



SUPPLY OF BLOOD FOR TRANSFUSION IN THE CARIBBEAN AND LATIN AMERICAN COUNTRIES 2006, 2007, 2008, AND 2009.

*Progress since 2005 of the Regional
Plan of Action for Transfusion Safety*



**Pan American
Health
Organization**



Regional Office of the
World Health Organization

*Area of Health Systems Based on Primary Health
Care Medicines and Health Technologies*



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2. BLOOD TRANSFUSION – trends
3. REGIONAL STRATEGIES
4. LATIN AMERICA
5. CARIBBEAN REGION

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Data compiled by José Ramiro Cruz
Support in the preparation Sonia M. James
Layout Quyen Nguyen

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INTRODUCTION

In September 2005, the 46th Directing Council of the Pan American Health Organization (PAHO) approved the Regional Plan of Action for Transfusion Safety 2006-2010, whose purpose is to contribute to the reduction of mortality and to the improvement of patient care in Latin America and the Caribbean by making safe blood for transfusion available in a timely manner for all patients who need it (1, 2).

The Regional Plan has the following objectives:

- a) Assure appropriate collection and preparation of blood components in sufficient quantities to treat the patients who need blood transfusions
- b) Assure timely access to blood components in the patients who need blood transfusions
- c) Assure the highest level of safety of blood products to avoid the transmission of infectious diseases and other untoward effects associated with transfusions
- d) Promote the appropriate clinical use of blood
- e) Improve the efficiency of national resources

In order to achieve its objectives, the Regional Plan adopted the following four strategies:

1. Planning and management of the national blood network system
2. Promotion of voluntary blood donation
3. Quality assurance
4. Appropriate use of blood and blood components

The Regional Plan approved in 2005 made reference to the Strategic and Programmatic Orientations 1999-2002 (3) and, therefore, has ten indicators of progress. In 2008, the 48th Directing Council added three more and modified the one related to the goal of voluntary donation (4, 5); thus, the current indicators are:

- a) 100% of the countries will have defined a specific entity within the normative level of their ministries of health as responsible for planning, oversight, and the overall efficient operation of the national blood system.
- b) 100% of the countries will have a national estimate of requirements for blood and blood components, by geographical areas and times of the year.
- c) 100% of the countries will have revised their legal and regulatory framework.
- d) 100% of the Latin American countries will have implemented regional blood collection and processing systems to cover the needs of patients from geographically distinct areas.
- e) 100% of the countries will have terminated remunerated and replacement blood donation, with the goal of 100% voluntary, altruistic, non-remunerated blood donation.
- f) 100% of the countries will have established a network of volunteers to educate the community, promote voluntary blood donation, and service blood donors.
- g) 100% of the countries will have implemented a quality assurance plan that comprises all blood services in the country.
- h) All blood banks must participate in quality control programs.
- i) 100% of the units of blood for transfusion should be tested for hepatitis B and C, syphilis, *T. cruzi*, and HIV infection.
- j) 95% of all units of blood collected will be fractionated into components.

- k) 100% of the countries will have implemented national guidelines for the clinical use of blood in all transfusion services.
- l) 100% of the countries will have established a hemovigilance program to assess the impact of transfusions on patients' health.
- m) 100% of the countries will have operational transfusion committees.

The Directing Council, moreover, requested the Director to report periodically to the Governing Bodies on the progress made in implementing the Regional Plan of Action for Transfusion Safety, including its limitations (2), with the instruction to prepare annual reports on the situation of blood transfusion safety in the Region (5).

Prior to the approval of the Regional Plan, the situation of the national blood programs in 36 countries and territories was summarized in "Supply of Blood for Transfusion in the Caribbean and Latin American Countries in 2005. Baseline Data for the Regional Plan of Action for Transfusion Safety 2006-2010" (6). Subsequently, PAHO published data for 2006 and 2007 from a smaller number of countries and/or territories in *"Supply of Blood for Transfusion in the Caribbean and Latin American Countries in 2006 and 2007. Progress since 2005 of the Regional Plan of Action for Transfusion Safety"* (7). The present publication summarizes the situation of national blood programs from 2006 to 2009, using the updated data furnished to PAHO by the national health authorities. As a result, there are variations in the information that was summarized in earlier publications (6, 7). Adhering to the criteria of the PAHO Strategic Plan 2008-2012 (8), 37 countries or territories are considered, including the British Overseas Territories and the Dutch Overseas Caribbean Territories.

The table lists the countries and territories and indicates the numbers of units of blood that, according to official reports to PAHO, were collected in each of them during the period 2005-2009. It shows that Uruguay and Venezuela have not sent reports to PAHO since 2005. Moreover, there have been no data since that year from Bermuda and Turks and Caicos Islands, part of the British Overseas Territories. In the case of the Dutch Overseas Caribbean Territories, Curaçao collects, processes, and provides the necessary components for transfusions to Aruba.

References

1. Pan American Health Organization. 46th Directing Council. Progress Report on the Regional Initiative for Blood Safety and Plan of Action for 2006-2010. Document CD46/16, 26-30 September 2005
2. Pan American Health Organization. 46th Directing Council. Progress Report on the Global Safe Blood Initiative and Plan of Action 2005-2010. Resolution CD46.R5, 29 September 2005
3. 25th Pan American Sanitary Conference. Strategic and Programmatic Orientations for the Pan American Sanitary Bureau, 1999-2002. Washington, D.C., 21-25 September 1998
4. Pan American Health Organization. 48th Directing Council. Improving Blood Availability and Transfusion Safety in the Americas. Document CD48/11, 29 September to 3 October 2008.
5. Pan American Health Organization. 48th Directing Council. Improving Blood Availability and Transfusion Safety in the Americas. Resolution CD48.R7, 2 October 2008
6. Pan American Health Organization. Technology and Health Service Delivery Area. Essential Medicines, Vaccines, and Health Technologies. Supply of Blood for Transfusion in the Caribbean and Latin American Countries in 2005. Base Line Data for the Regional Plan of Action for Transfusion Safety 2006-2010. Technical Document Series, Access to Quality Products. 2007
7. Pan American Health Organization. Technology, Health Care, and Research Area. Health Technologies for Quality of Care. Supply of Blood for Transfusion in the Caribbean and Latin America Countries in 2006 and 2007. Progress since 2005 of the Regional Plan of Action for Transfusion Safety. Technical Document Series. Monitoring and Evaluation. 2009.
8. Pan American Health Organization/World Health Organization. Strategic Plan 2008- 2012. Official Document No. 328. Washington, D.C., 2008.

NUMBER OF BLOOD UNITS OFFICIALLY REPORTED BY THE COUNTRIES AND TERRITORIES TO THE PAN AMERICAN HEALTH ORGANIZATION 2005-2009

BLOOD UNITS

COUNTRY	2005	2006	2007	2008	2009
Antigua and Barbuda	NR	1,020	986	NR	1,321
Argentina	365,313	345,502	708,560	773,097	926,451
Bahamas	5,152	5,026	5,343	5,519	6,914
Barbados	NR	4,164	NR	4,583	4,781
Belize	3,107	NR	3,233	3,866	4,364
Bolivia	46,764	49,954	54,951	61,808	69,073
Brazil	3,738,580	3,129,882	1,305,785	707,464	458,235
British Territories*	1,425	1,592	1,756	1,749	1,661
Chile	178,079	NR	238,124	NR	NR
Colombia	527,711	552,421	582,011	614,752	692,487
Costa Rica	54,170	54,170	53,914	57,996	59,336
Cuba	495,343	475,959	400,292	393,937	403,060
Dominica	757	765	723	775	977
Dominica Republic	62,120	64,219	46,590	81,478	85,169
Ecuador	124,724	124,724	144,600	155,700	NR
El Salvador	80,142	80,460	81,246	81,992	82,757
Grenada	835	1,004	1,015	1,106	1,426
Guatemala	77,290	NR	76,485	84,357	91,554
Guyana	5,267	6,310	7,111	NR	7,700
Haiti	10,823	13,622	16,594	19,646	21,471
Honduras	52,317	NR	52,497	54,498	58,317
Jamaica	22,155	23,118	23,251	24,464	24,881
Mexico	1,351,204	1,400,137	1,501,641	1,484,031	1,602,071
Netherlands Antilles**	9,393	6,784	6,559	6,701	6,702
Nicaragua	54,117	53,970	59,755	68,288	69,632
Panama	42,771	45,650	46,947	49,575	51,539
Paraguay	47,060	51,153	54,538	59,757	66,873
Peru	179,721	174,196	178,060	187,437	221,266
Saint Kitts and Nevis	423	415	NR	576	510
Saint Lucia	1,914	2,028	2,216	2,285	2,446
Saint Vicent and The Grenadines	822	882	1,172	1,156	982
Suriname	7,525	7,881	8,925	10,330	9,774
Trinidad and Tobago	13,625	19,771	21,017	22,011	22,368
Uruguay	95,686	NR	NR	NR	NR
Venezuela	403,625	NR	NR	NR	NR
TOTAL	8,059,960	6,696,779	5,685,897	5,020,934	5,056,098

* <i>British Territories</i>					
Anguilla	114	99	114	150	117
Bermuda	NR	NR	NR	NR	NR
British Virgin Islands	447	433	544	561	485
Cayman Islands	864	981	1,017	921	965
Montserrat	NR	79	81	117	94
Turks and Caicos Islands	NR	NR	NR	NR	NR

** <i>Netherlands Antilles</i>					
Aruba	2,648	NR	NR	NR	NR
Curacao	6,745	6,784	6,559	6,701	6,702



COUNTRY CODES

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

ABBREVIATIONS

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
NA	Not applicable
NR	Not reported
PL	Platelets
RBC	Red blood cells
WB	Whole blood



2006

REGIONAL SUMMARY 2006

VARIABLE	CARIBBEAN COUNTRIES	LATIN AMERICAN COUNTRIES	CARIBBEAN AND LATIN AMERICAN COUNTRIES
Blood units collected	94,382	6,602,397	6,696,779
Voluntary, non remunerated donors	28,416 30.11%	2,826,123 42.80%	2,854,539 42.63%
Remunerated donors	0 0%	14,328 0.22%	14,328 0.21%
Screening for HIV (%)	100	97.52	97.58
Screening for HBsAg (%)	100	97.32	97.39
Screening for HCV (%)	98.56	97.45	97.39
Screening for SYPHILIS (%)	100	95.64	95.75
Screening for <i>T. cruzi</i> (%)	NA	60.68	NA
Screening for HTLV I-II (%)	97.71	29.04	30.85

CARIBBEAN COUNTRIES 2006

TABLE 1. BLOOD COLLECTION

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	99	0	0	99	0
ANI	1,020	1	62	957	0
BAH	5,026	13	811	4,202	0
BAR	4,164	95	417	3,652	0
BVI	433	1	432	0	0
CAY	981	4	977	0	0
CUR	6,784	3	6,781	0	0
DOM	765	3	40	722	0
GRA	1,004	6	337	661	0
GUY	6,310	0	1,956	4,354	0
HAI	13,622	0	3,725	9,897	0
JAM	23,118	32	2,100	20,986	0
MOT	79	0	0	79	0
SKT	415	1	6	408	0
STL	2,028	7	1,276	745	0
STV	882	27	64	791	0
SUR	7,881	0	7,881	0	0
TRT	19,771	165	1,551	18,055	0

ANU: The number of collected units (99) is smaller than the number of evaluated donors (345). The evaluated and accepted donors donate blood when it is required for patients.

SUR: First time donors must wait three months before their first donation. A blood sample for TTI screening is collected at the time of selection.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2006 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	99	0	100	0
ANI	1,019	6	94	0
BAH	5,013	16	84	0
BAR	4,069	10	90	0
BVI	432	100	0	0
CAY	977	100	0	0
CUR	6,781	100	0	0
DOM	762	5	95	0
GRA	998	34	66	0
GUY	6,310	31	69	0
HAI	13,622	27	73	0
JAM	23,086	9	91	0
MOT	79	0	100	0
SKT	414	1	99	0
STL	2,021	63	37	0
STV	855	7	93	0
SUR	7,881	100	0	0
TRT	19,606	8	92	0

(*): Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2006 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ANU	99	0	0	345	65	0	0
ANI	1,019	65	3	1,226	269	0	0
BAH	5,013	863	52	4,462	260	0	0
BAR	4,069	427	10	4,384	732	0	0
BVI	432	NR	NR	NR	NR	NR	NR
CAY	977	1,064	87	0	0	0	0
CUR	6,781	6,821	40	0	0	0	0
DOM	762	40	0	990	268	0	0
GRA	998	393	56	879	218	0	0
GUY	6,310	NR	NR	NR	NR	NR	NR
HAI	13,622	4,599	874	12,583	2,686	0	0
JAM	23,086	3,150	1,050	25,000	4,014	0	0
MOT	79	NR	NR	NR	NR	NR	NR
SKT	414	NR	NR	NR	NR	NR	NR
STL	2,021	2,489	1,213	1,088	343	0	0
STV	855	77	13	1,007	216	0	0
SUR	7,881	7977	96	0	0	0	0
TRT	19,606	2,643	1,092	29,126	11,071	0	0

(*): Autologous donors not included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2006 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ANU	99	0	0	345	19	0	0
ANI	1,019	65	5	1,226	22	0	0
BAH	5,013	863	6	4,462	6	0	0
BAR	4,069	427	2	4,384	17	0	0
CAY	977	1,064	8	0	0	0	0
CUR	6,781	6,821	0.59	0	0	0	0
DOM	762	40	0	990	26	0	0
GRA	998	393	14	879	25	0	0
HAI	13,622	4,599	19	12,583	21	0	0
JAM	23,086	3,150	33	25,000	16	0	0
STL	2,021	2,489	49	1,088	32	0	0
STV	855	77	17	1,007	21	0	0
SUR	7,881	7,977	1	0	0	0	0
TRT	19,606	2,643	41	29,126	38	0	0

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2006

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF BANKS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ANU	99	1	99	0.4
ANI	1,019	2	510	2.0
BAH	5,013	3	1,671	6.4
BAR	4,069	1	4,069	15.7
BVI	432	1	432	1.7
CAY	977	2	488	1.9
CUR	6,781	1	6,781	26.1
DOM	762	1	762	2.9
GRA	998	1	998	3.8
GUY	6,310	3	1,052	4.0
HAI	13,622	1	851	3.3
JAM	23,086	1	2,562	9.9
MOT	79	1	79	0.3
SKT	414	1	414	1.6
STL	2,021	1	2,021	7.8
STV	855	1	855	3.3
SUR	7,881	1	7,881	30.3
TRT	19,606	2	3,268	12.6

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2006

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	100	100	53.00	100	0
ANI	100	100	100	100	0
BAH	100	100	100	100	100
BAR	100	100	100	100	100
BVI	100	100	100	100	0
CAY	100	100	100	100	100
CUR	100	100	100	100	100
DOM	100	100	0	100	100
GRA	100	100	100	100	100
GUY	100	100	100	100	100
HAI	100	100	100	100	100
JAM	100	100	100	100	100
MOT	100	100	0	100	0
SKT	100	100	0	100	0
STL	100	100	100	100	100
STV	100	100	100	100	100
SUR	100	100	100	100	100
TRT	100	100	100	100	100

ANU: Donors screened 219. Screening for HCV started in June 06.

CUR: Units screened 6,781.

MOT: Donors are submitted for screening immediately before the collection of blood units.

STL: Screened units 2,021.

SUR: The selected first time donors should wait three months for blood donation. At the moment of the selection it is only collected a sample for screening (sample tube test).

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2006

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU			103		219
ANI					1,020
BVI					433
DOM			765		
MOT			79		79
SKT			415		415
TOTAL			1,362		2,166

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2006

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	0.45	0	0	0.90	NA
ANI	0.30	0.40	0	0.90	NA
BAH	0.17	0.67	0.49	0.59	0.33
BAR	0.02	0.17	0.02	0.56	0.46
BVI	0	0.90	0.50	0.20	NA
CAY	0.50	0	0.20	0	0
CUR	0	0	0	0	0
DOM	0.10	0.30	NA	2.40	1.80
GRA	0	0.60	0.10	0.30	0.60
GUY	0.42	1.50	0.40	1.60	0.30
HAI	1.87	4.25	0.55	3.31	0.47
JAM	0.55	0.92	0.34	0.65	1.90
MOT	NA	NA	NA	NA	NA
SKT	0.24	4.10	NA	1.90	NA
STL	0	0.50	0	0.80	0.40
STV	0.10	1.40	0.60	3.70	2.90
SUR	0.05	0.13	0.04	0.03	0.04
TRT	0.23	0.47	0.56	1.20	0.90

TRT: *T. cruzi* 0.08%.**TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2006***Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ANU	99	54	NR	NR	NR	NR
ANI	1,020	529	21	11	NR	4
BAH	5,026	4,279	1,214	0	0	1,039
BAR	4,130	560	334	216	46	409
BVI	433	NR	NR	NR	NR	NR
CAY	981	682	339	NA	NA	NA
CUR	6,781	6,781	1,401	0	0	1,000
DOM	765	671	267	NR	219	198
GRA	1,004	988	223	0	0	11
GUY	NR	NR	NR	NR	NR	NR
HAI	13,622	4,620	28	NR	NR	5
JAM	23,118	12,000	1,400	600	2,000	2,000
MOT	79	NR	NR	NR	NR	NR
SKT	NR	NR	NR	NR	NR	NR
STL	NR	NR	NR	NR	NR	NR
STV	882	773	148	0	0	53
SUR	7,881	7,881	1,116	0	0	1,554
TRT	12,931	8,393	5,235	0	67	5,225

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

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ANU	7	NR	NR	NR	NR	NR
ANI	87	3	0	0	NA	NR
BAH	114	209	166	0	0	561
BAR	504	13	29	14	NA	169
BVI	13	NA	NA	NA	NA	NA
CAY	92	NR	129	NA	NA	9
CUR	0	60	10	NA	NA	210
DOM	15	28	23	NA	6	10
GRA	16	171	8	NA	NA	1
GUY	NR	NA	NA	NA	NA	NA
HAI	1,110	NA	NA	NA	NA	NR
JAM	NR	NR	NR	NR	NR	NR
MOT	26	NA	NA	NA	NA	NA
SKT	122	NA	NA	NA	NA	NA
STL	7	28	17	NA	NA	272
STV	0	77	30	NA	NA	28
SUR	0	104	11	NA	NA	397
TRT	742	197	476	NA	NR	1,362

* Outdated units

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2006 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ANU	54.55	NR	NR	NR	NR	20.58	NA	NA	NA	NA	NA
ANI	51.86	2.06	1.08	NR	0.39	18.63	0.57	0	0	NA	NR
BAH	83.90	24.15	0	0	20.67	89.76	4.88	13.67	0	0	53.99
BAR	13.55	8.09	5.23	1.11	9.90	14.11	2.32	8.68	6.48	NR	41.32
BVI	NR	NR	NR	NR	NR	NR	NA	NA	NA	NA	NA
CAY	69.52	34.56	NR	NR	NR	NR*	NR*	38.05	NA	NA	NA
CUR	100	20.66	0	0	14.75	0	0.88	0.71	NA	NA	21.00
DOM	87.71	34.90	NR	28.62	25.88	15.96	4.17	8.61	NA	2.74	5.05
GRA	98.40	22.21	0	0	1.10	100	17.30	3.59	NA	NA	9.09
GUY	NR	NR	NR	NR	NR	NR	NA	NA	NA	NA	NA
HAI	33.92	0.21	NR	NR	0.04	12.33	NR	NR	NA	NA	NR
JAM	51.91	6.06	2.60	8.65	8.65	NR	NR	NR	NR	NR	NR
MOT	NR	NR	NR	NR	NR	33.00	NA	NA	NA	NA	NA
SKT	NR	NR	NR	NR	NR	NR*	NA	NA	NA	NA	NA
STL	NR	NR	NR	NR	NR	NR	NA	NA	NA	NA	NA
STV	87.64	16.78	0	0	6.00	0	9.96	20.27	NA	NA	52.83
SUR	100	14.16	0	0	19.71	0	1.32	0.99	NA	NA	25.55
TRT	64.90	40.48	0	0.52	40.41	16.35	2.34	9.09	NA	NR	26.07

CAY: In blood and blood components discarded, 62 units of whole blood and packed red blood cells were reported together. Also, indicated that 9 platelets were discarded, and that 56.3% of platelets are imported.

SKT: Indicated that 26 units of whole blood were discarded.

STL: Indicated that were discarded: 7 whole blood units, 28 RBC, 17 FFP, 272 PL.

TRT: Information on discarded components was reported only from 1 center.

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ANU	NO	NO	NO	NO	YES
ANI	NO	YES	NO	NO	YES
BAH	NO	NO	NO	NO	YES
BAR	NO	NO	NO	NO	YES
BVI	NO	NO	NO	NO	NO
CAY	NO	NO	NO	NO	NO
CUR	YES	NO	NO	YES	NO
DOM	NO	NO	NO	NO	NO
GRA	NR	NR	NR	NR	NR
GUY	NR	NR	NR	NR	NR
HAI	NO	YES	YES	YES	YES
JAM	YES	YES	YES	YES	YES
MOT	NO	YES	NO	NO	NO
SKT	NO	NO	NO	NO	YES
STL	NO	NO	NO	NO	YES
STV	NO	NO	NO	NO	YES
SUR	NO	NO	YES	NO	NR
TRT	NO	YES	NO	NO	YES

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ANU	NO	NO	YES	YES	NO	NO
ANI	NO	NO	YES	YES	NO	NO
BAH	NO	YES	NO	NO	NO	YES
BAR	NO	NO	NR	NO	NR	NO
BVI	NO	NO	YES	YES	NO	NO
CAY	NO	NO	NO	NO	NO	NO
CUR	YES	YES	YES	YES	YES	NO
DOM	NO	NO	YES	NO	NO	NO
GRA	NR	NR	NR	NR	NR	NR
GUY	NR	NR	NR	NR	NR	NR
HAI	YES	YES	YES	NO	YES	NO
JAM	YES	NO	YES	YES	YES	NO
MOT	NO	NO	YES	NO	NO	NO
SKT	NO	NO	YES	NO	YES	NO
STL	YES	NO	YES	YES	NO	NO
STV	NO	NO	YES	NO	NO	NO
SUR	NO	YES	YES	YES	NO	YES
TRT	YES	NO	YES	YES	YES	YES

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	QUALITY ASSURANCE POLICY	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ANU	NO	YES	YES	NO	YES
ANI	YES	YES	YES	NO	NO
BAH	NO	YES	YES	NO	NO
BAR	YES	YES	YES	NO	NO
BVI	NO	NO	YES	NO	NO
CAY	NO	YES	YES	NO	YES
CUR	YES	YES	YES	YES	YES
GRA	YES	YES	YES	NR	NO
GUY	NR	NR	NR	NR	NR
HAI	YES	YES	YES	NO	YES
JAM	NO	YES	YES	NO	YES
MOT	NO	YES	YES	NO	YES
SKT	NO	YES	YES	NO	NO
STL	NO	YES	YES	NO	NO
STV	NO	YES	YES	NO	NO
SUR	YES	YES	YES	NO	NO
TRT	YES	YES	YES	NO	YES

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ANU	NO	NO
ANI	NO	NO
BAH	YES	NO
BAR	NO	NR
BVI	NO	NO
CAY	YES	NO
CUR	YES	NO
DOM	NO	NO
GRA	NR	NR
GUY	NR	NR
HAI	NO	NO
JAM	YES	NO
MOT	YES	NO
SKT	NO	NO
STL	NO	NO
STV	NO	NO
SUR	NO	NO
TRT	YES	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2006*

HIV	HBsAg	HCV	SYPHILIS	HTLV I-II	FIVE MARKERS
ANU	ANU		ANU		
ANI	ANI	ANI	ANI		
BAH	BAH	BAH	BAH	BAH	BAH
BAR	BAR	BAR	BAR	BAR	BAR
BVI	BVI	BVI	BVI		
CAY	CAY	CAY	CAY	CAY	CAY
CUR	CUR	CUR	CUR	CUR	CUR
DOM	DOM		DOM	DOM	
GRA	GRA	GRA	GRA	GRA	GRA
GUY	GUY	GUY	GUY	GUY	GUY
HAI	HAI	HAI	HAI	HAI	HAI
JAM	JAM	JAM	JAM	JAM	JAM
MOT	MOT		MOT		
SKT	SKT		SKT		
STL	STL	STL	STL	STL	STL
STV	STV	STV	STV	STV	STV
SUR	SUR	SUR	SUR	SUR	SUR
TRT	TRT	TRT	TRT	TRT	TRT
18	18	14	18	13	12

* Proportion of units received

LATIN AMERICAN COUNTRIES 2006

TABLE 1. BLOOD COLLECTION 2006

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	345,502	0	37,012	308,490	0
BOL	49,954	113	13,537	36,304	0
BRA	3,129,882	0	1,815,332	1,314,550	0
COL	552,421	943	337,525	213,953	0
COR	54,170	13	31,868	22,289	0
CUB	475,959	0	475,959	0	0
ECU	124,724	NR	NR	NR	NR
ELS	80,460	0	8,604	71,856	0
MEX	1,400,137	5,506	48,600	1,346,031	NA
NIC	53,970	0	24,707	29,263	0
PAN	45,650	132	1,448	33,324	10,746
PAR	51,153	42	4,719	46,390	2
PER	174,196	411	11,714	161,615	456
DOR	64,219	106	15,098	45,891	3,124

ARG: Public sector data, estimated to represent 50% of the national blood system.

BRA: Data provided by Hemocenters from Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhao, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondonia, Roraima, Santa Catarina, Sao Paulo, Sergipe, Tocantins. Number of donors interviewed 3.851.001.

PER: The number of units collected -174,196- is smaller than the number of donors accepted -195,682.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2006 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	345,502	11	89	0
BOL	49,841	27	73	0
BRA	3,129,882	58	42	0
COL	551,478	61	39	0
COR	54,157	59	41	0
CUB	475,959	100	0	0
ECU	124,724	NR	NR	NR
ELS	80,460	11	89	0
MEX	1,394,631	3	97	0
NIC	53,970	46	54	0
PAN	45,518	3	73	24
PAR	51,111	9	91	0.004
PER	173,785	7	93	0.3
DOR	64,113	23	72	5

(*): Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2006 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ARG	345,502	NR	NR	396,527	88,037	0	0
BOL	49,841	20,755	7,218	56,657	20,353	0	0
BRA	3,129,882	NR	NR	NR	NR	NR	NR
COL	551,478	NR	NR	NR	NR	NR	NR
COR	54,157	NR	NR	NR	NR	NR	NR
CUB	475,959	506,191	30,232	0	0	0	0
ECU	124,724	NR	NR	NR	NR	NR	NR
ELS	80,460	10,718	2,114	104,182	32,326	0	0
MEX	1,394,631	58,320	9,720	1,749,840	403,809	0	0
NIC	53,970	NR	NR	NR	NR	NR	NR
PAN	45,158	NR	NR	NR	NR	NR	NR
PAR	51,111	4,929	210	52,071	5,681	2	0
PER	173,785	16,280	2,956	263,691	81,904	1,149	578
DOR	64,113	17,257	2,159	54,191	8,300	3,447	323

(*): Autologous donors not included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2006 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ARG	345,502	NR	NR	396,527	22	0	0
BOL	49,841	20,755	35	56,657	36	0	0
CUB	475,959	506,191	6	0	0	0	0
ELS	80,460	10,718	20	104,182	31	0	0
MEX	1,394,631	58,320	17	1,749,840	23	0	0
PAR	51,111	4,929	4	52,071	11	2	0
PER	173,785	16,280	18	263,691	31	1,149	50
DOR	64,113	17,257	13	54,191	15	3,447	9

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFECIENCY OF BLOOD PROCESSING 2006

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF BANKS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ARG	345,502	455	759	2.9
BOL	49,841	20	2,492	9.6
BRA	3,129,882	326	9,601	36.9
COL	551,478	101	5,460	21.0
COR	54,157	31	1,747	6.7
CUB	475,959	48	9,916	38.1
ECU	124,724	23	5,423	20.9
ELS	80,460	30	2,682	10.3
MEX	1,394,631	543	2,568	9.9
NIC	53,970	24	2,249	8.6
PAN	45,518	28	1,626	6.3
PAR	51,111	15	3,407	13.1
PER	173,785	88	1,975	7.6
DOR	64,113	58	1,105	4.3

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2006

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	100	100	100	100	100	100	100
BOL	99.98	99.98	98.92	99.98	90.34	NR	NR
BRA	NR	NR	NR	NR	NR	NR	NR
COL	99.99	100	99.99	99.99	99.99	58.60	64.40
COR	100	100	100	100	100	100	100
CUB	100	100	100	100	NA	NR	NR
ECU	100	100	100	100	90.00	0	NR
ELS	100	100	100	100	100	NR	NR
MEX	94.09	93.60	93.98	89.39	42.62	NR	NR
NIC	91.84	91.28	91.03	91.43	89.96	NR	NR
PAN	100	100	100	100	97.94	24.70	100
PAR	100	100	100	100	100	49.45	90.98
PER	100	100	100	100	100	100	100
DOR	100	100	100	100	NA	88.80	NR

BOL: Screened units: HIV – HBsAg 49,948, HCV 49,416, Syphilis 49,944, *T. cruzi* 45,128.

COL: Screened units: HIV, HCV, Syphilis, *T. cruzi* 552,366; HBsAg 552,421; Anti-HBc 355,759; HTLV I-II 323,553.

PER: 191,406 units screened.

MEX: Screened units: HIV 1,317,458; HBsAg 1,310,648; HCV 1,315,894; Syphilis 1,25,595; *T. cruzi* 596,762..

NIC: Screened units: HIV 49,565; HBsAg 49,266; HCV 49,133; Syphilis 49,246; *T. cruzi* 48,549.

PAN: Units screened: Syphilis 46,160, *T. cruzi* 44,710, HTLV I-II 11,272.

PAR: Screened units 51,152. Screened: Anti-HBc 46,541; HTLV I-II 25,296.

DOR: The number of units received to be screened 72,500 (screened units: HIV 72,875; HBsAg 72, 871; HCV 72,868; Syphilis 72,767; HTLV I-II 64,713) is larger than the units collected

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2006 (*)

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>
BOL	6	6	538	10	4,826
COL	55		55	55	55
ECU					12,472
MEX	82,679	89,489	84,243	148,542	803,375
NIC	4,405	4,704	4,837	4,624	5,421
PAN					940
DOR		6	6	96	
TOTAL	87,145	94,205	89,679	153,327	827,089

(*) Except HTLV I-II and Anti-HBc.

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2006

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	0.30	0.47	0.95	1.14	3.99	0.27	2.90
BOL	0.11	0.40	0.66	0.90	1.93	NA	NA
BRA	NA	NA	NA	NA	NA	NA	NA
COL	0.46	0.35	0.57	1.51	0.40	0.27	2.86
COR	0.11	0.23	1.30	0.55	0.34	0.33	2.61
CUB	0.02	0.49	0.53	0.59	NA	NA	NA
ECU	0.58	0.34	0.57	0.80	0.16	NA	NA
ELS	0.10	0.24	0.32	0.83	2.17	NA	NA
MEX	0.38	0.20	0.68	0.30	0.50	NA	NA
NIC	0.84	1.32	0.47	0.90	0.89	NA	NA
PAN	0.06	0.29	0.32	0.30	0.15	0.04	NR
PAR	0.45	0.47	0.69	8.33	3.29	0.29	4.12
PER	0.51	0.51	1.22	1.90	1.02	1.52	6.05
DOR	0.58	1.22	0.47	1.04	NA	0.27	NA

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2006*Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ARG	314,111	282,670	169,602	110,068	25,000	164,365
BOL	49,954	36,140	26,184	7,847	2,294	8,848
BRA	NR	NR	NR	NR	NR	NR
COL	552,421	534,733	388,015	NR	39,950	249,378
COR	54,170	49,875	0	49,875	8,328	38,492
CUB	475,959	205,429	36,759	11,863	39,022	32,521
ECU	124,724	96,248	56,853	20,839	22,866	39,260
ELS	80,460	76,622	54,658	NR	7,578	42,279
MEX	1,352,369	1,238,269	NR	936,280	86,361	511,274
NIC	53,970	37,117	25,794	1,628	0	14,263
PAN	27,814	19,439	18	10,354	1,393	14,022
PAR	51,152	32,729	20,085	4,612	2,140	13,229
PER	162,054	149,138	NR	108,270	16,786	87,505
DOR	64,219	20,669	3,015	5,780	45	3,916

Blood and Blood Components Discarded (Number)*

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ARG	NR	NR	NR	NR	NR	NR
BOL	935	2,063	3,549	3,388	1,836	3,702
BRA	NA	NA	NA	NA	NA	NA
COL	4,979	44,270	278,181	NA	6,800	93,407
COR	929	5,635	NA	10,648	3,406	11,360
CUB	NR	NR	NR	NR	NR	NR
ECU	1,109	4,733	1,051	11,442	1,641	5,041
ELS	1,339	4,000	12,981	NA	304	4,366
MEX	39,967	82,369	NA	315,201	15,498	125,631
NIC	569	658	398	0	NA	242
PAN	900	521	NR	0	0	3,506
PAR	6,194	3,407	3,411	2,222	16	4,868
PER	2,678	6,207	NR	41,661	2,141	26,063
DOR	1,958	302	3,074	0	0	265

* Outdated units

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2006 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ARG	89.99	53.99	35.04	7.96	52.33	NR	NR	NR	NR	NR	NR
BOL	72.35	52.42	15.71	4.59	17.71	7.57	5.71	13.55	43.18	80.03	41.84
BRA	NR	NR	NR	NR	NR	NA	NA	NA	NA	NA	NA
COL	96.80	70.24	NR	7.23	45.14	28.15	8.28	71.69	NA	17.02	37.46
COR	92.07	0	92.07	15.37	71.06	21.63	11.30	NA	21.35	40.90	29.51
CUB	43.16	7.72	2.49	8.20	6.83	NR	NR	NR	NR	NR	NR
ECU	77.17	45.58	16.71	18.33	31.48	6.00	4.92	1.85	54.91	7.18	12.84
ELS	95.23	67.93	NR	9.42	52.55	40.11	5.22	23.75	NA	4.01	10.33
MEX	91.56	NR	69.23	6.39	37.81	27.74	6.65	NA	33.67	17.95	24.57
NIC	68.77	47.79	3.02	0	26.43	3.99	1.77	1.54	0	NA	1.70
PAN	69.89	0.06	37.23	5.01	50.41	10.75	2.68	100	0	0	25.00
PAR	63.98	39.27	9.02	4.18	25.86	33.62	10.41	16.98	48.18	0.75	36.80
PER	92.03	NR	66.81	10.36	54.00	20.73	4.16	NA	38.47	12.75	29.78
DOR	32.19	4.69	9.00	0.07	6.10	4.50	1.46	100	0	0	6.77

MEX: 47,768 units collected by apheresis.

PAN: Separation into components was reported by 9 blood services (61% of national collection).

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ARG	YES	YES	YES	YES	YES
BOL	YES	YES	NO	YES	YES
BRA	YES	YES	YES	YES	YES
COL	YES	YES	NO	YES	YES
COR	YES	YES	YES	YES	YES
CUB	YES	YES	NO	YES	YES
ECU	YES	NO	NO	NO	YES
ELS	NO	YES	NO	YES	YES
MEX	YES	YES	NO	YES	NO
NIC	YES	YES	YES	YES	NO
PAN	YES	YES	NO	NO	YES
PAR	YES	YES	YES	YES	YES
PER	YES	YES	NO	NO	NO
DOR	YES	YES	NO	YES	YES

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

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

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	QUALITY ASSURANCE POLICY	NATIONAL QUALITY ASSURANCE PROGRAM	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ARG	YES	YES	YES	NO	NO	YES
BOL	YES	YES	YES	NO	YES	YES
BRA	YES	NR	NR	YES	YES	YES
COL	YES	NO	YES	NO	YES	YES
COR	YES	YES	YES	NO	YES	YES
CUB	YES	YES	YES	YES	YES	YES
ECU	NO	NO	YES	YES	YES	NO
ELS	YES	YES	YES	NO	NO	YES
MEX	YES	NO	YES	YES	NO	YES
NIC	NO	YES	YES	NO	NO	YES
PAN	NO	NO	YES	YES	YES	YES
PAR	YES	NO	NO	NO	YES	YES
PER	NO	NO	NO	NO	YES	NO
DOR	YES	YES	YES	NO	YES	NO

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2006

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ARG	YES	YES
BOL	YES	YES
BRA	YES	YES
COL	YES	NO
COR	YES	YES
CUB	YES	YES
ECU	NO	NO
ELS	NO	NO
MEX	NO	NO
NIC	NO	NO
PAN	NO	YES
PAR	NO	YES
PER	NO	YES
DOR	NO	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2006*

HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	FIVE MARKERS	HTLV I-II	Anti-HBc
ARG	ARG	ARG	ARG	ARG	ARG	ARG	ARG
	COL						
COR	COR	COR	COR	COR	COR	COR	COR
CUB	CUB	CUB	CUB				
ECU	ECU	ECU	ECU				
ELS	ELS	ELS	ELS	ELS	ELS		
PAN	PAN	PAN	PAN				PAN
PAR	PAR	PAR	PAR	PAR	PAR		
PER	PER	PER	PER	PER	PER	PER	PER
DOR	DOR	DOR	DOR				
9	10	9	9	5	5	3	4

* Proportion of units received

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
CARIBBEAN COUNTRIES
2006**

COUNTRY	NAME	POSITION	ADDRESS
ANGUILLA	Everette Duncan	Senior Medical Technologist	PRINCESS ALEXANDRA HOSPITAL Stoney Ground Tel.: 264 497 2551 Ext: 301 - 304 e-mail: evie@anguillanet.com
ANTIGUA AND BARBUDA	Condon Jarvis	Chief Medical Technologist	HOLBERTON HOSPITAL Queen Elizabeth Highway Tel.: 268 462 2461 e-mail: condon.jarvis@antigua.gov.ag
BAHAMAS	Carolyn Azikiwe	Supervisor	PRINCESS MARGARET HOSPITAL BLOOD BANK Shirley Street - Nassau Tel.: 242 322 8077 e-mail: c_azikiwe@hotmail.com cazikiwe@coralwave.com
BARBADOS	Priscilla Jordan	Medical Laboratory Technologist (Dmt,Bsc)	BLOOD BANK DEPARTMENT, QUEEN ELIZABETH HOSPITAL Martindales Road, St. Michael Tel.: 246 436 6450 Ext: 6124 e-mail: NR
BRITISH VIRGIN ISLANDS	Allene Brewley	Laboratory Director	PEEBLES HOSPITAL P.O.Box 439, Road Town, Tortola, BVI Tel.: 284 494 3497 e-mail: peebleslab@hotmail.com
CAYMAN ISLANDS	Judith Clarke	Medical Technologist	CAYMAN ISLAND HEALTH SERVICES P.O. Box 915. Grand Cayman KY1-1103 Tel.: 345 2442 2669-74 e-mail: judith.clarke@hsa.ky
CURACAO	A. J. Duits	Director	RED CROSS BLOOD BANK FOUNDATION Pater Euwensweg 36 Tel.: 5999 4618 433 e-mail: ajduits@gmail.com
DOMINICA	Nina Pierre	Director Blood Bank	BLOOD BANK, MEDICAL LABORATORY PRINCESS MARGARET HOSPITAL, Goodwill Tel.: 767 448 2231 Ext: 2144 e-mail: pmhlab@cwdom.dm
GRENADA	Everlyn Peters	Senior Laboratory Technologist	PATHOLOGY LABORATORY, GENERAL HOSPITAL Grand Etang Rd., St. George's Tel.: 473 440 5578 e-mail: grensurv@spiceisle.com
GUYANA	Bonita Richards Clement Mcewan	Chief Technologist Director	GPHC Compound, Lamaha & Street Georgetown Tel.: 592 225 4972, 592 227 0418 e-mail: bonirich2001@yahoo.com clemencewan@hotmail.com

COUNTRY	NAME	POSITION	ADDRESS
HAITI	Ernst Noel	Director	NATIONAL BLOOD SAFETY PROGRAM 111, Rue Saint-Honoré, Port-au-Prince Tel.: 509 510 5908 509 510 5909 e-mail: noele@bloodsafetymssp.org enoel@doctor.com
JAMAICA	Lundie Richards	Director	NATIONAL BLOOD TRANSFUSION SERVICE JAMAICA (NBTS) 21 Slipe Pen Rd, Kingston Tel.: 876 922 5181-5 e-mail: lrr1524@yahoo.com richardsl@moh.gov.jm
MONTSERRAT	Dorothea Hazel	Epidemiologist	MINISTRY OF HEALTH P. O. Box 24, Brades Tel.: 664 491 2880 e-mail: mehcs@gov.ms
SAINT KITTS AND NEVIS	Althea Aaron-Friday	Medical Technologist	JOSEPH. N. FRANCE GENERAL HOSPITAL Buckley's Site Tel.: 869 465 2551 Ext 149 e-mail: pathlab@caribsurf.com
SAINT LUCIA	Veronica Lee	Medical Technologist	ST. LUCIA BLOOD BANK SERVICE Victoria Hospital, Castries Tel.: 758 452 4530 e-mail: vlee@candw.lc
SAINT VICENT AND THE GRENADINES	Dalrie Cole-John	Medical Technologist- Blood Bank	MILTON CATO MEMORIAL HOSPITAL BLOOD BANK Bentick Square, Kingstown, St. Vicent Tel.: 784 456 1185 Ext: 149 e-mail: kghlab@vincysurf.com
SURINAME	Tjon A Loi Maria	Medical Director	NATIONAL BLOOD BANK SURINAME RED CROSS SOCIETY Rode Kruislaan 24 Tel.: 597 499175 / 497483 e-mail: directeur_bloedbank@surinameredcross.sr
TRINIDAD AND TOBAGO	Kenneth Charles	Medical Director	NATIONAL BLOOD TRANSFUSION SERVICE 160 Charlotte Street, Port of Spain Tel.: 868 627 2619 e-mail: skcharles58@hotmail.com

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
LATIN AMERICAN COUNTRIES
2006**

COUNTRY	NAME	POSITION	ADDRESS
ARGENTINA	Esther Mabel Maschio	Coordinadora General del Plan Nacional	MINISTERIO DE SALUD Y AMBIENTE DE LA NACIÓN Av. 9 de Julio 1925 - 9º piso - Ciudad Autónoma de Buenos Aires Tel.: 11 4384 0324 / 0325 - 4379-9000 Interno 4825 e-mail: plannacionalsangre@msal.gov.ar mmaschio@msal.gov.ar
BOLIVIA	María del Carmen García de Luna Orosco Rubén Dario Roca Oyola	Coordinadora Nacional del Programa Nacional de Sangre Responsable Técnico	PROGRAMA NACIONAL DE SANGRE - MINISTERIO DE SALUD Y DEPORTES BOLIVIA La Paz Tel.: 591 2 211 5542 e-mail: clinicas@seibo.entelnet.bo
BRAZIL	Vania Lucia Lima de Melo	Consultora	MINISTÉRIO DA SAÚDE Esplanada dos Ministérios, Bloco G, Edifício Sede, Sala 946 Tel.: 55 021 61 3315 2440 e-mail: eliana.vieira@saude.gov.br
COLOMBIA	Luis Eduardo Mejía Mejía Mauricio Beltrán Durán	Director General Coordinador Red Nacional Bancos de Sangre	INSTITUTO NACIONAL DE SALUD Av. Calle 26 No. 51-60 Tel.: 1 220 7700 Extensión: 420 - 421 e-mail: mbeltrand@ins.gov.co
COSTA RICA	José Luis Salas Oviedo	Jefe del Área de Laboratorios Clínicos	DIRECCIÓN DESARROLLO DE SERVICIOS DE SALUD ÁREA DE LABORATORIOS CLÍNICOS CAJA COSTARRICENSE DE SEGURO SOCIAL Telf: 506 295 2584 e-mail: labclini@ccss.sa.cr; jsalas@ccss.sa.cr
CUBA	José M. Ballester	Director	INSTITUTO DE HEMATOLOGÍA E INMUNOLOGÍA San Francisco y Perla, Altahabana, Municipio Boyeros Apartado de correos 8070, La Habana, CP 10800 Tel.: 537 643 8268, 8695 e-mail: ihidir@hemato.sld.cu
DOMINICAN REPUBLIC	Sócrates E. Sosa Peña	Director del Programa Nacional de Bancos de Sangre	SECRETARÍA DE ESTADO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL Av. Tiradentes Esq. Av. San Cristobal, Ens., La Fe, Santo Domingo Ens, La Fe, Santo Domingo Tel.: 809 541 3121 Ext. 2472/74 e-mail: socratessosa@hotmail.com

COUNTRY	NAME	POSITION	ADDRESS
ECUADOR	Marco Antonio Herdoiza Holguin	Secretario Nacional de Bancos de Sangre	CRUZ ROJA ECUATORIANA Av. Colombia y Elizalde Esquina, 5º piso. Quito Tel.: 593 2 258 2482 Extensión: 326
EL SALVADOR	Ana Vilma de Aguilar	Jefa del Área Clínica	LABORATORIO CENTRAL "DR.MAX BLOCH" Almeda Roosevelt frente al Parque Cuscatlán contiguo a H. Rosales Tel.: 503 2221 5751 e-mail: anavilmadeaguilar@yahoo.es labcentralsv@hotmail.com
MEXICO	C. José de Jesús Estrada Chávez	Jefe del Departamento de Metodología	CENTRO NACIONAL DE LA TRANSFUSIÓN SANGUÍNEA Othon de Mendizal 195 Col. Zacatenco del Gustavo A. Madero México D.F. CP 07360 Tel.: 52 55 5119 4620 AL 28 EXT: 1333, 1334, 1336 e-mail: jestrada@salud.gob.mx
NICARAGUA	Alcidez González Mairena	Director General	CENTRO NACIONAL DE DIAGNÓSTICO Y REFERENCIA Costado Oeste Colonia Primero de Mayo Tel.: 289 7723 e-mail: dir-cndr@minsa.gob.ni
PANAMA	Gilma S. Bósquez	Jefa Técnica del Banco de Sangre	HOSPITAL SANTO TOMÁS La Exposición Cl. 34 Tel.: 507 507 5607 e-mail: scherezada_11@hotmail.com
PARAGUAY	María Ofelia Lemir de Zelada	Coordinadora de la Red Nacional de Servicios de Sangre	PROGRAMA NACIONAL DE SANGRE - MINISTERIO DE SALUD PÚBLICA Y BIENESTAR SOCIAL Manuel Domínguez y Brasil. Edificio SENEPA - 3º piso, Asunción Tel.: 595 21 222 573 e-mail: pnsangre@mspbs.gov.py
PERU	Norberto Quezada Velásquez	Coordinador del Programa Nacional de Hemoterapia Y Bancos de Sangre - Pronahebas	MINISTERIO DE SALUD Av. Salaverry No.801, Urb. Jesús María, Lima Tel.: 51 1 315 6600 Anexo 2540 e-mail: pronahebas@minsa.gob.pe



2007

REGIONAL SUMMARY 2007

VARIABLE	CARIBBEAN COUNTRIES	LATIN AMERICAN COUNTRIES	CARIBBEAN AND LATIN AMERICAN COUNTRIES
Blood units collected	99,901	5,585,996	5,685,897
Voluntary, non remunerated donors	36,939 <i>36.98%</i>	2,003,021 <i>35.86%</i>	2,039,960 <i>35.88%</i>
Remunerated donors	0 <i>0%</i>	11,509 <i>0.21%</i>	11,509 <i>0.20%</i>
Screening for HIV (%)	100	90.93	91.10
Screening for HBsAg (%)	100	89.81	90.00
Screening for HCV (%)	98.39	89.96	90.12
Screening for SYPHILIS (%)	100	88.89	89.10
Screening for <i>T. cruzi</i> (%)	NA	75.40	NA
Screening for HTLV I-II (%)	98.00	28.19	29.50

CARIBBEAN COUNTRIES 2007

TABLE 1. BLOOD COLLECTION

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	114	0	NA	NA	0
ANI	986	3	41	942	0
BAH	5,343	20	1,230	4,093	0
BAR	3,233	0	178	3,055	0
BVI	544	0	544	0	0
CAY	1,017	0	1,017	0	0
CUR	6,559	3	6,556	0	0
DOM	723	0	21	702	0
GRA	1,015	8	308	699	0
GUY	7,111	1	2,693	4,417	0
HAI	16,594	0	8,376	8,218	0
JAM	23,251	0	3,948	19,303	0
MOT	81	1	0	80	0
SKT	2,216	9	1,703	504	0
STL	1,172	43	79	1,050	0
STV	8,925	2	8,923	0	0
SUR	21,017	106	1,322	19,589	0

ANU: The number of units collected -114- is smaller than the number of donors interviewed -437. Accepted donors give blood when required by patients. The majority of donors are family/replacement donors. Less than 10% are voluntary donors. No distinction between the two groups was made.

GUY: Figures from NBTS. 2,993 voluntary donors, 2,798 replacement donors, one autologous donor.

SUR: First time donors must wait three months before their first donation. A blood sample for TTI screening is collected at the time of selection.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2007 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	114	NA	NA	0
ANI	983	4	96	0
BAH	5,323	23	77	0
BLZ	3,233	6	94	0
BVI	544	100	0	0
CAY	1,017	100	0	0
CUR	6,556	100	0	0
DOM	723	3	97	0
GRA	1,007	31	69	0
GUY	7,110	38	62	0
HAI	16,594	51	49	0
JAM	23,251	17	83	0
MOT	80	0	100	0
STL	2,207	77	23	0
STV	1,129	7	93	0
SUR	8,923	100	0	0
TRT	20,911	6	94	0

(*) Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2007 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ANU	114	0	0	437	79	0	0
ANI	983	47	6	1,158	216	0	0
BAH	5,323	1,328	98	4,420	327	0	0
BLZ	3,233	203	25	4,636	1,581	0	0
BVI	544	0	0	0	0	0	0
CAY	1,017	1,137	120	0	0	0	0
CUR	6,556	6,600	44	0	0	0	0
DOM	723	21	0	956	242	0	0
GRA	1,007	362	54	834	135	0	0
GUY	7,110	NR	NR	1,683	64	0	0
HAI	16,594	9,996	1,620	10,800	2,582	0	0
JAM	23,251	4,052	104	22,635	3,332	0	0
MOT	80	0	0	80	0	0	0
STL	2,207	2,866	1,163	857	353	0	0
STV	1,129	81	2	1,199	149	0	0
SUR	8,923	8,935	12	NA	NA	0	0
TRT	20,911	2,287	965	32,970	13,381	0	0

(*) Autologous donors not included.

GUY: data from NBTS not included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2007 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ANI	983	47	13	1,158	19	0	0
BAH	5,323	1,328	7	4,420	7	0	0
BLZ	3,233	203	12	4,636	34	0	0
CAY	1,017	1,137	11	0	0	0	0
CUR	6,556	6,600	44	0	0	0	0
DOM	723	21	0	956	27	0	0
GRA	1,007	362	15	834	16	0	0
HAI	16,594	9,996	16	10,800	24	0	0
JAM	23,251	4,052	3	22,635	15	0	0
MOT	80	0	0	80	0	0	0
STL	2,207	2,866	41	857	41	0	0
STV	1,129	81	2	1,199	12	0	0
SUR	8,923	8,935	0.1	0	0	0	0
TRT	20,911	2,287	42	32,970	41	0	0

(*) Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2007

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF BANKS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ANU	114	1	114	0.4
ANI	983	2	493	1.9
BAH	5,323	3	1,781	6.9
BLZ	3,233	1	462	1.8
BVI	544	1	544	2.1
CAY	1,017	2	508	2.0
CUR	6,556	1	6,556	25.2
DOM	723	1	723	2.8
GRA	1,007	1	1,015	3.9
GUY	7,110	3	1,013	3.9
HAI	16,594	1	976	3.8
JAM	23,251	1	2,583	9.9
MOT	80	1	81	0.3
STL	2,207	1	2,207	8.5
STV	1,129	1	1,172	4.5
SUR	8,923	1	8,923	34.3
TRT	20,911	2	3,002	11.5

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2007

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	100	100	100	100	0
ANI	100	100	100	100	0
BAH	100	100	100	100	100
BLZ	100	100	24.70*	100	100
BVI	100	100	100	100	0
CAY	100	100	100	100	100
CUR	100	100	100	100	100
DOM	100	100	0	100	100
GRA	100	100	100	100	100
GUY	100	100	100	100	100
HAI	100	100	100	100	100
JAM	100	98.86	95.16	90.80	100
MOT	100	100	0	100	0
STL	100	100	100	100	100
STV	100	100	100	100	100
SUR	100	100	100	100	100
TRT	100	100	100	100	100

ANU: 268 units were screened.

BAH: Autologous donors were not screened.

BLZ: The screening for HCV started on October 2007. *T. cruzi* screened 100%.

CUR: 6,556 units were screened.

GUY: HTLV I-II: the private sector did not screened 883 units. All 6,228 units, received by the M.O.H., were screened.

JAM: Screened units: HIV 25,982; HBsAg 22,987; HCV 22,125; Syphilis 21,111; HTLV I-II 23,861.

MOT: Donors are screened before blood is collected.

SUR: 9,331 units were screened.

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2007

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU					114
ANI					986
BLZ			2,434		
BVI					544
DOM			723		
GUY					883
JAM		264	1,126	2,140	
MOT			81		81
TOTAL		264	4,364	2,140	2,608

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2007

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	0	0.40	0	0	0
ANI	0.20	1.50	0.70	0.80	NA
BAH	0.30	0.66	0.66	0.90	0.40
BLZ	0.19	0.99	0.03	0.96	NR
BVI	0	0.38	0	0.38	NA
CAY	0.30	0	0.20	0	0.10
CUR	0	0	0	0	0.02
DOM	NR	0.14	NA	1.38	1.38
GRA	0	0.49	0	0.10	1.67
GUY	0.26	1.65	0.50	1.30	1.46
HAI	1.41	4.64	0.47	3.39	0.62
JAM	0.43	0.82	0.32	3.46	1.61
MOT	0	0	NR	0	NR
STL	0.09	0.85	0.04	1.80	0.60
STV	0.34	0.77	1.45	3.33	2.13
SUR	0.01	0.01	0.04	0.03	0.02
TRT	0.25	0.41	0.29	1.58	0.85

BLZ: *T. cruzi* 0.46%.TRT: *T. cruzi* 0.78%.**TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2007***Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ANU	114	47	NR	NR	NR	NR
ANI	986	621	40	11	0	34
BAH	5,399	4,556	1,052	0	0	934
BAR	3,233	781	186	99	0	0
BVI	544	59	59	0	NR	NR
CAY	1,017	864	272	NA	NA	NA
CUR	6,556	6,556	1,332	0	0	701
DOM	723	657	343	NR	194	164
GRA	1,015	1,005	200	0	0	3
GUY	5,492	4,702	4,102	0	600	300
HAI	16,594	6,199	30	NR	3	6
JAM	23,251	4,728	3,862	727	866	1,633
MOT	81	NR	NR	NR	NR	NR
SKT	2,216	2,216	585	0	12	407
STL	1,172	1,122	174	0	0	16
STV	8,925	8,925	1,531	0	0	1,831
SUR	14,737	6,930	5,239	NR	199	5,246
TRT	12,931	8,393	5,235	0	67	5,225

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

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ANU	9	NR	NA	NA	NA	NA
ANI	87	4	0	0	NA	NR
BAH	82	240	191	NA	NA	222
BAR	459	66	15	55	NA	NA
BVI	6	0	0	NA	NA	NA
CAY	61	42	221	NA	NA	0
CUR	0	60	10	NA	NA	230
DOM	34	73	15	14	NR	134
GRA	10	160	7	NA	NA	0
GUY	88	400	89	NA	200	111
HAI	1,582	NR	NR	NA	NR	NR
JAM	355	NR	316	83	79	264
MOT	38	NA	NA	NA	NA	NA
SKT	2	358	72	0	10	158
STL	4	94	16	NA	NA	3
STV	269	71	2	NA	NA	603
SUR	471	354	1,267	1,311	NR	909
TRT	742	197	476	NA	NR	1,362

* Outdated units

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2007 (%)

COUNTRY	% SEPERATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ANU	41.23	NR	NR	NR	NR	16.36	NR	NA	NA	NA	NA
ANI	62.98	4.06	1.11	0	3.45	23.83	0.64	0	0	NA	NR
BAH	84.38	19.49	0	0	17.36	47.40	5.27	18.16	NA	NA	23.77
BLZ	24.16	5.75	3.06	0	0	28.76	8.45	8.06	55.56	NA	NA
BVI	10.85	10.85	0	NR	NR	1.24	0	0	NA	NA	NA
CAY	84.96	26.75	NR	NR	NR	39.87	4.86	81.25	NA	NA	NA
CUR	100	20.32	0	0	10.69	0	0.92	0.75	NA	NA	32.81
DOM	90.87	47.44	NR	26.83	22.68	51.51	11.11	4.37	NA	NR	81.71
GRA	99.01	19.70	0	0	0.30	100	15.92	3.50	NA	NA	0
GUY	85.62	74.69	NR	10.92	5.46	11.14	8.51	2.17	NA	33.33	37.00
HAI	37.36	0.18	NR	0.02	0.03	15.21	NR	NR	NA	NR	NR
JAM	20.33	16.61	3.13	3.72	7.02	1.92	NR	8.18	11.42	9.12	16.16
MOT	NR	NR	NR	NR	NR	46.91	NA	NA	NA	NA	NA
STL	100	26.40	0	0.54	18.37	0	16.16	12.31	NA	83.33	38.82
STV	95.73	14.85	0	0	1.37	8.00	8.38	9.20	NA	NA	18.75
SUR	100	17.15	0	0	20.52	0	0.80	0.13	NA	NA	32.93
TRT	47.02	35.54	NR	1.35	35.60	6.03	5.11	22.08	NA	NR	17.33

BAH: Autologous not included.

CAY: Imported platelets.

TRT: Discarded, information only from 2 centers.

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ANU	NO	NO	NO	NO	YES
ANI	NO	YES	NO	NO	YES
BAH	YES	NO	NO	NO	YES
BLZ	NO	YES	NO	NO	YES
BVI	NO	NO	NO	NO	NO
CAY	NO	NO	NO	NO	NO
CUR	YES	NO	NO	YES	NO
DOM	NO	NO	NO	NO	NO
GRA	NR	NR	NR	NR	NR
GUY	NO	YES	YES	YES	YES
HAI	NO	YES	YES	YES	YES
JAM	YES	YES	YES	YES	YES
MOT	NO	NO	NO	NO	NO
STL	NO	NO	NO	NO	NO
STV	NO	NO	NO	NO	YES
SUR	NO	NO	YES	NO	NR
TRT	NO	YES	NO	YES	YES

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ANU	NO	NO	YES	YES	NO	NO
ANI	NO	NO	YES	YES	NO	NO
BAH	NO	YES	NO	NO	NO	YES
BLZ	YES	NO	NO	SI	YES	NO
BVI	NO	NO	NO	NO	NO	NO
CAY	NO	NO	NO	NO	NO	NO
CUR	YES	YES	YES	YES	YES	NO
DOM	NO	NO	YES	NO	NO	NO
GRA	NR	NR	NR	NR	NR	NR
GUY	YES	YES	YES	YES	YES	YES
HAI	YES	YES	YES	NR	YES	NO
JAM	YES	NO	YES	YES	YES	NO
MOT	NO	NO	YES	NO	NO	NO
STL	YES	NO	YES	YES	NO	NO
STV	NO	NO	YES	NO	NO	NO
SUR	NO	YES	YES	YES	NO	YES
TRT	YES	NO	YES	YES	YES	NO

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

COUNTRY	QUALITY ASSURANCE POLICY	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ANU	NR	YES	YES	NO	YES
ANI	YES	YES	YES	NO	NO
BAH	NO	YES	YES	NO	YES
BLZ	NO	YES	YES	SI	NO
BVI	NO	YES	YES	NO	NO
CAY	NO	YES	YES	NO	YES
CUR	YES	YES	YES	YES	YES
DOM	NO	YES	YES	NO	NO
GRA	NR	NR	NR	NR	NR
GUY	YES	YES	YES	NO	YES
HAI	YES	YES	YES	NO	YES
JAM	NO	YES	YES	NO	YES
MOT	NO	YES	YES	NO	NO
STL	NO	YES	YES	NO	NO
STV	NO	YES	YES	NO	NO
SUR	YES	YES	YES	NO	NO
TRT	NO	YES	YES	NO	YES

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ANU	NO	NO
ANI	NO	NO
BAH	YES	NO
BLZ	NO	NO
BVI	YES	NO
CAY	YES	NO
CUR	YES	NO
DOM	NO	NO
GRA	NR	NR
GUY	YES	NO
HAI	NO	NO
JAM	YES	NO
MOT	NO	NO
STL	NO	NO
STV	NO	NO
SUR	NO	NO
TRT	YES	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2007*

HIV	HBsAg	HCV	SYPHILIS	HTLV I-II	FIVE MARKERS
ANU	ANU	ANU	ANU		
ANI	ANI	ANI	ANI		
BAH	BAH	BAH	BAH	BAH	BAH
BLZ	BLZ		BLZ	BLZ	
BVI	BVI	BVI	BVI		
CAY	CAY	CAY	CAY	CAY	CAY
CUR	CUR	CUR	CUR	CUR	CUR
DOM	DOM		DOM	DOM	
GRA	GRA	GRA	GRA	GRA	GRA
GUY	GUY	GUY	GUY	GUY	GUY
HAI	HAI	HAI	HAI	HAI	HAI
JAM				JAM	
MOT	MOT		MOT		
STL	STL	STL	STL	STL	STL
STV	STV	STV	STV	STV	STV
SUR	SUR	SUR	SUR	SUR	SUR
TRT	TRT	TRT	TRT	TRT	TRT
17	16	13	16	13	10

* Proportion of units received

LATIN AMERICAN COUNTRIES 2007

TABLE 1. BLOOD COLLECTION 2007

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	708,560	16,530	55,347	636,683	0
BOL	54,951	56	16,004	38,891	0
BRA	1,305,785	23,013	918,644	364,128	0
CHI	238,124	0	19,329	218,795	0
COL	582,011	1,031	388,704	192,276	0
COR	53,914	46	31,948	21,920	0
CUB	400,292	0	400,292	0	0
ECU	144,600	0	50,610	93,990	0
ELS	81,246	0	8,569	72,677	0
GUT	76,485	69	4,850	71,566	0
HON	52,497	54	7,941	44,383	119
MEX	1,501,641	7,967	47,041	1,446,633	0
NIC	59,755	0	23,518	36,237	0
PAN	46,947	180	2,112	35,500	9,155
PAR	54,538	61	5,690	48,787	0
PER	178,060	845	14,440	162,444	331
DOR	46,590	99	7,982	36,605	1,904

BRA: Partial data. Public service of the States of Amazonas, Ceará, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Roraima, Sergipe, and Tocantins.

ELS: Also, 510 apheresis were collected, not included in calculations.

PER: The number of collected units -178,060- is smaller than the number of accepted donors -189,012

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2007 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	692,030	8.00	92.00	0
BOL	54,895	29.15	70.85	0
BRA	1,282,772	71.61	28.39	0
CHI	238,124	8.00	92.00	0
COL	580,980	67.00	33.00	0
COR	53,868	59.00	41.00	0
CUB	400,292	100	0	0
ECU	144,600	35.00	65.00	0
ELS	81,246	10.55	89.45	0
GUT	76,416	6.00	94.00	0
HON	52,443	15.00	85.00	0.23
MEX	1,493,674	3.15	96.85	0
NIC	59,755	39.00	61.00	0
PAN	46,767	4.00	76.00	20
PAR	54,477	10.44	89.56	0
PER	177,215	8.15	91.66	0.19
DOR	46,491	17.17	78.74	4

(*): Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2007 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ARG	692,030	60,287	4,940	749,039	112,356	0	0
BOL	54,895	24,538	8,534	59,376	20,485	0	0
BRA	1,282,772	1,138,970	220,326	449,610	85,482	0	0
CHI	238,124	NR	NR	NR	NR	NR	NR
COL	580,980	NR	NR	NR	NR	0	0
COR	53,868	NR	NR	NR	NR	NR	NR
CUB	400,292	418,000	17,708	NR	NR	0	0
ECU	144,600	NR	NR	NR	NR	0	0
ELS	81,246	10,419	1,850	104,309	31,632	0	0
GUT	76,416	NR	NR	NR	NR	0	0
HON	52,443	NR	NR	NR	NR	NR	NR
MEX	1,493,674	56,449	9,408	1,880,622	433,989	0	0
NIC	59,755	NR	NR	NR	NR	0	0
PAN	46,767	NR	NR	NR	NR	NR	NR
PAR	54,477	5,838	148	52,923	4,136	0	0
PER	177,215	21,333	5,483	245,474	72,744	555	123
DOR	46,491	9,759	1,777	46,361	9,756	2,630	726

(*): Autogous not included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2007 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ARG	692,030	60,287	8	749,039	15	0	0
BOL	54,895	24,538	35	59,376	35	0	0
BRA	1,282,772	1,138,970	19	449,610	19	0	0
CUB	400,292	418,000	4	0	0	0	0
ELS	81,246	10,419	18	104,309	30	0	0
MEX	1,493,674	56,449	17	1,880,622	23	0	0
PAR	54,477	5,838	3	52,923	8	0	0
PER	177,215	21,333	26	245,474	30	555	22
DOR	46,491	9,759	18	46,361	21	2,630	28

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2007

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF BANKS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ARG	692,030	500	1,384	5.3
BOL	54,895	19	2,889	11.1
BRA	1,282,772	437	2,935	11.3
CHI	238,124	57	4,178	16.1
COL	580,980	99	5,868	22.6
COR	53,868	27	1,995	7.7
CUB	400,292	48	8,339	32.1
ECU	144,600	22	6,573	25.3
ELS	81,246	31	2,621	10.1
GUT	76,416	47	1,626	6.3
HON	52,443	23	2,280	8.8
MEX	1,493,674	550	2,716	10.4
NIC	59,755	1	59,755	229.8
PAN	46,767	26	1,799	6.9
PAR	54,477	10	5,448	21.0
PER	177,215	88	2,014	7.7
DOR	46,491	54	861	3.3

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2007

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	100	100	100	100	100	100	100
BOL	99.99	99.99	99.99	99.99	99.84	NR	50.53
BRA	100	100	100	100	100	NR	NR
CHI	100	100	100	100	72.28	56.00	0
COL	100	100	100	100	100	57.53	62.73
COR	NR	NR	NR	NR	NR	NR	NR
CUB	NR	NR	NR	NR	NA	NR	NR
ECU	100	100	100	100	100	0	0
ELS	100	100	100	100	100	NR	NR
GUT	100	100	100	100	100	0	0
HON	100	100	100	100	100	0	0
MEX	98.70	94.83	95.37	91.63	53.31	NR	NR
NIC	100	100	100	100	94.50	NR	NR
PAN	100	100	100	100	100	30.25	100
PAR	100	100	100	100	100	69.81	100
PER	100	100	100	100	100	100	100
DOR	100	100	100	100	NA	100	0

BOL: Screened units: Anti-HBc 27,946, *T. cruzi* 54,861.

BRA: Screened units 918,674.

COL: Screened units: HTLV I-II 334,811, Anti-HBc 365,076.

CHI: Received screening 238,514 units. Screened: HIV-HBsAg-HCV-Syphilis 232,818, *T. cruzi* 168,281, HTLV I-II 130,400.

HON: Received for screening 52,497 units. Screened units: HIV 52,847, HBsAg 52,848, HCV 52,487, Syphilis 52,901, *T. cruzi* 52,847.

MEX: Screened units: HIV 1,482,063, HBsAg 1,424,019, HCV 1,432,087, Syphilis 1,376,010, *T. cruzi* 800,576.

NIC: Screened units 62,702. *T. cruzi* 59,259 screened.

PAN: Screened units HTLV I-II 14,200.

PER: Screened units 184,464.

DOR: Screened units 60,269.

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2007 (*)

COUNTY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>
BOL	5	5	5	5	90
CHI					64,537
MEX	19,578	77,622	69,554	125,631	701,065
NIC					3,443
PAN					235
TOTAL	19,583	77,627	69,559	125,636	769,370

(*) Except HTLV I-II and Anti-HBc.

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2007

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	0.25	0.39	0.98	1.12	3.75	NR	2.45
BOL	0.10	0.38	0.97	1.01	2.53	0.05	3.32
BRA	0.69	0.48	0.53	0.96	0.59	0.23	NR
CHI	0.04	0.02	NR	0.13	0.34	NR	NA
COL	0.44	0.27	0.58	1.58	0.48	0.28	2.76
COR	0.02	0.04	0.17	0.22	0.08	0.02	1.06
CUB	NA	NA	NA	NA	NA	NA	NA
ECU	0.43	0.29	0.43	0.57	0.17	NA	NA
ELS	0.09	0.24	0.29	1.14	2.09	NA	NA
GUT	0.82	1.21	0.69	2.10	0.97	NA	NA
HON	0.25	0.43	0.43	0.75	1.06	NA	NA
MEX	0.28	0.19	0.66	0.32	0.41	NA	NA
NIC	0.27	0.41	0.67	1.04	0.31	NA	NA
PAN	0.07	0.26	0.96	1.18 *	0.06	0.07	2.30
PAR	0.60	0.49	0.72	8.83	3.27	0.29	4.50
PER	0.39	0.49	0.81	1.43	0.77	1.11	4.61
DOR	0.40	1.33	0.42	0.68	NA	0.23	NA

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2007*Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ARG	690,560	586,976	276,224	310,752	129,134	152,614
BOL	54,717	43,056	29,833	5,987	2,997	13,838
BRA	857,019	775,048	129,108	680,016	61,792	426,463
COL	238,514	232,403	168,188	39,109	36,358	131,649
COR	582,011	568,231	432,286	NR	33,825	276,050
CUB	NR	NR	NR	NR	NR	NR
ECU	400,292	210,085	47,060	67,088	32,022	36,066
ELS	144,600	131,297	64,149	21,248	18,390	29,681
MEX	81,756	76,140	49,576	0	9,360	44,258
NIC	NR	NR	NR	NR	NR	NR
PAN	26,029	18,270	15,126	0	983	15,683
PAR	1,501,641	1,362,444	1,031,685	NR	88,812	556,553
PER	54,741	47,606	34,783	513	1,408	33,453
DOR	32,979	27,177	NR	15,092	2,727	16,656

Blood and Blood Components Discarded (Number)*

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ARG	NR	NR	NR	NR	NR	NR
BOL	1,867	2,853	6,797	4,718	965	5,346
BRA	30,227	118,338	111,710	343,751	10,149	192,226
COL	NR	9,114	11,136		1,260	27,215
COR	5,981	48,168	280,176	NA	7,779	102,017
CUB	NR	NA	NA	NA	NA	NA
ECU	NR	NR	NR	NR	NR	NR
ELS	1,106	3,157	9,614	3,879	612	5,924
MEX	1,115	3,958	10,798	NA	163	3,412
NIC	NR	NA	NA	NA	NA	NA
PAN	NR	NR	NR	NA	NR	NR
PAR	42,530	82,219	390,256	NA	17,252	146,068
PER	2,803	1,193	1,755	0	167	8,698
DOR	821	703	NA	199	NR	4,032

CHI: FFP/FP not specified

* Outdated units

TABLE 10. AVAILABLE OF BLOOD COMPONENTS 2007 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ARG	85.00	40.00	45.00	18.70	22.10	NR	NR	NR	NR	NR	NR
BOL	78.69	54.52	10.94	5.48	25.29	16.01	6.63	22.78	78.80	32.20	38.63
BRA	90.44	15.06	79.35	7.21	49.76	36.88	15.27	86.52	50.55	16.42	45.07
CHI	97.44	70.51	16.40	15.24	55.20	NR	3.92	5.37 *		3.47	20.67
COL	97.63	74.27	NR	5.81	47.43	43.40	8.48	NR	64.81	23.00	36.96
COR	NR	NR	NR	NR	NR	NR	NA	NA	NA	NA	NA
CUB	52.48	11.76	16.76	8.00	9.01	NR	NR	NR	NR	NR	NR
ECU	90.84	44.36	14.69	20.53	12.72	8.30	2.40	14.99	18.26	3.33	19.96
ELS	93.13	61.64	0	11.45	54.13	69.69	5.20	21.78	NA	1.74	7.71
GUT	NR	NR	NR	NR	NR	NR	NA	NA	NA	NA	NA
HON	70.19	58.11	0	3.78	60.25	NR	NR	NR	NR	NR	NR
MEX	90.73	68.70	NR	5.91	37.06	30.55	6.03	37.83	NA	19.43	26.25
NIC	86.97	63.54	0.94	2.57	61.11	39.29	2.51	5.05	0	11.86	26.00
PAN	82.41	NR	45.76	8.27	50.50	14	2.59	NA	1.32	NR	24.21
PAR	58.84	45.34	6.04	5.15	36.66	24.35	17.46	19.21	34.81	5.45	36.23
PER	82.52	0	62.60	15.13	44.95	8.43	6.08	0	37.08	17.31	25.18
DOR	49.00	10.95	5.92	0.07	8.77	10.49	1.66	45.48	0	0	5.12

CHI: Discarded components, *5.37% – it is not specified for FP or FFP.

PAN: Separated into components, figure that represents the fractioning in 9 blood banks, 70% of the blood donated nationwide.

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

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

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

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

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

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

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2007

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

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2007

HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	FIVE MARKERS	HTLV I-II	Anti-HBc
ARG	ARG	ARG	ARG	ARG	ARG	ARG	ARG
BRA	BRA	BRA	BRA	BRA	BRA		
CHI	CHI	CHI	CHI				
COL	COL	COL	COL	COL	COL		
ECU	ECU	ECU	ECU	ECU	ECU		
ELS	ELS	ELS	ELS	ELS	ELS		
GUT	GUT	GUT	GUT	GUT	GUT		
HON	HON	HON	HON	HON	HON		
NIC	NIC	NIC	NIC				
PAN	PAN	PAN	PAN	PAN	PAN		PAN
PAR	PAR	PAR	PAR	PAR	PAR		PAR
PER	PER	PER	PER	PER	PER	PER	PER
DOR	DOR	DOR	DOR			DOR	
13	13	13	13	10	10	3	4

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
CARIBBEAN COUNTRIES
2007**

COUNTRY	NAME	POSITION	ADDRESS
ANGUILLA	Everette Duncan	Senior Medical Technologist	PRINCESS ALEXANDRA HOSPITAL Stoney Ground Tel.: 264 497 2551 Ext: 301 - 304 e-mail: evie@anguillanet.com
ANTIGUA AND BARBUDA	Condon Jarvis	Chief Medical Technologist	HOLBERTON HOSPITAL Queen Elizabeth Highway Tel.: 268 462 2461 e-mail: condon.jarvis@antigua.gov.ag
BAHAMAS	Carolyn Azikiwe Everette Miller	Supervisor Supervisor	PRINCESS MARGARET HOSPITAL BLOOD BANK P.O. Box No. 3730 Tel.: 242 322 8077 e-mail: c_azikiwe@hotmail.com
BELIZE	Joy Robateau	Supervisor	BELIZE NATIONAL BLOOD TRANSFUSION SERVICES Princess Margaret Drive, Belize City Tel.: 501 224 5010 e-mail: j_robateau@yahoo.com
BRITISH VIRGIN ISLANDS	Allene Brewley-Roach	Laboratory Director	PEEBLES HOSPITAL (BVI HEALTH SERVICES AUTHORITY) P.O. Box 439, Road Town, Tortola Tel.: 284 494 3497 e-mail: peebleslab@hotmail.com
CAYMAN ISLANDS	Judith Clarke	Medical Technologist	CAYMAN ISLAND HEALTH SERVICES P.O. Box 915. Grand Cayman KY1-1103 Tel.: 345 2442 2669-74 e-mail: judith.clarke@hsa.ky
CURACAO	A. J. Duits	Director	RED CROSS BLOOD BANK FOUNDATION Pater Euwensweg 36 Tel.: 5999 4618 433 e-mail: ajduits@gmail.com
DOMINICA	Nina Pierre	Director Blood Bank	BLOOD BANK, MEDICAL LABORATORY PRINCESS MARGARET HOSPITAL Tel.: 767 448 2231 Ext: 2144 e-mail: pmhlab@cwdom.dm
GRENADA	Everlyn Peters	Senior Laboratory Technologist	PATHOLOGY LABORATORY, GENERAL HOSPITAL Grand Etang Rd., St. George's Tel.: 473 440 5578 e-mail: grensurv@spiceisle.com

COUNTRY	NAME	POSITION	ADDRESS
GUYANA	Arlene Siebs	Medical Technologist	NATIONAL BLOOD TRANSFUSION SERVICE GPHC Compound, Lamaha & East Street Georgetown Tel.: 592 225 4972, 592 227 0418 e-mail: sabhe24@yahoo.com
HAITI	Ernst Noel	Director	NATIONAL BLOOD SAFETY PROGRAM 111, Rue Saint-Honoré, Port-au-Prince Tel.: 509 3510 5908, 509 5310 5909 e-mail: noele@bloodsafetymssp.org, bloodsafetyht@yahoo.fr
JAMAICA	Jennifer Thame	Director-Acting	NATIONAL BLOOD TRANSFUSION SERVICE 21 Slipe Pen Rd Tel.: 876 922 5181-5 e-mail: jenthame@yahoo.com
MONTSERRAT	Brinette Bennett	Medical Technology	GLENDON HOSPITAL St. John, Montserrat Tel.: 664 491 2552 glendonlaboratory@yahoo.com
SAINT LUCIA	Veronica Lee	Medical Technologist	ST. LUCIA BLOOD BANK SERVICE - VICTORIA HOSPITAL Castries Tel.: 758 452 5430 e-mail: slubloodbank@gmail.com
SAINT VINCENT AND THE GRENADINES	Dalrie Cole-John	Medical Technologist- Blood Bank	MILTON CATO MEMORIAL HOSPITAL BLOOD BANK Bentick Square, Kingstown, St Vicent Tel.: 784 456 1185 Ext: 149 e-mail: kghlab@vincysurf.com
SURINAME	Tjon A Loi Maria	Medical Director	NATIONAL BLOOD BANK SURINAME RED CROSS SOCIETY Rode Kruislaan 24 Tel.: 597 499 175, 597 497 483 e-mail: directeur_bloedbank@surinameredcross.sr
TRINIDAD AND TOBAGO	Kenneth Charles	Medical Director	NATIONAL BLOOD TRANSFUSION SERVICE 160 Charlotte Street, Port of Spain Tel.: 868 627 2619 e-mail: skcharles58@hotmail.com

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
LATIN AMERICAN COUNTRIES
2007**

COUNTRY	NAME	POSITION	ADDRESS
ARGENTINA	Esther Mabel Maschio	Coordinadora General del Plan Nacional de Sangre	MINISTERIO DE SALUD Av. 9 de Julio 1925, Piso 9 Ciudad Autónoma de Buenos Aires CP C1073ABA Tel.: 4384 0324/25 - 4379 9000 Int. 4825 e-mail: plannacionaldesangre@msal.gov.ar mmaschio@msal.gov.ar
BOLIVIA	María del Carmen García de Luna Orosco Rubén Darío Roca Oyola	Directora Ejecutiva del Hemocentro-Bsrdlp/Centro Referencia Nacional Coordinadora Nacional del Programa Nacional de Sangre Responsable Técnico	CENTRO DE REFERENCIA NACIONAL / PROGRAMA NACIONAL DE SANGRE-MINISTERIO DE SALUD Y DEPORTES Calle Claudio Sanjinez s/n Complejo Hospitalario de Miraflores, La Paz Tel.: 591 2 211 5542 e-mail: clinicasgarcia@hotmail.com
BRAZIL	Guilherme Genovez	Coordenador	COORDENACAO DA POLÍTICA NACIONAL DE SANGUE E HEMODERIVADOS/ MINISTÉRIO DA SAÚDE Esplanada dos Ministérios, Bloco G, Edifício Sede, Sala 946 Brasilia - D.F. CEP: 70.058-900. Tel.: 55 61 3315 2440 e-mail: sangue@saude.gov.br
CHILE	María Cristina Martínez	Secretaria Ejecutiva Comisión Para el Plan Nacional de Sangre y Tejidos (Cnst)	MINISTERIO DE SALUD (MINSAL) Mac Iver 541 - Santiago Tel.: 56 2 574 0270 e-mail: cnst@minsal.cl cristinamartinez@vtr.net
COLOMBIA	Luis Eduardo Mejía Mejía Mauricio Beltrán Durán	Director General Coordinador Red Nacional Bancos de Sangre	COORDINACIÓN NACIONAL DE SANGRE Av. Calle 26 No.51-60 Tel.: 01 220 7700 Ext.420-421 e-mail: mbeltrand@ins.gov.bo
COSTA RICA	Vilma Carvajal Gutiérrez	Jefa del Área de Regulación Y Sistem- atización De Labora- torios Clínicos Y Bancos De Sangre	DIRECCIÓN DESARROLLO DE SERVICIOS DE SALUD ÁREA DE LABORATORIOS CLÍNICOS CAJA COSTARRICENSE DE SEGURO SOCIAL Telf: 506 295 2584 e-mail: vcarvagu@ccss.sa.cr

COUNTRY	NAME	POSITION	ADDRESS
CUBA	José M. Ballester	Director	INSTITUTO DE HEMATOLOGÍA E INMUNOLOGÍA San Francisco y Perla, Altahabana, Municipio Boyeros Apartado de correos 8070, La Habana, CP 10800 Tel.: 537 643 8268, 8695 e-mail: ihidir@hemato.sld.cu
DOMINICAN REPUBLIC	Sócrates E. Sosa Peña	Director del Programa Nacional de Bancos de Sangre	SECRETARÍA DE ESTADO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL Av. Tiradentes Esq. Av. San Cristobal, Ens, La Fé, Santo Domingo Tel: 809 541 3121 Ext.2472, 2474 e-mail: sócratessosa@hotmail.com
EL SALVADOR	Ana Vilma de Aguilar	Jefa del Área Clínica	LABORATORIO CENTRAL "DR.MAX BLOCH" Almeda Roosevelt frente al Parque Cuscatlán contíguo a H. Rosales, San Salvador Tel.: 503 2221 5751 e-mail: anavilmadeaguilar@yahoo.es labcentralsv@hotmail.com
ECUADOR	Marco Antonio Herdoiza Holguin	Secretario Nacional de Sangre	SECRETARÍA NACIONAL DE SANGRE-SENAS CRUZ ROJA ECUATORIANA Av. Colombia y Elizalde, Esquina, Quinto Piso, Quito Tel.: 593 2 2 582482 Ext.326 e-mail: mherdoiza@cruzroja.org.ec
GUATEMALA	Claudia María García González	Coordinadora del Programa de Medicina Transfusional y Bancos de Sangre	MINISTERIO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL 5av. 11-40 Zona 11, Ciudad de Guatemala Tel.: 2 471 9540 e-mail: pnbs@drpap-mspas.gob.gt
HONDURAS	Inés Adela Zelaya Pineda Elizabeth Vinelli	Jefa Departamento Bancos de Sangre y Servicios de Transfusión Directora del Programa Nacional de Sangre	SECRETARÍA DE SALUD 6to. Piso, Anexo 2. Barrio el Centro, antigua calle del Mónica, frente a Farmacia Regis, Tegucigalpa Tel.: 504 237 5800 e-mail: inazpin@yahoo.com CRUZ ROJA HONDUREÑA Segunda Avenida Calle Real de Comayaguela Tel.: 504 237 1800 e-mail: cenasa@datum.hn
MEXICO	Rafael Antonio Marín y López	Director General	CENTRO NACIONAL DE TRANSFUSIÓN SANGUÍNEA Othon de Mendizal 195 Col. Zacatenco del Gustavo A. Madero, México, D.F. CP 07360 Tel.: 5119 4620 al 28 Ext. 1101, 1104, 1105 e-mail: amarin@salud.gob.mx

COUNTRY	NAME	POSITION	ADDRESS
NICARAGUA	Alcidez González Mairena	Director General	CENTRO NACIONAL DE DIAGNÓSTICO Y REFERENCIA Costado Oeste Colonia Primero de Mayo Tel.: 289 7723 e-mail: dir-cndr@minsa.gob.ni
PANAMA	Heriberto Espino R. Gilma Bósquez D.	Jefe Médico Jefa Técnica	BANCO DE SANGRE HOSPITAL SANTO TOMÁS La Exposición, CI.34, Ciudad de Panamá Tel.: 507 507 5607 e-mail: espino62@hotmail.com / scherazada_11@hotmail.com
PARAGUAY	Angélica Samudio María Ofelia Lemir de Zelada	Directora Coordinadora de la Red Nacional de Servicios de Sangre	PROGRAMA NACIONAL DE SANGRE - MINISTERIO DE SALUD PÚBLICA Y BIENESTAR SOCIAL Manuel Domínguez y Brasil. Edificio SENEPA - 3º piso, Asunción Tel.: 595 21 222 573 e-mail: pnsangre@mspbs.gov.py
PERU	Norberto Quezada Velásquez	Coordinador	PROGRAMA NACIONAL DE HEMOTERAPIA Y BANCOS DE SANGRE-PRONAHEBAS - MINISTERIO DE SALUD Av. Salaverry No.801, Jesús María - Lima Tel.: 315 6600 Anexo 2540 e-mail: pronahebas@minsa.gob.pe



2008

REGIONAL SUMMARY 2008

VARIABLE	CARIBBEAN COUNTRIES	LATIN AMERICAN COUNTRIES	CARIBBEAN AND LATIN AMERICAN COUNTRIES
Blood units collected	104,767	4,916,097	5,020,864
Voluntary, non remunerated donors	40,309 38.47%	1,554,051 31.61%	1,594,360 31.75%
Remunerated donors	0 0%	12,849 0.26%	12,849 0.26%
Screening for HIV (%)	100	100	100
Screening for HBsAg (%)	100	100	100
Screening for HCV (%)	98.69	100	99.97
Screening for SYPHILIS (%)	100	99.93	99.93
Screening for <i>T. cruzi</i> (%)	NA	80.01	NA
Screening for HTLV I-II (%)	98.50	31.26	32.66

CARIBBEAN COUNTRIES 2008

TABLE 1. BLOOD COLLECTION

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	150	2	NA	NA	NA
BAH	5,519	9	1,223	4,287	0
BAR	4,583	130	531	3,922	0
BLZ	3,866	0	390	3,476	0
BVI	561	NA	NA	NA	NA
CAY	921	2	919	0	0
CUR	6,701	4	6697	0	0
DOM	775	2	28	745	0
GRA	1,106	2	380	724	0
HAI	19,646	0	12,928	6,718	0
JAM	24,464	43	2,564	21,857	0
MOT	117	1	0	116	0
SKT	576	0	81	495	0
STL	2,285	4	1,478	803	0
STV	1,156	30	57	1,069	0
SUR	10,330	4	10,326	0	0
TRT	22,011	95	2,707	19,209	0

ANU: The majority of donors are family/replacement donors. Less than 10% are voluntary donors. No distinction between the two groups was made. A registry of voluntary donors started in June.

BAR: Also collected 45 apheresis - not included in collected units.

BLZ: Reported but not included in this table 3 therapeutic donors (interviewed and collected).

BVI: Donors were not differentiated into voluntary, and family-replacement donors. Donors are not remunerated.

JAM: 20% of donors seen in the mobile collections were deferred.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2008 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	148	NA	NA	0
BAH	5,510	22	78	0
BAR	4,453	12	88	0
BLZ	3,866	10	90	0
BVI	561	NA	NA	NA
CAY	919	100	0	0
CUR	6,697	100	0	0
DOM	773	4	96	0
GRA	1,104	34	66	0
HAI	19,646	66	34	0
JAM	24,421	10	90	0
MOT	116	0	100	0
SKT	576	14	86	0
STL	2,281	65	35	0
STV	1,126	5	95	0
SUR	10,326	100	0	0
TRT	21,916	12	88	0

(*) Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2008 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ANU	148	NR	NR	NR	NR	NR	NR
BAH	5,510	1418	195	4,546	259	0	0
BAR	4,453	NR	NR	NR	NR	NR	NR
BLZ	3,866	556	166	5,710	2,234	0	0
BVI	561	NA	NA	NA	NA	NA	NA
CAY	919	1,018	99	0	0	0	0
CUR	6,697	6,733	36	0	0	0	0
GRA	1,104	413	33	843	119	0	0
HAI	19,650	16,336	3408	8,755	2,033	0	0
JAM	24,421	3,566	1,002	NR	NR	NR	NR
MOT	116	0	0	116	0	0	0
SKT	576	81	0	642	147	0	0
STL	2,281	2,145	667	1,153	350	0	0
STV	1,126	60	3	1,210	141	0	0
SUR	10,326	11,339	1,013	0	0	0	0
TRT	21,916	3,768	1,061	32,732	13,523	0	0
JAM	26,303		8,522	17,781	0	0	0

(*) Autologous donors not included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2008 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ANU	148	NR	NR	NR	NR	NR	NR
BAH	5,510	1,418	13.75	4,546	5.70	0	0
BAR	4,453	NR	NR	NR	NR	0	0
BLZ	3,866	556	30.00	5,710	39.00	0	0
BVI	561	NA	NA	NA	NA	NA	NA
CAY	919	1,018	9.72	0	0	0	0
CUR	6,697	6,733	0.53	0	0	0	0
DOM	773	28	0	1,102	32.40	0	0
GRA	1,104	413	7.99	843	14.12	0	0
HAI	19,646	16,336	20.86	8,755	23.27	0	0
JAM	24,421	3,566	28.10	NR	NR	NR	NR
MOT	116	0	0	116	0	0	0
SKT	576	81	0	642	22.90	0	0
STL	2,281	2,145	31.10	1,153	30.36	0	0
STV	1,126	60	5.00	1,210	11.65	0	0
SUR	10,326	11,339	8.93	0	0	0	0
TRT	21,916	3,768	28.16	32,732	41.31	0	0

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2008

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER COLLECT BLOOD CENTERS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ANU	148	1	148	0.6
BAH	5,510	3	1,837	7.1
BAR	4,453	1	4,453	17.1
BLZ	3,866	1	3,866	14.9
BVI	561	1	561	2.2
CAY	919	2	460	1.8
CUR	6,697	1	6,697	25.8
DOM	773	1	773	3.0
GRA	1,104	1	1,104	4.2
HAI	19,646	1	19,646	75.6
JAM	24,421	1	24,421	93.9
MOT	116	1	116	0.4
SKT	576	1	576	2.2
STL	2,281	1	2,281	8.8
STV	1,126	1	1,126	4.3
SUR	10,326	1	10,326	39.7
TRT	21,916	2	10,958	42.1

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2008

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	100	100	100	100	0
BAH	100	100	100	100	100
BAR	100	100	100	100	100
BLZ	100	100	100	100	100
BVI	100	100	100	100	0
CAY	100	100	100	100	100
CUR	100	100	100	100	100
DOM	100	100	0	100	100
GRA	100	100	100	100	100
HAI	100	100	100	100	100
JAM	100	100	100	100	100
MOT	100	100	14.53	100	0
SKT	100	100	13.40	100	3.64
STL	100	100	100	100	100
STV	100	100	100	100	100
SUR	100	100	100	100	100
TRT	100	100	100	100	100

ANU: Screening units 338.
BAR: Screen 4,516 units. also, 45 blood platelets apheresis.
BLZ: screen *T. cruzi* 100%.
CAY: Screen 919 units.
CUR: Screened units 6,697.
MOT: During the period under review, the test for HTLV I-II was unavailable; therefore, could not be performed.
SKT: Screen units VHC 77, HTLV I-II 21.
T&T: Screened units 21,933. *T. cruzi* 100%.

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2008

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU					338
BVI					561
DOM			775		
MOT			100		117
SKT			499		555
TOTAL			1,374		1,571

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2008

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	0	1.18	0.59	0.59	NA
BAH	0.24	0.80	0.69	0.94	0.58
BAR	0.16	0.29	0.62	0.20	0.82
BLZ	0.36	0.96	0.13	1.91	NR
BVI	0	0.36	0	0	NA
CAY	0.11	0.11	0.44	0	0
CUR	0	0	0	0	0.01
DOM	0.52	0.90	NA	2.06	1.29
GRA	0.18	1.08	0.45	0.54	2.44
HAI	1.73	4.37	0.57	4.16	0.94
JAM	1.04	0.83	0.55	2.53	1.86
MOT	0	0	0	0	NA
SKT	0	3.30	1.30	0.52	4.76
STL	0.04	0.70	0.09	0.22	1.05
STV	0.26	0.87	1.12	2.08	2.08
SUR	0.01	0.06	0.02	0.13	0
TRT	0.21	0.35	0.15	1.49	0.72

BLZ: *T. cruzi* 0.75%.TRT: *T. cruzi* 0.03%.**TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2008***Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ANU	150	93	NR	NR	NR	NR
ANI	5,519	4,720	1,418	0	0	1,280
BAH	4,516	1,502	1,502	0	0	1,502
BAR	3,866	1,153	250	896	0	26
BVI	561	172	172	0	NR	NR
CAY	919	792	381	NR	NR	NR
CUR	6,697	6,697	1,300	0	0	696
DOM	775	697	424	NR	108	166
GRA	1,106	1,106	109	0	0	0
GUY	17,079	9,272	282	NR	6	9
HAI	18,536	8,988	7,247	737	1,004	1,959
JAM	117	0	0	0	0	0
MOT	576	111	110	NR	NR	NR
SKT	2,281	2,281	420	0	0	627
STL	1,156	1,046	410	0	0	55
STV	9,689	9,689	1,465	0	0	1,781
TRT	14,688	10,085	7,316	NR	344	7,313

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

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ANU	9	NR	NA	NA	NA	NA
BAH	116	368	249	NA	NA	442
BAR	155	45	221	NA	NA	300
BLZ	610	12	32	86	NA	12
BVI	8	0	0	NA	NA	NA
CAY	51	64	126	NA	NA	2
CUR	0	60	10	NA	NA	240
DOM	48	62	12	NA	9	121
GRA	0	147	22	NA	NA	NA
HAI	2,303	NR	NR	NA	NR	NR
JAM	2,196	NR	NR	NR	NR	NR
MOT	48	NA	NA	NA	NA	NA
SKT	89	13	13	NA	NA	NA
STL	4	134	38	NA	NA	363
STV	88	6	20	NA	NA	2
SUR	0	93	33	NA	NA	490
TRT	544	233	2,548	NA	186	766

* Outdated units

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2008 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ANU	62.00	NR	NR	NR	NR	20.93	NR	NA	NA	NA	NA
BAH	85.52	0	25.69	0	23.19	58.58	7.80	NA	17.56	NA	34.53
BAR	33.26	0	33.26	0	33.26	5.14	3.00	NA	14.71	NA	19.97
BLZ	29.82	23.18	10.80*	0	1.12*	22.48	1.04	9.60	12.80*	NA	46.15*
BVI	30.66	0	30.66	NR	NR	2.06	0	NA	0	NA	NA
CAY	86.18	NR	41.46	NR	NR	22.47	8.08	NA	33.07	NA	NA
CUR	100	0	19.41	0	10.39	0	0.90	NA	0.77	NA	34.48
DOM	89.94	NR	54.71	13.94	21.42	61.54	8.90	NA	2.83	8.33	72.89
GRA	100	0	9.86	0	0	0	13.29	NA	20.18	NA	NA
HAI	54.28	NR	1.66	0.035	0.053	24.68	NR	NA	NR	NR	NR
JAM	48.49	3.98	39.09	5.42	10.57	23.00	NR	NR	NR	NR	NR
MOT	0	0	0	0	0	41.03	NA	NA	NA	NA	NA
SKT	19.27	NR	19.10	NR	NR	19.14	11.71	NA	11.82	NA	NA
STL	100	0	18.41	0	27.49	0	5.87	NA	9.05	NA	57.89
STV	90.48	0	35.47	0	4.76	80.00	0.57	NA	4.87	NA	3.64
SUR	100	0	15.12	0	18.38	0	0.96	NA	2.25	NA	27.51
TRT	68.66	NR	49.81	2.34	49.79	11.82	2.31	NA	34.83	54.07	10.47

ANU: Five units were sent overseas with patients who were transferred for treatment

BAR: Includes 45 platelets obtained by apheresis. 143 units of liquid plasma were discarded.

BLZ: Data from Belize City only. Delete rest of statement

CAY: 351 units of stored frozen plasma were discarded.

JAM: Units separated into components at the Central Blood Bank

MOT: During the period under review, Montserrat did not have the capacity to conduct separation of components. The components were sourced from the neighbouring island of Antigua.

STL: 4 units of autologous donors were discarded.

STV: Discarded number of units of whole blood 14+74 tested positive for TT1.

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ANU	NO	NO	NO	NO	YES
BAH	YES	NO	NO	NO	YES
BAR	NO	NO	NO	NO	NO
BLZ	NO	YES	NO	YES	YES
BVI	NO	NO	NO	NO	NO
CAY	NO	NO	NO	NO	NO
CUR	YES	NO	NO	YES	NO
DOM	NO	NO	NO	NO	NO
GRA	NO	NO	NO	NO	NO
HAI	NO	YES	YES	YES	YES
JAM	YES	YES	YES	YES	YES
MOT	NO	NO	NO	NO	NO
SKT	NO	NO	NO	NO	NO
STL	NO	NO	NO	NO	NO
STV	NO	NO	NO	NO	YES
SUR	YES	NO	YES	YES	NO
TRT	NO	YES	NO	YES	NO

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ANU	NO	NO	YES	YES	NO*	NO
BAH	NO	YES	NO	YES	NO	NO
BAR	NO	NO	YES	YES	NO	NO
BLZ	YES	YES	YES	YES	SI	NO
BVI	NO	NO	NO	NO	NO	NO
CAY	NO	NO	NO	YES	NO	NO
CUR	YES	YES	YES	YES	SI	NO
DOM	NO	NO	YES	NO	NO	NO
GRA	NO	NO	NO	NO	NO	NO
HAI	YES	YES	YES	NO	YES	NO
JAM	YES	NO	YES	YES	NO	NO
MOT	NO	NO	YES	NO	NO	NO
SKT	NO	NO	NO	YES	NO	NO
STL	YES	NO	YES	YES	NO	NO
STV	NO	NO	YES	NO	NO	NO
SUR	NO	YES	YES	YES	YES	YES
TRT	YES	NO	YES	YES	YES	NO

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	QUALITY ASSURANCE POLICY	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ANU	NR	YES	YES	NO	YES
BAH	NO	YES	YES	NO	NO
BAR	NO	YES	NR	NO	NO
BLZ	YES	YES	YES	YES	NO
BVI	NO	YES	YES	NO	NO
CAY	NO	YES	YES	NO	YES
CUR	YES	YES	YES	YES	YES
DOM	NO	YES	YES	NO	NO
GRA	NO	YES	YES	NO	NO
HAI	YES	YES	YES	NO	YES
JAI	YES	YES	YES	NO	YES
MOT	NO	YES	YES	NO	NO
SKT	NO	YES	YES	NO	NO
STL	NO	YES	YES	NO	NO
STV	NO	YES	YES	NO	NO
SUR	YES	YES	YES	YES	YES
TRT	YES	YES	YES	NO	NO

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ANU	NO	NO
BAH	YES	NO
BAR	NO	NO
BLZ	NO	NO
BVI	YES	NO
CAY	YES	NO
CUR	YES	NO
DOM	NO	NO
GRA	NO	NO
HAI	NO	NO
JAM	YES	NO
MOT	NO	NO
SKT	NO	NO
STL	NO	NO
STV	NO	NO
SUR	YES	NO
TRT	NO	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2008*

HIV	HBsAg	VHC	SYPHILIS	HTLV I-II	FIVE MARKERS
ANU	ANU	ANU	ANU		
BAH	BAH	BAH	BAH	BAH	BAH
BAR	BAR	BAR	BAR	BAR	BAR
BLZ	BLZ	BLZ	BLZ	BLZ	BLZ
BVI	BVI	BVI	BVI		
CAY	CAY	CAY	CAY	CAY	CAY
DOM	DOM		DOM	DOM	DOM
GRA	GRA	GRA	GRA	GRA	GRA
HAI	HAI	HAI	HAI	HAI	HAI
JAM	JAM	JAM	JAM	JAM	JAM
MOT	MOT		MOT		
SKT	SKT		SKT		
STL	STL	STL	STL	STL	STL
STV	STV	STV	STV	STV	STV
SUR	SUR	SUR	SUR	SUR	SUR
TRT	TRT	TRT	TRT	TRT	TRT
16	16	13	16	12	12

* Proportion of units received

LATIN AMERICAN COUNTRIES 2008

TABLE 1. BLOOD COLLECTION 2008

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	773,097	21,000	112,173	639,924	0
BOL	61,808	44	19,047	42,717	0
BRA	707,464	10,387	369,363	327,714	0
COL	614,752	776	437,411	176,565	0
COR	57,996	67	36,417	21,512	0
CUBA	393,937	0	393,937	0	0
ECU	155,700	0	57,011	98,689	0
ELS	81,922	11	7,959	73,471	0
GUT	84,357	47	4,126	80,184	0
HON	54,498	25	6,435	47,828	210
MEX	1,484,031	4,795	39,563	1,439,673	0
NIC	68,288	0	32,506	35,782	0
PAN	49,575	256	2,574	37,472	9,273
PAR	59,757	54	7,588	52,115	0
PER	187,437	402	8,621	178,396	18
DOR	81,478	85	19,320	58,725	3,348

BRA: Data from Ceará, Goiás, Espiritu Santo, Maranhao, Minas Gerais, Paraná, Rondonia, Santa Catarina, Sergipe, and Tocantins.

ECU: Donors interviewed 235,909, deferred 80,209 donors.

ELS: 481 units collected by apheresis not included.

GUT: Information regarding remunerated donors was not collected.

HON: Donors interviewed 67,540, deferred 13,042 - not indicated by type of donor.

PER: Donors accepted 196,356. Due to different reasons, the number of collected units is not the same as the number of accepted donors.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2008 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	752,097	14.91	85.09	0
BOL	61,764	30.84	69.16	0
BRA	697,077	52.99	47.01	0
COL	613,976	71.24	28.76	0
COR	57,996	62.86	37.14	0
CUBA	393,937	100	0	0
ECU	155,700	36.62	63.38	0
ELS	81,981	9.77	90.23	0.014
GUT	84,310	4.89	95.11	0
HON	54,473	11.81	87.80	0.39
MEX	1,479,236	2.67	97.33	0
NIC	68,288	47.60	52.40	0
PAN	49,319	5.22	75.98	18.80
PAR	59,703	12.71	87.29	0
PER	187,035	4.61	95.38	0.010
DOR	81,393	23.74	72.15	4.11

(*): Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2008 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ARG	752,097	115,522	3,349	780,324	140,400	0	0
BOL	61,764	28,969	9,922	65,798	23,081	0	0
BRA	697,077	NR	NR	NR	NR	NR	NR
COL	613,976	NR	NR	NR	NR	NR	NR
COR	57,929	NR	NR	NR	NR	NR	NR
CUBA	393,937	411,984	18,047	0	0	0	0
ECU	155,700	NR	NR	NR	NR	0	0
ELS	81,981	10,217	2,258	104,728	31,257	0	0
GUT	84,310	4,547	421	122,196	42,012	0	0
HON	54,473	NR	NR	NR	NR	NR	NR
MEX	1,479,236	46,158	6,595	2,097,591	657,918	0	0
NIC	68,288	36,525	4,019	42,486	6,704	0	0
PAN	49,319	NR	NR	NR	NR	NR	NR
PAR	59,703	7,866	276	56,819	4,613	0	0
PER	187,035	11,840	2,534	271,824	85,247	55	37
DOR	81,393	22,715	3,395	70,874	12,149	4,026	678

(*): Autologous donors not included

NIC: Data of replacement donors given by the Nicaraguan Red Cross: interviewed 36,986, deferred 6,685, collected 30,301.

ECU: The total number of donors interviewed 235,909, deferred 80,209.

HON: Donors were not indicated by type, just: interviewed 67,540, deferred 13,042. The Nicaraguan Red Cross indicated donors as: interviewed 36,986, deferred 6,685, extracted 30,301.

PAR: 2 failed extractions in voluntary donors; and 91 failed extractions in replacement donors.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2008 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ARG	752,097	115,522	2.90	780,324	17.99	0	0
BOL	61,764	28,969	34.25	65,798.00	35.08	0	0
CUBA	393,937	411,984	4.38	0	0	0	0
ELS	81,981	10,217	22.10	104,728	29.84	0	0
GUT	84,310	4,547	9.26	122,196	34.38	0	0
MEX	1,479,236	46,158	14.29	2,097,591	31.37	0	0
NIC	68,288	36,525	11.00	42,486	15.78	0	0
PAR	59,703	7,866	3.51	56,819	8.12	0	0
PER	187,035	11,840	21.40	271,824.00	31.36	55.00	67.27
DOR	81,393	22,715	14.95	70,874	17.14	4,026.00	16.84

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2008

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF BANKS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ARG	752,097	322	2,336	9.0
BOL	61,764	18	3,431	13.2
BRA	697,077	396	1,760	6.8
COL	613,976	95	6,463	24.9
COR	57,929	17	3,408	13.1
CUBA	393,937	48	8,207	31.6
ECU	155,700	34	4,579	17.6
ELS	81,981	31	2,645	10.2
GUT	84,310	52	1,621	6.2
HON	54,473	23	2,368	9.1
MEX	1,479,236	557	2,656	10.2
NIC	68,288	6	11,381	43.8
PAN	49,319	26	1,897	7.3
PAR	59,703	11	5,428	20.9
PER	187,035	90	2,078	8.0
DOR	81,393	63	1,292	5.0

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2008

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	100	100	100	100	100	100	100
BOL	100	100	100	100	100	NR	100
BRA	100	100	100	100	100	NR	NR
COL	100	100	100	100	100	60.75	64.75
COR	100	100	100	100	100	100	100
CUBA	100	100	100	100	NA	NR	NR
ECU	100	100	100	100	100	NR	NR
ELS	100	100	100	100	100	NR	NR
GUT	100	100	100	100	100	NR	NR
HON	100	100	100	100	100	NA	NA
MEX	100	100	100	99.78	66.26	NR	NR
NIC	100	100	100	100	98.50	NR	NR
PAN	100	100	100	100	96.52	43.24	100
PAR	100	100	100	100	100	76.48	100
PER	99.99	99.96	99.87	99.80	99.91	99.83	NR
DOR	100	100	100	100	NA	89.97	NR

COL: Screened units HTLV I-II 373,468, Anti-HBc 398,076.

ELS: 481 units collected by apheresis, included in calculations of screening.

GUT: Screened units 84,310.

HON: Screened units: HIV 54,581, HBsAg 54,587, HCV 54,587, Syphilis 54,653, *T. cruzi* 54,580.

MEX: Screened units: Syphilis 1,480,702, *T. cruzi* 983,311- obligatory only in endemic areas.

NIC: Screened units *T. cruzi* 67,253.

PAN: Screened units: *T. cruzi* 47,848, HTLV I-II 21,435.

PER: Screened units: HIV 187,911, HBsAg 187,855, HCV 187,677, Syphilis 187,557, *T. cruzi* 187,761, HTLV I-II 187,601, Anti-HBc 187,440.

DOR: Screened units 83,776. Screened HTLV I-II 75,370. A higher number of screened units is given because there are services that repeat tests.

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2008 (*)

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>
COL					
MEX				3,329	500,720
NIC					1,035
PAN					1,727
PAR					
PER	19	75	244	375	169
DOR					
TOTAL	19	75	244	3,704	503,651

(*) Except HTLV I-II and Anti-HBc.

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2008

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	0.21	0.33	0.63	1.07	3.80	0.25	0.87
BOL	0.15	0.24	1.03	0.94	2.36	NA	NR
BRA	0.40	0.35	0.37	0.50	0.32	NA	NA
COL	0.38	0.24	0.61	1.65	0.55	0.26	2.43
COR	0.16	0.17	1.27	0.79	0.49	0.31	2.92
CUBA	0.02	0.37	1.20	0.57	NA	NA	NA
ECU	0.20	0.37	0.59	0.46	0.18	NA	NA
ELS	0.09	0.17	0.17	0.91	2.46	NA	NA
GUT	0.76	0.55	0.88	2.31	1.42	0.23	2.09
HON	0.28	0.30	0.48	1.08	1.56	NA	NA
MEX	0.33	0.19	0.62	0.39	0.45	NA	NA
NIC	0.39	0.33	0.69	1.48	0.43	NA	NA
PAN	0.06	0.21	0.34	1.38	0.38	0.25	2.24
PAR	0.37	0.37	0.44	8.13	3.22	0.29	3.98
PER	0.31	0.46	0.89	1.35	0.54	1.03	4.70
DOR	0.34	1.14	0.39	0.64	NA	0.26	NA

BLZ: *T. cruzi* 0.75%.TRT: *T. cruzi* 0.03%.

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2008*Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ARG	773,097	695,787	292,730	403,556	83,494	251,105
BOL	61,798	53,306	41,184	8,365	3,596	17,900
BRA	697,077	413,381	338,945	NR	24,681	206,620
COL	614,752	592,159	453,652	80,633	97,401	280,441
COR	54,452	52,273	NR	52,273	6,738	41,897
CUB	194,308	184,840	37,492	8,061	18,984	28,309
ECU	155,700	102,349	84,259	7,977	4,188	39,337
ELS	81,922	81,603	59,665	NR	8,545	47,581
GUT	84,310	67,172	46,135	NR	1,665	28,256
HON	54,498	19,615	16,115	NR	924	16,540
MEX	1,484,031	1,381,175	1,102,297	NR	91,426	630,031
NIC	64,308	56,616	34,740	NR	7,140	36,954
PAN	33,021	29,287	153	14,488	2,698	17,791
PAR	59,757	37,925	33,615	510	3,531	23,022
PER	187,437	139,821	105,447	NR	14,572	83,110
DOR	81,478	30,503	3,467	5,933	47	3,906

Blood and Blood Components Discarded (Number)

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ARG	NR	NR	NR	NR	NR	NR
BOL	1,177	3,782	9,891	4,567	939	6,405
BRA	15,216	71,217	185,337	NR	2,663	76,627
COL	4,839	45,186	210,499	75,775	9,542	100,682
COR	509	5,920	0	8,897	1	14,928
CUB	706	20,940	3,060	5,527	673	6,371
ECU	320	1,690	4,360	2,813	503	2,934
ELS	1,446	5,451	8,438	NR	365	7,320
GUT	4,518	7,345	12,604	NR	299	6,799
HON	NR	NR	NR	NA	NR	NR
MEX	41,741	91,840	413,112	NR	12,202	156,289
NIC	667	1,669	670	NR	5	723
PAN	598	3,488	141	NR	122	5,009
PAR	4,324	7,228	7,102	3,639	62	9,062
PER	3,483	7,762	39,704	NA	1,269	19,792
DOR	3,422	531	7,906	0	0	319

* Outdated units

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2008 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ARG	90.00	37.86	52.20	10.80	32.48	NR	NR	NR	NR	NR	NR
BOL	86.26	66.64	13.54	5.82	28.97	13.66	7.09	24.02	54.60	26.11	35.78
BRA	59.30	48.62	NR	3.54	29.64	54.01	17.23	54.68	NA	10.79	37.09
COL	96.32	73.79	13.12	15.84	45.62	46.19	7.63	46.40	93.98	9.80	35.90
COR	96.00	0	96.00	12.37	76.94	23.36	11.33	NA	17.02	0.01	35.63
CUBA	95.13	19.30	4.15	9.77	14.57	7.46	11.33	8.16	68.56	3.55	22.51
ECU	65.73	54.12	5.12	2.69	25.26	4.46	1.65	5.17	35.26	12.01	7.46
ELS	99.61	72.83	NR	10.43	58.08	100	6.68	14.14	NA	4.27	15.38
GUT	79.67	54.72	NR	1.97	33.51	26.36	10.93	27.32	NA	17.96	24.06
HON	35.99	29.57	NR	1.70	30.35	NR	NR	NR	NR	NR	NR
MEX	93.07	74.28	NR	6.16	42.45	40.58	6.65	37.48	NA	13.35	24.81
NIC	88.04	54.02	NR	11.10	57.46	5.64	2.95	1.93	NA	0.070	1.96
PAN	88.69	0.46	43.88	8.17	53.88	2.95	11.91	92.16	NR	4.52	28.15
PAR	63.47	56.25	0.85	5.91	38.53	20.06	19.06	21.13	100	1.76	39.36
PER	74.60	56.26	NR	7.77	44.34	1.86	5.55	37.65	NA	8.71	23.81
DOR	37.44	4.26	7.28	0.06	4.79	6.71	1.74	100	0	0	8.17

ELS: 481 units collected by apheresis, included in calculation of separation into components.

HON: The Ministry of Health instead of Secretary did not fraction components this year; it only obtained 1,355 units of platelets apheresis. The national register form does not allow to obtain separate information regarding discarded components.

MEX: Also, separated into components – apheresis procedure 49,826.

PAN: Separated into components – figure that represents the fractioning of 10 blood banks, 66% donated blood nationwide. Discarded units: data corresponds to 21 blood banks and 1 transfusion center (expired).

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ARG	YES	YES	YES	YES	YES
BOL	YES	YES	NO	YES	YES
BRA	YES	YES	YES	YES	YES
COL	YES	YES	NO	YES	YES
COR	YES	YES	YES	YES	YES
CUBA	YES	YES	NO	YES	YES
ECU	YES	YES	YES	YES	YES
ELS	NO	YES	NO	YES	NO
GUT	YES	YES	YES	YES	YES
HON	YES	YES	YES	YES	YES
MEX	YES	YES	YES	YES	NO
NIC	YES	YES	YES	YES	NO
PAN	YES	YES	NO	NO	YES
PAR	YES	YES	YES	YES	YES
PER	YES	YES	NO	NO	NO
DOR	YES	YES	NO	YES	YES

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

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
BRA	NO	YES	YES	YES	YES	YES
COL	YES	YES	YES	YES	YES	YES
COR	YES	YES	YES	YES	YES	YES
CUBA	YES	YES	YES	YES	YES	YES
ECU	YES	YES	YES	YES	YES	YES
ELS	YES	YES	YES	YES	YES	YES
GUT	YES	NO	YES	YES	YES	YES
HON	YES	YES	YES	YES	YES	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	YES	YES	YES	YES	YES	YES
PAN	YES	NO	NO	YES	YES	YES
PAR	YES	YES	YES	YES	YES	YES
PER	NO	NO	NO	NR	YES	YES
DOR	NO	YES	YES	YES	NO	YES

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	QUALITY ASSURANCE POLICY	NATIOANL QUALITY ASSURANCE PROGRAM	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ARG	YES	NO	YES	YES	NO	YES
BOL	YES	YES	YES	NO	YES	YES
BRA	NO	YES	YES	YES	YES	YES
COL	NO	NO	YES	NO	YES	YES
COR	YES	YES	YES	NO	YES	YES
CUBA	YES	YES	YES	YES	YES	YES
ECU	NO	YES	YES	YES	NO	NO
ELS	YES	NO	YES	NO	YES	YES
GUT	NO	NO	YES	NO	NO	YES
HON	NO	NO	NO	NO	NO	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	NO	YES	YES	NO	NO	YES
PAN	NO	NO	YES	YES	YES	YES
PAR	YES	YES	NO	NO	YES	YES
PER	NR	NR	YES	NO	YES	NO
DOR	YES	YES	YES	NO	YES	NO

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2008

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ARG	YES	YES
BOL	YES	YES
BRA	YES	YES
COL	YES	NO
COR	YES	YES
CUBA	YES	YES
ECU	NO	NO
ELS	NO	NO
GUT	YES	NO
HON	NO	NO
MEX	YES	NO
NIC	NO	NO
PAN	NO	YES
PAR	NO	YES
PER	NO	NO
DOR	NO	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2008*

HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	FIVE MARKERS	HTLV I-II	Anti-HBc
ARG	ARG	ARG	ARG	ARG	ARG	ARG	ARG
BOL	BOL	BOL	BOL	BOL	BOL		BOL
BRA	BRA	BRA	BRA	BRA	BRA		
COL	COL	COL	COL	COL	COL		
COR	COR	COR	COR	COR	COR	COR	COR
CUBA	CUBA	CUBA	CUBA				
ECU	ECU	ECU	ECU	ECU	ECU		
ELS	ELS	ELS	ELS	ELS	ELS		
GUT	GUT	GUT	GUT	GUT	GUT		
HON	HON	HON	HON	HON	HON		
MEX	MEX	MEX					
NIC	NIC	NIC	NIC				
PAN	PAN	PAN	PAN				PAN
PAR	PAR	PAR	PAR	PAR	PAR		PAR
DOR	DOR	DOR	DOR				
15	15	15	14	10	10	2	5

* Proportion of units received

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
CARIBBEAN COUNTRIES
2008**

COUNTRY	NAME	POSITION	ADDRESS
ANGUILLA	Everette Duncan	Senior Medical Technologist	HEALTH AUTHORITY OF ANGUILLA. PRINCESS ALEXANDRA HOSPITAL THE VALLEY ANGUILLA Stoney Ground Tel.: 264 497 2551 e-mail: evie@anguillanet.com
BAHAMAS	Carolyn Azikiwe	Supervisor	PRINCESS MARGARET HOSPITAL Shirley Street - Nassau Tel.: 242 322 8077 e-mail: c_azikiwe@hotmail.com
BARBADOS	Priscilla Jordan	Medical Laboratory Technologist	QUEEN ELIZABETH HOSPITAL Martindales Road, St. Michael Tel.: 246 4253522 Ext: 6124 e-mail: woodon261@hotmail.com
BELIZE	Joy Robateau	Supervisor	BELIZE NATIONAL BLOOD TRANSFUSION SERVICES Princess Margaret Drive, Belize City Tel.: 501 224 5010 e-mail: j_robateau@yahoo.com
BRISH VIRGIN ISLANDS	Allene Brewley-Roach	Laboratory Director	PEEBLES HOSPITAL (BVI HEALTH SERVICES AUTHORITY) P.O. Box 439, Road Town, Tortola Tel.: 284 494 3497 e-mail: peebleslab@hotmail.com
CAYMAN ISLANDS	Judith Clarke	Laboratory Quality Coordinator	CAYMAN ISLAND HEALTH SERVICES AUTHORITY 95 Hospital Road, P.O. Box 915 Grand Cayman KY1-1103 Tel.: 345 244 2669 e-mail: JUDITH.CLARKE@HSA.KY
CURACAO	A. J. Duits	Director	RED CROSS BLOOD BANK FOUNDATION Pater Euwensweg 36 Tel.: 5999 4618 433 e-mail: ajduits@gmail.com
DOMINICA	Nina Pierre	Director Blood Bank	BLOOD BANK, MEDICAL LABORATORY PRINCESS MARGARET HOSPITAL Tel.: 767 448 2231 Ext: 2144 e-mail: pmhlab@cwdom.dm
GRENADA	Everlyn Peters	Senior Laboratory Technologist	PATHOLOGY LABORATORY, GENERAL HOSPITAL Grand Etang Rd., St. George's Tel.: 473 440 5578 e-mail: grensurv@spiceisle.com

COUNTRY	NAME	POSITION	ADDRESS
HAITI	Ernst Noel	Director	NATIONAL BLOOD SAFETY PROGRAM 111, Rue Saint-Honoré, Port-au-Prince Tel.: 509 3510 5908, 509 5310 5909 e-mail: noele@bloodsafetyspp.org, bloodsafetyht@yahoo.fr
JAMAICA	Evadne Williams	Director	NATIONAL BLOOD TRANSFUSION SERVICE 21 Slipe Pen Road, Kingston Tel.: 876 922 5181 e-mail: evadnem47@yahoo.com
MONTSERRAT	Brinette Bennett	Medical Technology	GLENDON HOSPITAL St. John, Montserrat Tel.: 664 491 2552 glendonlaboratory@yahoo.com
SAINT KITTS AND NEVIS	Domina Christmas Jasmin Hanley	Medical Technologist Laboratory Manager	JOSEPH. N. FRANCE GENERAL HOSPITAL Buckley's Site Tel.: 869 465 2551 Ext. 163 e-mail: jhantaq@yahoo.com
SAINT LUCIA	Veronica Lee	Medical Technologist/Blood Bank Manager	ST. LUCIA BLOOD BANK SERVICE VICTORIAHOSPITAL, Castries Tel.: 758 452 5430 e-mail: slubloodbank@gmail.com
SAINT VINCENT AND THE GRENADINES	Dalrie Cole-John	Medical Technologist-Blood Bank	MILTON CATO MEMORIAL HOSPITAL BLOOD BANK Bentick Square, Kingstown, St Vincent Tel.: 784 456 1185 Ext: 149 e-mail: kghlab@vincysurf.com
SURINAME	Tjon A Loi Maria	Medical Director	NATIONAL BLOOD BANK SURINAME RED CROSS SOCIETY Rode Kruislaan 24 Tel.: 597 499175 / 497483 e-mail: directeur_bloedbank@surinameredcross.sr
TRINIDAD AND TOBAGO	Kenneth Charles	Medical Director	NATIONAL BLOOD TRANSFUSION SERVICE 160 Charlotte Street, Port of Spain Tel.: 868 627 2619 e-mail: skcharles@live.com

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
LATIN AMERICAN COUNTRIES
2008**

COUNTRY	NAME	POSITION	ADDRESS
ARGENTINA	Esther Mabel Maschio	Coordinadora General del Plan Nacional de Sangre	MINISTERIO DE SALUD Av. 9 de Julio 1925 - Piso 9 Ciudad Autónoma de Buenos Aires - CP C1073ABA Tel.: 011 4384 0324/25, 4379 9000 Int. 4825 e-mail: plannacionaldesangre@msal.gov.ar mmaschio@msal.gov.ar
BOLIVIA	Ma. del Carmen García de Luna Orosco Ruben Dario Roca Oyola	Coordinadora Nacional del Programa Nacional de Sangre Responsable Técnico del Programa Nacional de Sangre	CENTRO DE REFERENCIA NACIONAL / PROGRAMA NACIONAL DE SANGRE-MINISTERIO DE SALUD Y DEPORTES Calle Claudio Sanjinez s/n Complejo Hospitalario de Miraflores, La Paz Tel.: 591 2 211 5542 e-mail: clinicas@seibo.entelnet.bo
BRAZIL	Danila Augusta Accioly Varella Barca Guilherme Genovez	Assessora da Gestao da Informacao Coordenador Nacional	COORDENACAO DA POLÍTICA NACIONAL DE SANGUE Esplanada dos Ministérios, Bloco G, Edifício Sede, Sala 946 Brasilia - D.F. CEP: 70.058-900. Tel.: 55 61 3315 2440 e-mail: sangue@saude.gov.br
COLOMBIA	Mauricio Beltrán Durán	Coordinador Red Nacional de Bancos de Sangre	INSTITUTO NACIONAL DE SALUD Av. Calle 26 No.51-20 Tel.: 220-77-00 Ext. 420-421 e-mail: mbeltrand@ins.gov.co
COSTA RICA	Vilma Carvajal Gutiérrez	Jefa Sub Area de Laboratorios Clínicos	CAJA COSTARRICENSE DE SEGURO SOCIAL San José Tel.: 506 2539 1082 e-mail: vcarvagu@ccss.sa.cr
CUBA	Ángel Suarez Escandon	Jefe Del Programa Nacional De Sangre	MINSAP N Vedado Ciudad Habana Tel.: 537 838 3419 e-mail: angel.suarez@infomed.sld.cu
DOMINICA REPUBLIC	Sócrates E. Sosa Peña	Director del Programa Nacional de Bancos de Sangre	SECRETARÍA DE ESTADO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL Av. Tiradentes Esq. Av. San Cristobal, Ens, La Fé, Santo Domingo Tel: 809 541 3121 Ext.2472, 2474 e-mail: sócratessosa@hotmail.com
ECUADOR	Diana Almeida Ubidia	Tecnica del Programa de Seguridad Transfusional	MINISTERIO DE SALUD PÚBLICA Av. República del Salvador y Suecia, Quito Tel.: 593 2 381 400 Ext. 95-17 e-mail: diana_helena@yahoo.es

COUNTRY	NAME	POSITION	ADDRESS
EL SALVADOR	Ana Vilma de Aguilar	Jefa Área Clínica	UNIDAD DE VIGILANCIA LABORATORIAL Alameda Roosevelt frente al Parque Cuscatlán contíguo a H. Rosales, San Salvador Tel.: 503 2221 5751 e-mail: anavilmadeaguilar@yahoo.es labcentralsv@hotmail.com
GUATEMALA	Claudia María García González	Coordinadora del Programa de Medicina Transfusional y Bancos de Sangre	MINISTERIO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL 5av. 11-40 Zona 11, Ciudad de Guatemala Tel.: 2 471 9540 e-mail: pnbs@drpap-mspas.gob.gt
HONDURAS	Inés Adela Zelaya Pineda	Jefa Departamento Bancos de Sangre y Servicios de Transfusión	SECRETARÍA DE SALUD 6to. Piso, Anexo 2. Barrio el Centro, Antigua calle del Mónica, frente a la Farmacia Regis, Tegucigalpa Tel.: 504 222 8523 e-mail: inazpin@yahoo.com
MEXICO	Julieta Rojo Medina	Director General	CENTRO NACIONAL DE LA TRANSFUSIÓN SANGUÍNEA Othon de Mendizal 195 Col. Zacatenco del Gustavo A. Madero, México, D.F. CP 07360 Tel.: 5119 4620 al 28 Ext. 1101, 1104, 1105 e-mail: julieta.rojo@salud.gob.mx
NICARAGUA	Alcidez González Mairena	Director General	CENTRO NACIONAL DE DIAGNÓSTICO Y REFERENCIA Costado Oeste Colonia Primero de Mayo Tel.: 289 7723 e-mail: dir-cndr@minsa.gob.ni
PANAMA	Heriberto Espino R. Gilma Bósquez D.	Jefe Médico Jefa Técnica	BANCO DE SANGRE HOSPITAL SANTO TOMÁS La Exposición, CI.34 Telf.: 507 507 5607 e-mail: espino62@hotmail.com; scherazada_11@hotmail.com
PARAGUAY	Angélica Samudio María Ofelia Lemir de Zelada	Directora Del Programa Nacional De Sangre Coordinadora de la Red Nacional de Servicios de Sangre	PROGRAMA NACIONAL DE SANGRE - MINISTERIO DE SALUD PUBLICA Y BIENESTAR SOCIAL Manuel Domínguez y Brasil. Edificio SENEPA - 3º piso Asunción Tel.: 595 21 222573 e-mail: pnsangre@mspbs.gov.py
PERU	Norberto Quezada Velásquez	Coordinador	PROGRAMA NACIONAL DE BANCOS DE SANGRE - MINSA Av. Salaverry No.801, Jesús María - Lima Tel.: 51 1 315 6600 Anexo 2540 e-mail: nquezada@minsa.gob.pe



2009

REGIONAL SUMMARY 2009

VARIABLE	CARIBBEAN COUNTRIES	LATIN AMERICAN COUNTRIES	CARIBBEAN AND LATIN AMERICAN COUNTRIES
Blood units collected	118,278	4,937,275	5,055,553
Voluntary, non remunerated donors	49,430 41.79%	1,590,717 32.22%	1,640,147 32.44%
Remunerated donors	0 0%	11,323 0.23%	11,323 0.22%
Screening for HIV (%)	100	99.97	99.97
Screening for HBsAg (%)	100	99.97	99.97
Screening for HCV (%)	98.77	99.97	99.94
Screening for SYPHILIS (%)	100	99.97	100
Screening for <i>T. cruzi</i> (%)	NA	84.08	NA
Screening for HTLV I-II (%)	94.06	46.83	47.95

CARIBBEAN COUNTRIES 2009

TABLE 1. BLOOD COLLECTION

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	117	0	NR	117	0
ANI	1,321	3	66	1,252	0
BAH	6,914	4	1,346	5,564	0
BAR	4,781	119	716	3,946	0
BLZ	4,364	0	337	4,027	0
BVI	485	NA	NA	NA	NA
CAY	965	0	965	0	0
CUR	6,702	1	6701	0	0
DOM	977	4	31	942	0
GRA	1,426	5	370	1,051	0
GUY	7,700	0	5,209	2,491	0
HAI	21,471	51	14,953	6,467	0
JAM	24,881	55	3,688	21,138	0
MOT	94	1	NA	93	0
SKT	510	1	98	411	0
STL	2,446	4	1,564	878	0
STV	982	26	52	904	0
SUR	9,774	0	10,437	0	0
TRT	22,368	95	2,897	19,376	0

BAH: Replacement donors interviewed 5,360, deferred 448. The RMH only indicated the number of units collected.

BAR: Not included 50 platelets apheresis collected and screened.

BVI: Donors are not being differentiated into voluntary and family/replacement donors. Donors are not remunerated.

JAM: The statistics do not separate deferrals per donor category (voluntary/replacement/autologous). Some stratified data available is only from 1 fixed center site [NBTS-HQ].

SUR: 10,437 blood samples - test tubes - were extracted and screened (from the ones that were not deferred). Received for separation into components 9,774 blood units.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2009 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	117	0	100	0
ANI	1,318	5.01	94.99	0
BAH	6,910	19.48	80.52	0
BAR	4,662	15.36	84.64	0
BLZ	100	7.72	92.28	0
BVI	485	NA	NA	NA
CAY	965	100	0	0
CUR	6,701	100	0	0
DOM	973	3.19	96.81	0
GRA	1,421	26.04	73.96	0
GUY	7,700	67.65	32.35	0
HAI	21,420	69.81	30.19	0
JAM	24,826	14.77	85.23	0
MOT	93	0	100	0
SKT	509	19.25	80.75	0
STL	2,442	64.05	35.95	0
STV	956	5.44	94.56	0
SUR	10,437	100	0	0
TRT	22,273	13.01	86.99	0

(*): Autologous donors not included.

TALBE 3. SELECTION OF ALLOGENEIC DONORS 2009 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ANU	117	NR	NR	431	89	0	0
ANI	1,318	68	2	1,441	189	0	0
BAH	6,910	1,466	120	NA	NA	0	0
BAR	4,662	NR	NR	NR	NR	0	0
BLZ	4,364	528	191	6,333	2,306	0	0
BVI	485	NA	NA	NA	NA	NA	NA
CAY	965	1,081	116	0	0	0	0
CUR	6,701	6,736	35	0	0	0	0
DOM	973	31	0	1,440	498	0	0
GRA	1,421	408	38	1212	161	0	0
GUY	7,700	NR	NR	NR	NR	0	0
HAI	21,420	18,229	3,276	8,557	2,090	0	0
JAM	24,826	NR	NR	NR	NR	0	0
MOT	93	NA	NA	100	0	0	0
SKT	509	98	0	588	177	0	0
STL	2,442	2,362	798	1,338	460	0	0
STV	956	62	10	1,127	223	0	0
SUR	10,437	11,927	1,490	0	0	0	0
TRT	22,273	4,099	1,202	36,102	16,726	0	0

(*): Autologous donors included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2009 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ANU	117	0	0	431	20.65	0	0
ANI	1,318	68	3	1,441	13.12	0	0
BAH	6,914	1466	8.19	NA	NA	0	0
BAR	4,662	NR	NR	NR	NR	0	0
BLZ	4,364	528	36.17	6,333	36.41	0	0
CAY	965	1,081	10.73	0	0	0	0
CUR	6,701	6,736	0.52	0	0	0	0
DOM	973	31	0	1,440	34.58	0	0
GRA	1,421	408	9.31	1,212	13.28	0	0
HAI	21,420	18,229	17.97	8,557	24.42	0	0
MOT	93	NA	NA	93	0	0	0
SKT	509	98	0	588	30.10	0	0
STL	2,442	2,362	33.78	1,338	34.38	0	0
STV	956	62	16.13	1,127	19.79	0	0
SUR	10,437	11,927	12.49	0	0	0	0
TRT	22,273	4,099	29.32	36,102	46.33	0	0

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2009

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER COLLECT BLOOD CENTERS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ANU	117	1	117	0.5
ANI	1,318	2	659	2.5
BAH	6,910	3	2,303	8.9
BAR	4,662	1	4,662	17.9
BLZ	4,364	1	4,364	16.8
BVI	485	1	485	1.9
CAY	965	2	483	1.9
CUR	6,701	1	6,701	25.8
DOM	973	1	973	3.7
GRA	1,421	1	1,421	5.5
GUY	7,700	1	7,700	29.6
HAI	21,420	1	21,420	82.4
JAM	24,826	3	8,275	32
MOT	93	1	93	0.4
SKT	509	1	509	2.0
STL	2,442	2	1,221	4.7
STV	956	1	956	3.7
SUR	10,437	1	10,437	40.1
TRT	22,273	2	11,137	42.8

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2009

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	100	100	100	100	0
ANI	100	100	93.10	100	0
BAH	100	100	100	100	100
BAR	100	100	100	100	100
BLZ	100	100	100	100	NR
BVI	100	100	100	100	0
CAY	100	100	100	100	100
CUR	100	100	100	100	100
DOM	100	100	0	100	100
GRA	100	100	100	100	100
GUY	100	100	100	100	100
HAI	100	100	100	100	100
JAM	100	100	100	100	100
MOT	100	100	100	100	0
SKT	100	100	21.40	100	0
STL	100	100	100	100	100
STV	100	100	100	100	100
SUR	100	100	100	100	100
TRT	100	100	100	100	100

ANU: Screened units 301.

ANI: HCV testing could not be done on all units due to unavailability of reagent. Screened units 1,318.

BAH: Screened units 6,914.

BAR: Not included 50 platelets apheresis collected and screened.

BLZ: Screened *T. cruzi* 100%.

CUR: Screened units 6,701.

GUY: Screened *T. cruzi* 100%.

MOT: Screened units 93.

STL: Blood units from autologous were not screened or separated into components

STV: 982 units tested, 56 were reactive, 2 donors were co-infected.

SUR: Extracted and screened were 10,437 blood samples -test tubes (from the ones that were not deferred).

TRT: Screened units 22,273. Screened *T. cruzi* 100%

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2009

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU					301
ANI			91		1,318
BLZ					4,634
BVI					485
DOM			977		
MOT					94
SKT			401		509
TOTAL			1,469		7,341

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2009

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	0	0	0.66	0.66	0
ANI	0.91	1.67	0.53	0.46	NR
BAH	0.19	0.77	0.52	0.30	0.29
BAR	0.10	0.27	0.33	0.13	0.36
BLZ	0.23	0.48	0.34	0.87	NA
BVI	0	0.21	0	0.21	NA
CAY	0.21	0	0.21	0.10	0.10
CUR	0	0	0	0	0
DOM	0.30	0	NA	1.94	1.54
GRA	0	1.05	0.07	0.42	0.84
GUY	0.17	0.90	0.30	0.34	0.87
HAI	1.41	4.08	0.39	2.84	1.02
JAM	0.54	0.84	0.67	1.15	1.93
MOT	0	0	0	0	NA
SKT	0.19	3.14	0.39	0.98	NA
STL	0.12	0.66	0.04	0.66	0.53
STV	0.31	0.92	0.71	1.63	2.34
SUR	0.01	0.05	0.04	0.04	0.02
TRT	0.22	0.31	0.21	1.36	0.94

BLZ: *T. cruzi* 0.66%.GUY: *T. cruzi* 0.1%.TRT: *T. cruzi* 0.05%.**TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2009***Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ANU	117	71	NR	NR	NR	NR
ANI	1,318	809	135	48	0	141
BAH	6,262	5,090	1,377	0	0	1,688
BAR	4,781	1,799	1,781	NR	18	1,745
BLZ	4,364	1,391	693	698	0	280
BVI	485	79	79	NR	NR	NR
CAY	965	875	367	NR	NR	NR
CUR	6,701	6,701	1,520	0	0	810
DOM	977	902	550	NR	56	271
GRA	1,426	1,426	176	0	3	35
GUY	7,700	5,727	3,500	NR	145	1,257
HAI	20,028	10,349	160	NR	2	5
JAM	24,881	11,941	10,983	1,017	2,796	2,796
MOT	94	1	0	1	0	0
SKT	509	70	70	NR	NR	NR
STL	2,442	2,442	728	0	0	856
STV	982	953	135	0	0	37
SUR	9,774	9,772	1,419	0	0	1,860
TRT	14,803	11,622	9,521	0	239	9372

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

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ANU	15	NR	NA	NA	NA	NA
ANI	76	21	39	0	NA	12
BAH	93	454	224	NA	NA	791
BAR	225	105	121	NA	NR	313
BLZ	561	82	36	80	NA	218
BVI	18	0	0	NA	NA	NA
CAY	41	41	202	NA	NA	8
CUR	0	60	10	NA	NA	190
DOM	37	42	NR	NA	NR	227
GRA	0	186	21	NA	NR	6
GUY	128	517	452	NA	13	173
HAI	NR	NR	NR	NA	NR	NR
JAM	NR	NR	NR	NR	NR	NR
MOT	26	0	NA	1	NA	NA
SKT	53	12	11	NA	NA	NA
STL	0	211	150	NA	NA	476
STV	7	59	7	NA	NA	7
SUR	2	94	39	NA	NA	473
TRT	161	244	1891	NA	374	992

* Outdated units

TABLE 10. AVAILABLE OF BLOOD COMPONENTS 2009 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ANU	60.68	NR	NR	NR	NR	55.56	NR	NA	NA	NA	NA
ANI	61.38	3.64	10.24	0	10.70	5.76	2.60	0	28.89	NA	8.51
BAH	81.28	0	21.99	0	26.96	11.57	8.92	NA	16.27	NA	46.86
BAR	37.63	NR	37.25	0.38	36.50	7.75	5.84	NA	6.79	NR	17.94
BLZ	31.87	15.99	15.88	0	6.42	18.87	5.90	11.46	5.19	NA	77.86
BVI	16.29	NR	16.29	NR	NR	4.43	0	NA	0	NA	NA
CAY	90.67	NR	38.03	NR	NR	45.56	4.69	NA	55.04	NA	NA
CUR	100	0	22.68	0	12.08	0	0.90	NA	0.66	NA	23.46
DOM	92.32	NR	56.29	5.73	27.74	49.33	4.66	NA	NR	NR	83.76
GRA	100	0	12.34	0.21	2.45	0	13.04	NA	11.93	NR	17.14
GUY	74.38	NR	45.45	1.88	16.32	28.76	9.03	NA	12.91	8.97	13.76
HAI	51.67	NR	0.80	0.01	0.02	NR	NR	NA	NR	NR	NR
JAM	47.99	4.09	44.14	11.24	11.24	NR	NR	NR	NR	NR	NR
MOT	1.06	1.06	0	0	0	27.96	0	100	NA	NA	NA
SKT	13.75	NR	13.75	NR	NR	12.07	17.14	NA	15.71	NA	NA
STL	100	0	29.81	0	35.05	0	8.64	NA	20.60	NA	55.61
STV	97.05	0	13.75	0	3.77	24.14	6.19	NA	5.19	NA	18.92
SUR	99.98	0	14.52	0	19.03	100	0.96	NA	2.75	NA	25.43
TRT	78.51	0	64.32	1.61	63.31	1.09	2.10	NA	19.86	100	10.58

BAH: RMH did not give data.

BLZ: % only from Belize City - also, reported 3 therapeutic donors (interviewed/collected); and 3 discarded units.

CAY: Discarded: 490 units of stored frozen plasma; 8 units of platelets (4 random + 4 apheresis) - 25% of the units are imported.

TRT: Discarded information comes from 2 centers.

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ANU	NO	NO	NO	NO	NO
ANI	NO	NO	NO	NO	NO
BAH	NO	NO	NO	NO	YES
BAR	NO	NO	NO	YES	NO
BLZ	NO	YES	NO	YES	SI
BVI	NO	NO	NO	NO	NO
CAY	NO	NO	NO	NO	NO
CUR	YES	NO	NO	YES	NO
DOM	NO	NO	NO	NO	NO
GRA	NO	NO	NO	NO	NO
GUY	YES	YES	YES	YES	YES
HAI	NO	YES	YES	YES	YES
JAM	NO	NO	NO	NO	YES
MOT	NO	NO	NO	NO	NO
SKT	NO	NO	NO	NO	YES
STL	NO	NO	NO	NO	NO
STV	NO	NO	NO	NO	YES
SUR	YES	YES	YES	YES	YES
TRT	NO	YES	NO	YES	NO

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ANU	NO	NO	YES	NO	NO	NO
ANI	NO	NO	NO	NO	NO	NO
BAH	NO	NO	NO	NO	NO	YES
BAR	NO	NO	NO	YES	YES	NO
BLZ	YES	YES	YES	YES	YES	NO
BVI	NO	NO	NO	NO	NO	NO
CAY	NO	NO	NO	YES	NO	NO
CUR	YES	YES	YES	YES	YES	NO
DOM	NO	NO	YES	NO	NO	NO
GRA	NO	NO	NO	NO	NO	NO
GUY	NO	YES	YES	YES	YES	YES
HAI	YES	YES	YES	NO	YES	NO
JAM	YES	YES	YES	NO	YES	NO
MOT	NO	NO	YES	NO	NO	NO
SKT	NO	NO	YES	NO	NO	NO
STL	YES	NO	YES	YES	NO	NO
STV	NO	NO	YES	NO	NO	NO
SUR	NO	YES	YES	YES	YES	YES
TRT	YES	YES	YES	YES	YES	NO

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	QUALITY ASSURANCE POLICY	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ANU	NO	YES	YES	NO	YES
ANI	NR	NR	NR	NR	NR
BAH	NO	YES	YES	NO	NO
BAR	NO	NO	YES	NO	NO
BLZ	YES	YES	YES	YES	NO
BVI	NO	NR	NO	NO	NO
CAY	NO	YES	YES	NO	YES
CUR	YES	YES	YES	YES	YES
DOM	NO	YES	YES	NO	NO
GRA	NO	YES	YES	NO	NO
GUY	YES	YES	YES	NO	YES
HAI	YES	YES	YES	NO	YES
JAM	YES	NO	NO	NO	NO
MOT	NO	YES	YES	NO	NO
SKT	NO	YES	YES	NO	NO
STL	NO	YES	YES	NO	NO
STV	NO	YES	YES	NO	NO
SUR	YES	YES	YES	NO	YES
TRT	NO	YES	YES	NO	NO

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ANU	NO	NO
ANI	NR	NR
BAH	YES	NO
BAR	YES	NO
BLZ	NO	NO
BVI	YES	NO
CAY	YES	NO
CUR	YES	NO
DOM	NO	NO
GRA	NO	NO
GUY	YES	NO
HAI	NO	NO
JAM	NO	NO
MOT	NO	NO
SKT	NO	NO
STL	NO	NO
STV	NO	NO
SUR	YES*	NO
TRT	YES*	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2009*

HIV	HBsAg	HCV	SYPHILIS	HTLV I-II	FIVE MARKERS
ANU	ANU	ANU	ANU		
ANI	ANI		ANI		
BAH	BAH	BAH	BAH	BAH	BAH
BAR	BAR	BAR	BAR	BAR	BAR
BLZ	BLZ	BLZ	BLZ		
BVI	BVI	BVI	BVI		
CAY	CAY	CAY	CAY	CAY	CAY
CUR	CUR	CUR	CUR	CUR	CUR
DOM	DOM		DOM	DOM	
GRA	GRA	GRA	GRA	GRA	GRA
GUY	GUY	GUY	GUY	GUY	GUY
HAI	HAI	HAI	HAI	HAI	HAI
JAM	JAM	JAM	JAM	JAM	JAM
MOT	MOT	MOT	MOT		
SKT	SKT		SKT		
STL	STL	STL	STL	STL	STL
STV	STV	STV	STV	STV	STV
SUR	SUR	SUR	SUR	SUR	SUR
TRT	TRT	TRT	TRT	TRT	TRT
19	19	16	19	13	12

* Proportion of units received

LATIN AMERICAN COUNTRIES 2009

TABLE 1. BLOOD COLLECTION 2009

COUNTRY	TOTAL UNIT COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	926,451	24,988	171,059	730,404	0
BOL	69,073	95	23,104	45,874	0
BRA	458,235	599	262,819	194,817	0
COL	692,487	492	523,830	168,165	0
COR	59,336	72	38,593	20,671	0
CUB	403,060	0	403,060	0	0
ELS	82,212	10	9,652	72,550	0
GUT	91,554	45	3,918	87,591	0
HON	58,317	24	7,108	50,891	294
MEX	1,602,071	2,026	43,943	1,556,102	0
NIC	69,632	0	60,650	8,982	0
PAN	51,539	189	2,519	41,190	7,641
PAR	66,873	51	9,095	57,727	0
PER	221,266	469	10,597	210,112	88
DOR	85,169	84	20,770	61,015	3,300

BRA: Partial data of hemotherapy production sent from the Federation States of Ceará, Goiás, Paraná, and Santa Catarina.

ELS: Included in unit collected 545 units apheresis (not indicated by type of donor).

HON: The instruments of data collection used until 2009 did not permit to separate the information of permanent and temporary donors.

PAR: Collected 57,738 units of replenishment donors, 11 extractions failed.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2009 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	901,463	18.98	81.02	0
BOL	68,978	33.49	66.51	0
BRA	457,636	57.43	42.57	0
COL	691,995	75.70	24.30	0
COR	59,264	65.12	34.88	0
CUB	403,060	100	0	0
ELS	82,747	11.74	88.26	0
GUT	91,509	4.28	95.72	0
HON	58,293	12.19	87.30	0.50
MEX	1,600,045	2.75	97.25	0
NIC	69,632	87.10	12.90	0
PAN	51,350	4.91	80.21	14.88
PAR	66,822	13.61	86.39	0
PER	220,797	4.80	95.16	0.04
DOR	85,085	24.41	71.71	3.88

(*): Autologous donors not included.

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2009 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ARG	901,463	180,131	9,072	820,597	90,193	0	0
BOL	68,978	32,709	9,605	69,665	23,791	0	0
BRA	457,636	NR	NR	NR	NR	NR	NR
COL	691,995	NR	NR	NR	NR	NR	NR
COR	59,264	NR	NR	NR	NR	NR	NR
CUB	403,060	NR	NR	0	0	0	0
ELS	82,747	14,953	5,301	102,430	29,880	0	0
GUT	91,509	4,547	629	128,916	41,325	0	0
HON	58,293	9,415	2,307	66,208	15,317	373	79
MEX	1,600,045	49,655	5,712	2,017,641	461,539	0	0
NIC	69,632	68,865	8,215	10,017	1,035	0	0
PAN	51,350	NR	NR	NR	NR	NR	NR
PAR	66,822	10,468	1,373	60,023	2,285	0	0
PER	220,797	12,816	2,219	304,273	94,161	136	48
DOR	85,085	25,953	5,183	77,117	16,102	4,678	1,378

(*): Autologous donors not included.

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2009 (*)

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ARG	901,463	180,131	5.04	820,597	10.99	0	0
BOL	68,978	32,709	29.37	69,665	34.15	0	0
BRA	457,636	NR	NR	NR	NR	NR	NR
COL	691,995	NR	NR	NR	NR	NR	NR
COR	59,264	NR	NR	NR	NR	NR	NR
CUB	403,060	403,060	100	0	0	0	0
ELS	82,747	14,953	35.45	102,430	29.17	0	0
GUT	91,509	4,547	13.83	128,916	32.06	0	0
HON	58,293	9,415	24.50	66,208	23.13	373	21.18
MEX	1,600,045	49,655	11.50	2,017,641	22.88	0	0
NIC	69,632	68,865	11.93	10,017	10.33	0	0
PAN	51,350	NR	NR	NR	NR	NR	NR
PAR	66,822	10,468	13.12	60,023	3.81	0	0
PER	220,797	12,816	17.31	304,273	30.95	136	35.29
DOR	85,085	25,953	19.97	77,117	20.88	4,678	29.46

(*): Autologous donors not included. Only countries with complete data.

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2009

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF BANKS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 days)
ARG	901,463	400	2,254	8.67
BOL	68,978	20	3,449	13.27
BRA	457,636	588	778	2.99
COL	691,995	91	7,604	29.25
COR	59,264	27	2,195	8.44
CUB	403,060	46	8,762	33.70
ELS	82,747	29	2,853	10.97
GUT	91,509	60	1,525	5.87
HON	58,293	24	2,429	9.34
MEX	1,600,045	560	2,857	10.99
NIC	69,632	3	23,274	89.52
PAN	51,350	26	1,975	7.60
PAR	66,822	11	6,075	23.36
PER	220,797	90	2,453	9.44
DOR	85,085	65	1,309	5.03

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2009

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	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	NR	NR
COL	100	100	100	100	100	63.39	66.66
COR	100	100	100	100	100	100	100
CUB	100	100	100	100	NA	NR	NR
ECU	100	100	100	100	100	NR	NR
ELS	100	100	100	100	100	NR	NR
GUT	100	100	100	100	100	NR	NR
HON	100	100	100	100	100	70.20	70.11
MEX	100	100	100	100	82.10	NR	NR
NIC	100	100	100	100	100	0	0
PAN	100	100	100	100	100	81.78	NR
PAR	100	100	100	100	100	100	100
PER	99.20	99.36	99.35	99.28	99.23	98.64	NR
DOR	100	100	100	100	NR	100	NR

ARG: Screened units 901,463.

BRA: Screen units 443,442.

COL: Screen units: HTLV I-II 439,001, Anti-HBc 461, 591.

ELS: apheresis donors included.

GUT: Screening for HTLV I-II and Anti-HBc is partial, it is not obligatory by the Law of Medicine Services.

HON: The data recorded by the Ministry of Health corresponds to 1 hospital. Screened units: Anti-HBc 40,884, HTLV I-II 40,937.

MEX: Screened units *T. cruzi* 1,315,323 (obligatory only in endemic areas).

PAN: Screened units HTLV I-II 42,148.

PER: Units received for screening 213,830; but screened for: HIV 212,122; HBsAg 212,459; HCV 212,438; Syphilis 212,295; *T. cruzi* 212,173; HTLV I-II 210,914.

DOR: Screened units 87,237 (more than the collected number).

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2009 (*)

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>
COL					
HON					
MEX					286,748
PAN					
PER	1,708	1,371	1,392	1,535	1,657
TOTAL	1,708	1,371	1,392	1,535	288,405

(*) Except HTLV I-II and Anti-HBc.

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2009

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	Anti-HBc
ARG	0.24	0.27	0.67	0.92	3.08	0.21	2.03
BOL	0.11	0.31	1.07	0.94	2.62	NA	NA
BRA	0.56	0.22	0.34	0.34	0.20	NA	NA
COL	0.25	0.20	0.45	1.06	0.45	0.19	1.66
COR	0.12	0.13	0.93	0.61	0.42	0.54	2.35
CUB	0.02	0.44	1.56	0.67	NA	NA	NA
ELS	0.08	0.15	0.12	1.11	1.93	NA	NA
GUT	0.60	0.64	0.89	2.15	1.75	0.05	1.54
HON	0.27	0.29	0.48	1.04	1.55	0.15	3.09
MEX	0.30	0.19	0.59	0.45	0.41	NA	NA
NIC	0.08	0.21	0.31	0.83	0.12	NA	NA
PAN	0.05	0.20	0.24	1.28	0.36	2.99	1.77
PAR	0.61	0.42	0.32	8.35	2.85	0.23	3.79
PER	0.54	0.45	1.06	1.38	0.73	1.32	NR
DOR	0.22	1.08	0.54	0.58	NA	0.26	NA

BRA: Total of bags submitted to be tested 443,442.

GUT: CMV 1.21%.

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2009*Separation into components (Number)*

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ARG	877,143	789,143	631,323	157,820	59,185	518,650
BOL	69,073	61,313	47,343	9,454	4,392	21,512
BRA	429,379	408,982	335,727	NR	25,856	197,074
COL	692,487	625,762	498,396	99,918	33,476	299,722
COR	59,366	56,005	14,898	41,107	10,796	41,897
CUB	185,416	176,261	30,454	2,929	25,826	29,038
ELS	82,757	79,500	60,816	NR	5,640	50,335
GUT	83,906	73,178	44,683	NR	663	27,402
HON	58,317	22,813	19,515	0	1,415	17,747
MEX	1,547,104	1,461,559	1,192,274	269,285	89,973	627,850
NIC	69,632	62,319	25,158	1,330	7,521	34,189
PAN	42,652	38,897	58	20,971	3,501	27,059
PAR	66,873	49,730	39,425	5,880	3,386	28,567
PER	213,830	169,538	139,990	0	17,584	110,717
DOR	85,169	33,133	5,712	4,741	30	4,820

Blood and Blood Components Discarded 2009 (%)

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ARG	14,225	127,943	2,316	6,000	1,683	78,941
BOL	1,180	4,050	15,027	6,884	1,006	8,411
BRA	15,704	66,565	168,671	0	2,572	77,653
COL	7,722	60,419	240,858	102,255	9,381	102,266
COR	235	5,569	0	12,410	1,558	20,487
CUB	706	25,975	2,496	165	621	5,557
ELS	1,714	4,711	11,981	NR	200	7,456
GUT	5,511	8,422	8,819	NR	521	6,689
HON	NR	NR	NR	NR	NR	NR
MEX	43,998	94,504	446,677	292,008	2,883	172,718
NIC	2,003	3,979	28,080	8,114	726	10,315
PAN	823	3,249	NR	487	85	5,103
PAR	4,756	8,521	10,281	5,851	64	10,383
PER	2,277	9,201	51,380	0	3,146	31,569
DOR	3,498	472	2,934	0	3	345

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2009 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ARG	89.97	71.97	17.99	6.75	59.13	58.50	16.21	0.37	3.80	2.84	15.22
BOL	88.77	68.54	13.69	6.36	31.14	17.84	6.61	31.74	72.82	22.91	39.10
BRA	95.25	78.19	NR	6.02	45.90	76.99	16.28	50.24	NA	9.95	39.40
COL	90.36	71.97	14.43	4.83	43.28	51.43	9.66	48.33	100	28.02	34.12
COR	94.34	25.10	69.24	18.19	70.57	80.20	9.94	0	30.19	14.43	48.90
CUB	95.06	16.42	1.58	13.93	15.66	7.71	14.74	8.20	5.63	2.40	19.14
ELS	96.06	73.49	NR	6.82	60.82	54.27	5.93	19.70	NA	3.55	14.81
GUT	87.21	53.25	NR	0.79	32.66	51.37	11.51	19.74	NA	78.58	24.41
HON	39.12	33.46	0	2.43	30.43	NA	NA	NA	NA	NA	NA
MEX	94.47	77.06	NR	5.82	40.58	51.43	6.47	37.46	NA	3.20	27.51
NIC	89.50	36.13	1.91	10.80	49.10	67.78	6.38	100	100	9.65	30.17
PAN	91.20	0.14	49.17	8.21	63.44	21.92	8.35	NR	2.32	2.43	18.86
PAR	74.36	58.96	8.79	5.06	42.72	27.74	17.13	26.08	90.51	1.89	36.35
PER	79.29	65.47	0	8.22	51.78	1.06	5.43	36.70	NA	17.89	28.51
DOR	38.90	6.71	5.57	0.04	5.66	6.72	1.42	51.37	0	10.00	7.16

HON: The data recorded by the Ministry of Health corresponds to 1 hospital. The national register form does not allow to obtain separately the information of discarded components.

MEX: Also, received 54, 967 apheresis procedure.

NIC: Discarded FFP and FP include prepared units before the period of this report.

PAN: The number of units separated into component indicates the fractioning in 10 blood banks, that represents 82.7% of the blood donated nationwide. The units discarded correspond to the components of 22 of the 26 blood banks nationwide.

DOR: It is indicated a higher number of screened units because there are establishments where the tests are repeated due to lack of confidence and security in the test results of other establishments.

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ARG	YES	YES	YES	YES	YES
BOL	YES	YES	NO	YES	YES
BRA	YES	YES	YES	YES	YES
COL	YES	YES	YES	YES	YES
COR	YES	YES	YES	YES	YES
CUB	YES	YES	YES	YES	YES
ELS	NO	YES	NO	YES	NO
GUT	YES	YES	YES	NO	YES
HON	YES	YES	YES	YES	YES
MEX	NO	YES	YES	YES	YES
NIC	YES	YES	YES	YES	NO
PAR	YES	YES	YES	YES	YES
PER	YES	YES	NO	NO	NO
DOR	YES	YES	NO	YES	YES

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

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
BRA	NO	YES	YES	YES	YES	YES
COL	YES	YES	YES	YES	YES	YES
COR	YES	YES	YES	YES	YES	YES
CUB	YES	YES	YES	YES	YES	YES
ELS	YES	YES	YES	YES	YES	YES
GUT	YES	NO	YES	YES	YES	YES
HON	NO	YES	YES	YES	YES	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	YES	NO	YES	YES	YES	YES
PAR	YES	YES	YES	YES	YES	YES
PER	NO	NO	NO	YES	YES	YES
DOR	NO	YES	YES	YES	NO	NO

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	QUALITY ASSURANCE POLICY	NATIONAL QUALITY ASSURANCE PROGRAM	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ARG	YES	YES	YES	YES	NO	YES
BOL	YES	YES	YES	NO	YES	YES
BRA	NO	YES	YES	YES	YES	YES
COL	YES	YES	YES	YES	YES	YES
COR	YES	YES	YES	NR	YES	YES
CUB	YES	YES	YES	YES	YES	YES
ELS	YES	YES	YES	YES	YES	YES
GUT	NO	NO	NO	NO	YES	YES
HON	NO	NO	YES	YES	NO	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	NO	YES	YES	NO	NO	YES
PAR	YES	YES	NO	NO	YES	YES
PER	NR	YES	YES	NO	YES	NO
DOR	YES	YES	YES	NO	YES	NO

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2009

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ARG	YES	YES
BOL	YES	YES
COL	YES	YES
COR	YES	YES
CUB	YES	YES
ELS	NO	NO
GUT	YES	NO
HON	NO	NO
MEX	YES	YES
NIC	NO	NO
DOR	NO	NO
PAR	NO	YES
PER	NO	YES
DOR	NO	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2009*

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	FIVE MARKERS	HTLV I-II	Anti-HBc
ARG	ARG	ARG	ARG	ARG	ARG	ARG	ARG	ARG
BOL	BOL	BOL	BOL	BOL	BOL	BOL		
BRA	BRA	BRA	BRA	BRA	BRA	BRA		
COL	COL	COL	COL	COL	COL	COL		
COR	COR	COR	COR	COR	COR	COR	COR	COR
CUB	CUB	CUB	CUB	CUB				
ELS	ELS	ELS	ELS	ELS	ELS	ELS		
GUT	GUT	GUT	GUT	GUT	GUT	GUT		
HON	HON	HON	HON	HON	HON	HON		
MEX	MEX	MEX	MEX	MEX				
NIC	NIC	NIC	NIC	NIC	NIC	NIC		
PAN	PAN	PAN	PAN	PAN	PAN	PAN		
PAR	PAR	PAR	PAR	PAR	PAR	PAR	PAR	PAR
DOR	DOR	DOR	DOR	DOR			DOR	
14	14	14	14	14	11	11	4	3

* Proportion of units received

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
CARIBBEAN COUNTRIES
2009**

COUNTRY	NAME	POSITION	ADDRESS
ANGUILLA	Everette Duncan	Senior Medical Technologist	PRINCESS ALEXANDRA HOSPITAL Stoney Ground Tel.: 264 497 2551 e-mail: evie@anguillanet.com
ANTIGUA	Condon Jarvis	Chief Medical Technologist	MOUNT ST. JOHN'S MEDICAL CENTER Queen Elizabeth Highway, St. John's Tel.: 268 484 2700 e-mail: cejarvis@msjmc.org
BAHAMAS	Carolyn Azikiwe	Supervisor	BLOOD BANK - PRINCESS MARGARET HOSPITAL Nassau Tel.: 242 322 8077 e-mail: cazikiwe@pmh.phabahamas.org
BARBADOS	Priscilla Jordan	Medical Laboratory Technologist	QUEEN ELIZABETH HOSPITAL Martindales Road, St. Michael Tel.: 246 4366450 Ext: 6124 e-mail: woodon261@hotmail.com (personal)
BELIZE	Joy Robateau	Supervisor	BELIZE NATIONAL BLOOD TRANSFUSION SERVICES Princess Margaret Drive, Belize City Tel.: 501 224 5010 e-mail: j_robateau@yahoo.com
BRITISH VIRGIN ISLANDS	Allene Brewley-Roach	Laboratory Director	PEEBLES HOSPITAL LABORATORY #32 Main Street, Road Town, Tortola Tel.: 284 852 7571 e-mail: peebleslab@hotmail.com
CAYMAN ISLANDS	Judith Clarke	Laboratory Quality Coordinator	CAYMAN ISLANDS HEALTH SERVICES AUTHORITY 95 Hospital Road, P.O. Box 915 Grand Cayman KY1-1103 Tel.: 345 244 2669 e-mail: judith.clarke@hsa.ky
CURACAO	A. J. Duits	Director	RED CROSS BLOOD BANK FOUNDATION Pater Euensweg 36 Tel.: 5999 4618 433 e-mail: ajduits@gmail.com
DOMINICA	Nina Pierre		BLOOD BANK, MEDICAL LABORATORY PRINCESS MARGARET HOSPITAL Tel.: 767 448 2231 Ext: 2144 e-mail: pmhlab@cwdom.dm

COUNTRY	NAME	POSITION	ADDRESS
GRENADA	Everlyn Peters	Senior Laboratory Technologist	PATHOLOGY LABORATORY, GENERAL HOSPITAL Grand Etang Rd., St. George's Tel.: 473 440 5578 e-mail: grensurv@spiceisle.com
GUYANA	Colin Roach	Director	NATIONAL PUBLIC HEALTH REFERENCE LABORATORY - NATIONAL BLOOD BANK Georgetown Tel.: 592 225 4014 e-mail: laboratorydirector@gmail.com
HAITI	Ernst Noel	Director	NATIONAL BLOOD SAFETY PROGRAM 111, Rue Saint-Honoré, Port-au-Prince Tel.: 509 25 10 59 08 / 09 e-mail: noele@bloodsafetymssp.org bloodsafetyht@yahoo.fr; elnoel18@gmail.com
JAMAICA	Lundie Richards	Director	NATIONAL BLOOD TRANSFUSION SERVICE 21 Slipe Pen Rd. Tel.: 876 922 5181 e-mail: Lrrichar@lakeheadu.ca
MONTSERRAT	Brinette Bennett	Medical Technology	GLENDON HOSPITAL St. John, Montserrat Tel.: 1664 491 2843 e-mail: glendonlaboratory@yahoo.com
SAINT KITTS AND NEVIS	Domina Christmas Jasmin Hanley	Technologist Laboratory Manager	JOSEPH. N. FRANCE GENERAL HOSPITAL Buckley's Site - Basseterre Tel.: 869 465 2551 e-mail: pathlab@yahoo.com
SAINT LUCIA	Veronica Lee	Medical Technologist/Blood Bank Manager	SAINT LUCIA BLOOD BANK SERVICE VICTORIAHOSPITAL, Castries Tel.: 758 452 5430 e-mail: slubloodbank@gmail.com
SURINAME	María Tjon A. Loi	Medical Director	NATIONAL BLOOD BANK SURINAME RED CROSS SOCIETY Rode Kruislaan 24 Tel.: 597 499175 / 497483 e-mail: directeur_bloedbank@surinamered-cross.sr
TRINIDAD AND TOBAGO	Kenneth Charles	Medical Director	NATIONAL BLOOD TRANSFUSION SERVICE 160 Charlotte Street, Port of Spain Tel.: 868 627 2619 e-mail: skcharles@live.com

**NATIONAL STAFF WHO SUBMITTED OFFICIAL REPORTS TO THE
PAN AMERICAN HEALTH ORGANIZATION
LATIN AMERICAN COUNTRIES
2009**

COUNTRY	NAME	POSITION	ADDRESS
ARGENTINA	Esther Mabel Maschio	Coordinadora General del Plan Nacional de Sangre	MINISTERIO DE SALUD Av. 9 de Julio 1925, 9no. Piso Ciudad Autónoma de Buenos Aires, CP C1073ABA Telf.: 11 4384-0324/25, 4379-9000 Interno 4825 e-mail: plannacionaldesangre@msal.gov.ar
BOLIVIA	Ma. del Carmen García de Luna Orosco Ruben Dario Roca Oyola	Coordinadora Nacional Responsable Técnico	PROGRAMA NACIONAL DE SANGRE- MINISTERIO DE SALUD La Paz Telf.: 591-2-211-5542 e-mail: clinicasgarcía@hotmail.com
BRAZIL	Danila Augusta Accioly Varella Barca	Assessora da Gestao da Informacao	COORDENACAO GERAL DE SANGUE E HEMODERIVADOS MINISTERIO DA SAÚDE SAF/SUL,Trecho 02, Ed. Premium, Torre 02, ala B, 2ndo. Andar sala 202 - CEP 70.070'600, Brasilia Tel.: 55 61 3315 6169 e-mail: sangue@saude.gov.br
COLOMBIA	Juan Gonzalo Lopez Casas Mauricio Beltran Duran	Director General Coordinador Red Nacional Bancos de Sangre	INSTITUTO NACIONAL DE SALUD Avenida Calle 26 No.51-20 Tel.: 1 221-2219 - Línea Nacional Gratuita: 018000 113400 e-mail: mbeltrand@ins.gov.co
COSTA RICA	Vilma Carvajal Gutiérrez	Jefa Sub Area de Laboratorios Clínicos	CAJA COSTARRICENSE DE SEGURO SOCIAL San José Telf.: 2539 1082 e-mail: vcarvagu@ccss.sa.cr
CUBA	Ángel Suarez Escandon	Programa Nacional de Sangre	MINSAP Calle 23 esq. N. Vedado, Ciudad Habana Tel.: 838 3419 e-mail: angel.suarez@infomed.sld.cu
DOMINICAN REPUBLIC	Sócrates E. Sosa Peña	Director del Programa Nacional de Bancos de Sangre	SECRETARÍA DE ESTADO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL Av. Tiradentes Esq. Av. San Cristobal, Ens. La Fé, Santo Domingo Telf: 809 541 3121 Ext.2472-2474 e-mail: sócratessosa@hotmail.com

COUNTRY	NAME	POSITION	ADDRESS
EL SALVADOR	Ana Vilma De Aguilar	Jefa Área Clínica	UNIDAD DE VIGILANCIA LABORATORIAL Alameda Roosevelt frente al Parque Cuscatlán contíguo a H. Rosales Tel.: 503 2221 5751 e-mail: anavilmadeaguilar@yahoo.es aguevara@mspaspas.gob.sv
GUATEMALA	Claudia María García González	Coordinadora del Programa de Medicina Transfusional y Bancos de Sangre	MINISTERIO DE SALUD PÚBLICA Y ASISTENCIA SOCIAL 5av. 11-40 Zona 11, Ciudad de Guatemala Tel.: 2 471 9540 e-mail: pnbs@drpap-mspas.gob.gt
HONDURAS	Inés Adela Zelaya Pineda	Jefa Departamento Bancos de Sangre y Servicios de Transfusión	SECRETARÍA DE SALUD 6to. Piso, Anexo 2. Barrio el Centro, antigua calle del Mónica, frente a Farmacia Regis, Tegucigalpa Telf.: 504 222 8523 e-mail: deparsan@yahoo.com
MEXICO	Julieta Rojo Medina	Director General	CENTRO NACIONAL DE LA TRANSFUSIÓN SANGUÍNEA Othon de Mendizabal 195 Col. Zacatenco del Gustavo A. Madero, México, D.F. CP 07360 Telf.: 5119 4620 al 28 Ext. 1101, 1104, 1105 e-mail: julieta.rojo@salud.gob.mx
NICARAGUA	Alcidez González Mairena	Director General Cndr-Minsa	CENTRO NACIONAL DE DIAGNÓSTICO Y REFERENCIA Complejo de Salud Dra. Concepción Palacios - Costado oeste Colonia Primero de Mayo Tel.: 289-7723 e-mail: dir-cndr@minsa.gob.ni
PANAMA	Gilma Bósquez D.	Coordinador del Programa Nacional de Bancos de Sangre	MINSA Av. Salaverry No.801, Jesús María, Lima.
PARAGUAY	Angélica Samudio María Ofelia Lemir de Zelaya	Directora del Programa Nacional de Sangre Coordinadora de la Red Nacional de Servicios de Sangre	PROGRAMA NACIONAL DE SANGRE - MINISTERIO DE SALUD PÚBLICA Y BIENESTAR SOCIAL Rca. Argentina 222 entre Mcal. López y Boggiani Asunción Telf.: 595 21 606364 e-mail: pnsangre@mspabs.gov.py; pnsangre2004@gmail.com
PERU	Norberto Quezada Velásquez	Coordinador del Programa Nacional de Bancos de Sangre	MINSA Av. Salaverry No.801, Jesús María, Lima.



COUNTRY SPECIFIC SUMMARIES

CARIBBEAN COUNTRIES

	2005	2006	2007	2008	2009
ANGUILLA (ANU)					
Number of units collected	114	99	114	150	117
Number of Autologous donors	0	0	0	2	0
Percent type of allogeneic donors					
Voluntary, altruistic donors	10	0	NA	NA	0
Family/Replacement donors	90	100	NA	NA	100
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	NR	53.00	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	0	0	0	0
Percent of units reactive/positive					
HIV	NR	0.45	0	0	0
HBsAg	NR	0	0.40	1.18	0
HCV	NR	0	0	0.59	0.66
Syphilis	0.40	0.90	0	0.59	0.66
HTLV I-II	NR	NA	0	NA	0
Percent units separated into components					
Packed red blood cells	62.00	54.55	41.23	62.00	60.68
Fresh frozen plasma	NR	NR	NR	NR	NR
Frozen plasma	2.00	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR	NR
Platelets	NR	NR	NR	NR	NR
Percent units discarded					
Whole food	NR	20.58	16.36	20.93	55.56
Packed red blood cells	4.00	NA	NR	NR	NR
Fresh frozen plasma	NA	NA	NA	NA	NA
Frozen plasma	NR	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	NA	NA	NA	NA	NA

2006/2007/2008/2009: The evaluated and accepted donors donate blood when it is required for patients; this is the reason for the discrepancy in the number of donors screened and the units collected. The majority of donors are still family/replacement donors.

2006: Screening for HCV started in June 06.

2008: A registry of voluntary donors was started in June. 5 units were transferred overseas with patients.

Data submitted by:

2005/2006/2007/2008/2009: Everette Duncan, Senior Medical Technologist.

YEAR	DONORS EVALUATED	UNITS COLLECTED	UNITS SCREENED
2006	345	99	219
2007	437	114	268
2008	524	148	338
2009	432	117	301

	2005	2006	2007	2008	2009
ANTIGUA AND BARBUDA (ANI)					
Number of units collected	NR	1,020	986	NR	1,321
Number of Autologous donors		1	3		3
Percent type of allogeneic donors					
Voluntary, altruistic donors		6	4		5
Family/Replacement donors		94	96		95
Remunerated donors		0	0		0
Percent of units screened					
HIV		100	100		100
HBsAg		100	100		100
HCV		100	100		93.10
Syphilis		100	100		100
HTLV I-II		0	0		0
Percent of units reactive/positive					
HIV		0.30	0.20		0.91
HBsAg		0.40	1.50		1.67
HCV		0	0.70		0.53
Syphilis		0.90	0.80		0.46
HTLV I-II		NA	NA		NR
Percent units separated into components					
Packed red blood cells		51.86	62.98		61.38
Fresh frozen plasma		2.06	4.06		10.24
Frozen plasma		1.08	1.11		3.64
Cryoprecipitate		NR	0		0
Platelets		0.39	3.45		10.70
Percent units discarded					
Whole food		18.63	23.83		5.76
Packed red blood cells		0.57	0.64		2.60
Fresh frozen plasma		0	0		28.89
Frozen plasma		0	0		0
Cryoprecipitate		NA	NA		NA
Platelets		NR	NR		8.51

2009: HCV testing could not be done on all units due to unavailability of reagent. Screened units 1,318.

Data submitted by:

2006/2007/2009: Condon Jarvis, Chief Medical Technologist.

	2005	2006	2007	2008	2009
ARUBA (ARU)					
Number of units collected	2,648	NR	NR	NR	NR
Number of Autologous donors	8				
Percent type of allogeneic donors					
Voluntary, altruistic donors	100				
Family/Replacement donors	0				
Remunerated donors	0				
Percent of units screened					
HIV	100				
HBsAg	100				
HCV	100				
Syphilis	100				
HTLV I-II	100				
Percent of units reactive/positive					
HIV	0.11				
HBsAg	0.26				
HCV	0.15				
Syphilis	0.30				
HTLV I-II	0.08				
Percent units separated into components					
Packed red blood cells	100				
Fresh frozen plasma	45				
Frozen plasma	0				
Cryoprecipitate	0				
Platelets	100				
Percent units discarded					
Whole food	0				
Packed red blood cells	2				
Fresh frozen plasma	8				
Frozen plasma	NA				
Cryoprecipitate	NA				
Platelets	88				

Data submitted by: 2005: Vivian Lampe, Manager.

	2005	2006	2007	2008	2009
BAHAMAS (BAH)					
Number of units collected	5,152	5,026	5,343	5,519	6,914
Number of Autologous donors	26	13	20	9	4
Percent type of allogeneic donors					
Voluntary, altruistic donors	15	16	23	22	19
Family/Replacement donors	85	84	77	78	81
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	0.26	0.17	0.30	0.24	0.19
HBsAg	0.80	0.67	0.66	0.80	0.77
HCV	0.36	0.49	0.66	0.69	0.52
Syphilis	0.53	0.59	0.90	0.94	0.30
HTLV I-II	0.28	0.33	0.40	0.58	0.29
Percent units separated into components					
Packed red blood cells	87.00	83.90	84.38	85.52	81.28
Fresh frozen plasma	30.00	24.15	19.49	25.69	21.99
Frozen plasma	NR	0	0	0	0
Cryoprecipitate	NR	0	0	0	0
Platelets	30.00	20.67	17.36	23.19	26.96
Percent units discarded					
Whole food	74.00	89.76	47.40	58.58	11.57
Packed red blood cells	7.00	4.88	5.27	7.80	8.92
Fresh frozen plasma	15.00	13.67	18.16	17.56	16.27
Frozen plasma	NR	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	37.00	53.99	23.77	34.53	46.86

2007: Autologous donors units were not screened or separated into components.

2009: Number of replacement donors attended 5,360, differed 448. The RMH only indicated the number of units collected. Units screened 6,914. Separated into components 6,262 – RMH did not gave data.

Data submitted by:

2005/2006/2007/2008/2009: Carolyn Azikiwe, Supervisor at Princess Margaret Hospital Blood Bank (2007, aslo Everette Miller).

	2005	2006	2007	2008	2009
BARBADOS (BAR)					
Number of units collected	NR	4,164	NR	4,583	4,781
Number of Autologous donors		95		130	119
Percent type of allogeneic donors					
Voluntary, altruistic donors		10		12	15
Family/Replacement donors		90		88	85
Remunerated donors		0		0	0
Percent 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
Percent of units reactive/positive					
HIV		0.02		0.16	0.10
HBsAg		0.17		0.29	0.27
HCV		0.02		0.62	0.33
Syphilis		0.56		0.20	0.13
HTLV I-II		0.46		0.82	0.36
Percent units separated into components					
Packed red blood cells		13.55		33.26	37.63
Fresh frozen plasma		8.09		33.26	37.25
Frozen plasma		5.23		0	NR
Cryoprecipitate		1.11		0	0.38
Platelets		9.90		33.26	36.50
Percent units discarded					
Whole food		14.11		5.14	7.75
Packed red blood cells		2.32		3.00	5.84
Fresh frozen plasma		8.68		14.71	6.79
Frozen plasma		6.48		NA	NA
Cryoprecipitate		NR		NA	NR
Platelets		41.32		19.97	17.94

2008: Also collected 45 apheresis – not included in collected units. Screened and received to be separated into components were 4,516 units plus 45 blood platelets apheresis. Discarded 143 units of liquid frozen plasma.

2009: Not included 50 platelets apheresis collected and screened.

Data submitted by: 2006/2008/2009: Priscilla Jordan, Medical Laboratory Technologist.

	2005	2006	2007	2008	2009
BELIZE (BLZ)					
Number of units collected	3,107	NR	3,233	3,866	4,364
Number of Autologous donors	0		0	0	0
Percent type of allogeneic donors					
Voluntary, altruistic donors	9		6	10	8
Family/Replacement donors	91		94	90	92
Remunerated donors	0		0	0	0
Percent of units screened					
HIV	100		100	100	100
HBsAg	100		100	100	100
HCV	0		24.70	100	100
Syphilis	100		100	100	100
HTLV I-II	NR		100	100	NR
Percent of units reactive/positive					
HIV	0.32		0.19	0.36	0.23
HBsAg	1.09		0.99	0.96	0.48
HCV	NA		0.03	0.13	0.34
Syphilis	0.48		0.96	1.91	0.87
HTLV I-II	0		NR	NR	NA
Percent units separated into components					
Packed red blood cells	35.00		24.16	29.82	31.87
Fresh frozen plasma	35.00		5.75	10.80	15.88
Frozen plasma	35.00		3.06	23.18	15.99
Cryoprecipitate	NR		0	0	0
Platelets	NR		0	1.12	6.42
Percent units discarded					
Whole food	16.00		28.76	22.48	18.87
Packed red blood cells	3.00		8.45	1.04	5.90
Fresh frozen plasma	3.00		8.06	12.80	5.19
Frozen plasma	4.00		55.56	9.60	11.46
Cryoprecipitate	NA		NA	NA	NA
Platelets	NA		NA	46.15	77.86

2005/2007/2008/2009: Screened *T. cruzi* 100%. Reactive positive *T. cruzi*: 2005: 0.45% - 2007: 0.46% - 2008: 0.75% - 2009: 0.66%.

2007: VHC - se comenzó a tamizar en octubre de ese año.

2008: Percentages of separation into components and units discarded for fresh frozen plasma and platelets correspond only to Belize City –2,314 units– also, reported but not included 3 therapeutic donors (interviewed/collected); and 3 discarded units.

2009: Percentage only from Belize City – also, reported 3 therapeutic donors (interviewed/collected).

Data submitted by: 2005/2007/2008/2009: Joy Charley, Supervisor Blood Bank.

	2005	2006	2007	2008	2009
BRITISH VIRGIN ISLANDS (BVI)					
Number of units collected	447	433	544	561	485
Number of Autologous donors	1	1	0	NA	NA
Percent type of allogeneic donors					
Voluntary, altruistic donors	0	100	100	NA	NA
Family/Replacement donors	100	0	0	NA	NA
Remunerated donors	0	0	0	NA	NA
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	NR	0	0	0	0
Percent of units reactive/positive					
HIV	NR	0	0	0	0
HBsAg	NR	0.90	0.38	0.36	0.21
HCV	0.22	0.50	0	0	0
Syphilis	NR	0.20	0.38	0	0.21
HTLV I-II	NR	NA	NA	NA	NA
Percent units separated into components					
Packed red blood cells	NR	NR	10.85	30.66	16.29
Fresh frozen plasma	NR	NR	10.85	30.66	16.29
Frozen plasma	NR	NR	0	0	NR
Cryoprecipitate	NR	NR	NR	NR	NR
Platelets	NR	NR	NR	NR	NR
Percent units discarded					
Whole food	2.00	NR	1.24	2.06	4.43
Packed red blood cells	NA	NA	0	0	0
Fresh frozen plasma	NA	NA	0	0	0
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	NA	NA	NA	NA	NA

2008/2009. Donors are not being differentiated into voluntary, family-replacement donors. Donors are not remunerated.

Data submitted by:

2005/2006/2007/2008/2009: Allene Brewley, Laboratory Director.

	2005	2006	2007	2008	2009
CAYMAN ISLAND (CAY)					
Number of units collected	864	981	1,017	921	965
Number of Autologous donors	4	4	0	2	0
Percent type of allogeneic donors					
Voluntary, altruistic donors	100	100	100	100	100
Family/Replacement donors	0	0	0	0	0
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	NR	0.50	0.30	0.11	0.21
HBsAg	NR	0	0	0.11	0
HCV	0.11	0.20	0.20	0.44	0.21
Syphilis	NR	0	0	0	0.10
HTLV I-II	NR	0	0.10	0	0.10
Percent units separated into components					
Packed red blood cells	63.00	69.52	84.96	86.18	90.67
Fresh frozen plasma	26.00	34.56	26.75	41.46	38.03
Frozen plasma	NR	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR	NR
Platelets	NR	NR	NR	NR	NR
Percent units discarded					
Whole food	NR	NR	39.87	22.47	45.56
Packed red blood cells	20.00	30.76	4.86	8.08	4.69
Fresh frozen plasma	56.00	38.05	81.25	33.07	55.04
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	NA	NA	NA	NA	NA

2005/2006: In percent units discarded, it was only given one number for both –whole blood and packed read blood cells–.

2006: In units discarded, 62 units of whole blood and packed read blood cells were reported together. Also, it was indicated that 9 platelets were discarded, and that 56.3% of platelets are imported. Platelets imported.

2008: Screened and separated into components 919 units. 351 units of stored frozen plasma were discarded.

2009: Discarded: 490 units of stored frozen plasma; 8 units of platelets (4 random + 4 apheresis) – 25% of the units are imported.

2006/2007/2008/2009: Imported Platelets (separation into components).

Data Submitted by:

2005/2006/2007: Judith Clarke, Medical Technologist.

2008/2009: Judith Clarke, Laboratory Quality Coordinator.

	2005	2006	2007	2008	2009
CURACAO (CUR)					
Number of units collected	6,745	6,784	6,559	6,701	6,702
Number of Autologous donors	2	3	3	4	1
Percent type of allogeneic donors					
Voluntary, altruistic donors	100	100	100	100	100
Family/Replacement donors	0	0	0	0	0
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	0	0	0	0	0
HBsAg	0	0	0	0	0
HCV	0	0	0	0	0
Syphilis	0	0	0	0	0
HTLV I-II	0.03	0	0.02	0.01	0
Percent units separated into components					
Packed red blood cells	52.00	100	100	100	100
Fresh frozen plasma	0	20.66	20.32	19.41	22.68
Frozen plasma	0	0	0	0	0
Cryoprecipitate	0	0	0	0	0
Platelets	44.00	14.75	10.69	10.39	12.08
Percent units discarded					
Whole food	0	0	0	0	0
Packed red blood cells	2.00	0.88	0.92	0.90	0.90
Fresh frozen plasma	0	0.71	0.75	0.77	0.66
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	5.00	21.00	32.81	34.48	23.46

2008: Separated into components 6,697 units.

Data submitted by:

2006/2007/2008/2009: A.J. Duits, Director of the Red Cross Blood Bank Foundation.

NUMBER OF SCREENED UNITS:	
2005	6,743
2006	6,781
2007	6,556
2008	6,697
2009	6,701

	2005	2006	2007	2008	2009
DOMINICA (DOM)					
Number of units collected	757	765	723	775	977
Number of Autologous donors	3	3	0	2	4
Percent type of allogeneic donors					
Voluntary, altruistic donors	5	5	3	4	3
Family/Replacement donors	95	95	97	96	97
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	0	0	0	0	0
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	0.13	0.10	NR	0.52	0.30
HBsAg	0.79	0.30	0.14	0.90	0
HCV	NT	NA	NA	NA	NA
Syphilis	2.64	2.40	1.38	2.06	1.94
HTLV I-II	1.85	1.80	1.38	1.29	1.54
Percent units separated into components					
Packed red blood cells	94.00	87.71	90.87	89.94	92.32
Fresh frozen plasma	48.00	34.90	47.44	54.71	56.29
Frozen plasma	NR	NR	NR	NR	NR
Cryoprecipitate	6.00	28.62	26.83	13.94	5.73
Platelets	16.00	25.88	22.68	21.42	27.74
Percent units discarded					
Whole food	57.00	15.96	51.51	61.54	49.33
Packed red blood cells	4.00	4.17	11.11	8.90	4.66
Fresh frozen plasma	8.00	8.61	4.37	2.83	NR
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	4.00	2.74	NR	8.33	NR
Platelets	8.00	5.05	81.71	72.89	83.76

Data submitted by:

2005/2006/2007/2008/2009: Nina Pierre, Director Blood Bank.

	2005	2006	2007	2008	2009
GRENADA (GRA)					
Number of units collected	835	1,004	1,015	1,106	1,426
Number of Autologous donors	2	6	8	2	5
Percent type of allogeneic donors					
Voluntary, altruistic donors	30	34	31	34	26
Family/Replacement donors	70	66	69	66	74
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	0.12	0	0	0.18	0
HBsAg	1.80	0.60	0.49	1.08	1.05
HCV	0.24	0.10	0	0.45	0.07
Syphilis	1.08	0.30	0.10	0.54	0.42
HTLV I-II	0.96	0.60	1.67	2.44	0.84
Percent units separated into components					
Packed red blood cells	99.00	98.40	99.01	100	100
Fresh frozen plasma	36.00	22.21	19.70	9.86	12.34
Frozen plasma	NR	0	0	0	0
Cryoprecipitate	NR	0	0	0	0.21
Platelets	5.00	1.10	0.30	0	2.45
Percent units discarded					
Whole food	66.00	100	100	0	0
Packed red blood cells	10.00	17.30	15.92	13.29	13.04
Fresh frozen plasma	0.30	3.59	3.50	20.18	11.93
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NR
Platelets	12.00	9.09	0	NA	17.14

Data submitted by:

2005: Everlyn Peters, Senior Medical Technologist.

2006/2007/2008/2009: Everlyn Peters, Senior Laboratory Technologist.

	2005	2006	2007	2008	2009
GUYANA (GUY)					
Number of units collected	5,267	6,310	7,111	NR	7,700
Number of Autologous donors	16	0	1		0
Percent type of allogeneic donors					
Voluntary, altruistic donors	22	31	38		68
Family/Replacement donors	78	69	62		32
Remunerated donors	0	0	0		0
Percent 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	100	*100		100
Percent of units reactive/positive					
HIV	0.83	0.42	0.26		0.17
HBsAg	2.01	1.50	1.65		0.90
HCV	0.46	0.40	0.50		0.30
Syphilis	0.79	1.60	1.30		0.34
HTLV I-II	0	0.30	1.46		0.87
Percent units separated into components					
Packed red blood cells	62.00	NR	85.62		74.38
Fresh frozen plasma	NR	NR	74.69		45.45
Frozen plasma	NR	NR	NR		NR
Cryoprecipitate	NR	NR	10.92		1.88
Platelets	NR	NR	5.46		16.32
Percent units discarded					
Whole food	4.00	NR	11.14		28.76
Packed red blood cells	8.00	NA	8.51		9.03
Fresh frozen plasma	5.00	NA	2.17		12.91
Frozen plasma	4.00	NA	NA		NA
Cryoprecipitate	0	NA	33.33		8.97
Platelets	20.00	NA	37.00		13.76

2007: Figures from NBTS based on the statistics of the Recruitment Department were reported (voluntary 2,693; replacement 2,798, and autologous 1). HTLV I-II: the private sector did not screened 883 units; all 6,228 units received by the M.O.H were screened. Separated into components 5,492 units –only from NBTS.

2009: Also screened 100% *T. cruzi*; reactive/positive 0.1%.

Data submitted by:

2005: Clement McEwan, Medical Director.

2006: Clement McEwan, Medical Director / Arlene Siebs, Chief Technologist Ag.

2007: Arlene Siebs, Medical Technologist.

2009: Colin Roach, Director.

	2005	2006	2007	2008	2009
HAITI (HAI)					
Number of units collected	10,823	13,622	16,594	19,646	21,471
Number of Autologous donors	0	0	0	0	51
Percent type of allogeneic donors					
Voluntary, altruistic donors	15	27	51	66	70
Family/Replacement donors	85	73	49	34	30
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	97.69	100	100	100	100
Syphilis	99.92	100	100	100	100
HTLV I-II	89.62	100	100	100	100
Percent of units reactive/positive					
HIV	1.58	1.87	1.41	1.73	1.41
HBsAg	3.95	4.25	4.64	4.37	4.08
HCV	0.66	0.55	0.47	0.57	0.39
Syphilis	3.13	3.31	3.39	4.16	2.84
HTLV I-II	0.96	0.47	0.62	0.94	1.02
Percent units separated into components					
Packed red blood cells	28.00	33.92	37.36	54.28	51.67
Fresh frozen plasma	0.01	0.21	0.18	1.66	0.80
Frozen plasma	0	NR	NR	NR	NR
Cryoprecipitate	0	NR	0.02	0.035	0.01
Platelets	0	0.04	0.03	0.053	0.02
Percent units discarded					
Whole food	10.00	12.33	15.21	24.68	NR
Packed red blood cells	NR	NR	NR	NR	NR
Fresh frozen plasma	NR	NR	NR	NR	NR
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NR	NR	NR
Platelets	NA	NR	NR	NR	NR

2008: Units separated into components 17,079.

2009: Units separated into components 20,028.

Data submitted by:

2006/2007/2008/2009: Ernst Noel, Director National Blood Safety Program.

	2005	2006	2007	2008	2009
JAMAICA (JAM)					
Number of units collected	22,155	23,118	23,251	24,464	24,881
Number of Autologous donors	89	32	0	43	55
Percent type of allogeneic donors					
Voluntary, altruistic donors	10	9	17	10	15
Family/Replacement donors	90	91	83	90	85
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	98.86	100	100
HCV	100	100	95.16	100	100
Syphilis	100	100	90.80	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	0.50	0.55	0.43	1.04	0.54
HBsAg	0.60	0.92	0.82	0.83	0.84
HCV	0.40	0.34	0.32	0.55	0.67
Syphilis	2.30	0.65	3.46	2.53	1.15
HTLV I-II	1.60	1.90	1.61	1.86	1.93
Percent units separated into components					
Packed red blood cells	46.00	51.91	20.33	48.49	47.99
Fresh frozen plasma	31.00	6.06	16.61	39.09	44.14
Frozen plasma	7.00	2.60	3.13	3.98	4.09
Cryoprecipitate	7.00	8.65	3.72	5.42	11.24
Platelets	9.00	8.65	7.02	10.57	11.24
Percent units discarded					
Whole food	NR	NR	1.92	23.00	NR
Packed red blood cells	NR	NR	NR	NR	NR
Fresh frozen plasma	NR	NR	8.18	NR	NR
Frozen plasma	NR	NR	11.42	NR	NR
Cryoprecipitate	NR	NR	9.12	NR	NR
Platelets	NR	NR	16.16	NR	NR

2007: Screened units: HIV 25,982; HBsAg 22,987; HCV 22,125; Syphilis 21,111; HTLV I-II 23,861.

2008: 20.81% of donors seen in the mobile collections were deferred. The information given in separated into components corresponds only from 18,536 units received at the Central Blood Bank.

2009: The statistic do not separate deferrals per donor category (voluntary/replacement/autologous). Some stratified data available only from 1 fixed center site [NBTS-HQ].

Data submitted by:

2005/2006/2009: Lundie Richards, Medical Director NBTS.

2007: Jennifer Thame, Director-Acting NBTS.

2008: Evadne Williams, Director, NBTS.

	2005	2006	2007	2008	2009
MONTSERRAT (MOT)					
Number of units collected	NR	79	81	117	94
Number of Autologous donors		0	1	1	1
Percent type of allogeneic donors					
Voluntary, altruistic donors		0	0	0	0
Family/Replacement donors		100	100	100	100
Remunerated donors		0	0	0	0
Percent of units screened					
HIV		100	100	100	100
HBsAg		100	100	100	100
HCV		0	0	14.53	100
Syphilis		100	100	100	100
HTLV I-II		0	0	0	0
Percent of units reactive/positive					
HIV		NA	0	0	0
HBsAg		NA	0	0	0
HCV		NA	NA	0	0
Syphilis		NA	0	0	0
HTLV I-II		NA	NA	NA	NA
Percent units separated into components					
Packed red blood cells		NR	NR	0	1.06
Fresh frozen plasma		NR	NR	0	0
Frozen plasma		NR	NR	0	1.06
Cryoprecipitate		NR	NR	0	0
Platelets		NR	NR	0	0
Percent units discarded					
Whole food		33.00	46.91	41.03	27.96
Packed red blood cells		NA	NA	NA	0
Fresh frozen plasma		NA	NA	NA	NA
Frozen plasma		NA	NA	NA	100
Cryoprecipitate		NA	NA	NA	NA
Platelets		NA	NA	NA	NA

2006/2007: Donors are screened before blood is collected.

2008: During the period under review, Montserrat did not have the capacity to conduct separation of components. The components were sourced from the neighboring Island of Antigua. Also, during the period under review, the test for HTLV was unavailable. 48 units of whole blood were discarded.

2009: Screened units 93.

Data submitted by:

2006: Dorothea Hazel, Epidemiologist.

2007/2008/2009: Brinnette Bennett, Medical Technology.

	2005	2006	2007	2008	2009
SAINT KITTS & NEVIS (SKT)					
Number of units collected	423	415	NR	576	510
Number of Autologous donors	1	1		0	1
Percent type of allogeneic donors					
Voluntary, altruistic donors	3	1		14	19
Family/Replacement donors	97	99		86	81
Remunerated donors	0	0		0	0
Percent of units screened					
HIV	100	100		100	100
HBsAg	100	100		100	100
HCV	0	0		13.40	21.40
Syphilis	100	100		100	100
HTLV I-II	0	0		3.64	0
Percent of units reactive/positive					
HIV	0.47	0.24		0	0.19
HBsAg	5.67	4.10		3.30	3.14
HCV	NA	0		1.30	0.39
Syphilis	0.71	1.90		0.52	0.98
HTLV I-II	NA	0		4.76	NA
Percent units separated into components					
Packed red blood cells	NR	NR		19.27	13.75
Fresh frozen plasma	NR	NR		19.10	13.75
Frozen plasma	NR	NR		NR	NR
Cryoprecipitate	NR	NR		NR	NR
Platelets	NR	NR		NR	NR
Percent units discarded					
Whole food	NR	NR		19.14	12.07
Packed red blood cells	NA	NA		11.71	17.14
Fresh frozen plasma	NA	NA		11.82	15.71
Frozen plasma	NA	NA		NA	NA
Cryoprecipitate	NA	NA		NA	NA
Platelets	NA	NA		NA	NA

2006: Indicated that 122 units of whole blood were discarded.

2008: Units screened: HCV 77, HTLV I-II 21.

Data submitted by:

2005/2006: Althea Aaron-Friday, Medical Technologist.

2008: Domina Christmas, Medical Technologist - Jasmin Hanley, Laboratory Manager.

2009: Jasmin Hanley, Laboratory Manager / Domina Christmas, Technologist

	2005	2006	2007	2008	2009
SAINT LUCIA (STL)					
Number of units collected	1,914	2,028	2,216	2,285	2,446
Number of Autologous donors	8	7	9	4	4
Percent type of allogeneic donors					
Voluntary, altruistic donors	82	63	77	65	64
Family/Replacement donors	18	37	23	35	36
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	NR	0	0.09	0.04	0.12
HBsAg	0.78	0.50	0.85	0.70	0.66
HCV	0.05	0	0.04	0.09	0.04
Syphilis	0.04	0.80	1.80	0.22	0.66
HTLV I-II	0.68	0.40	0.60	1.05	0.53
Percent units separated into components					
Packed red blood cells	98.00	NR	100	100	100
Fresh frozen plasma	11.00	NR	26.40	18.41	29.81
Frozen plasma	44.00	NR	0	0	0
Cryoprecipitate	0.50	NR	0.54	0	0
Platelets	26.00	NR	18.37	27.49	35.05
Percent units discarded					
Whole food	NR	NR	0	0	0
Packed red blood cells	15.00	NA	16.16	5.87	8.64
Fresh frozen plasma	12.00	NA	12.31	9.05	20.60
Frozen plasma	93.00	NA	NA	NA	NA
Cryoprecipitate	50.00	NA	83.33	NA	NA
Platelets	71.00	NA	38.82	57.89	55.61

2006: Screened units 2,021. Indicated that were discarded 7 units of whole blood, 28 RBC, 17 FFP, 272 PL.

2008: 4 units of autologous donors were discarded.

2009: Blood units from autologous were not screened or separated into components.

Data submitted by:

2005/2006/2007/2008/2009: Verónica Lee, Medical Technologist.

	2005	2006	2007	2008	2009
SAINT VINCENT AND THE GRENADINES (STV)					
Number of units collected	822	882	1,172	1,156	982
Number of Autologous donors	25	27	43	30	26
Percent type of allogeneic donors					
Voluntary, altruistic donors	13	7	7	5	5
Family/Replacement donors	87	93	93	95	95
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	NR	0.10	0.34	0.26	0.31
HBsAg	1.70	1.40	0.77	0.87	0.92
HCV	0.36	0.60	1.45	1.12	0.71
Syphilis	2.43	3.70	3.33	2.08	1.63
HTLV I-II	2.19	2.90	2.13	2.08	2.34
Percent units separated into components					
Packed red blood cells	98.00	87.64	95.73	90.48	97.05
Fresh frozen plasma	20.00	16.78	14.85	35.47	13.75
Frozen plasma	NR	0	0	0	0
Cryoprecipitate	NR	0	0	0	0
Platelets	31.00	6.00	1.37	4.76	3.77
Percent units discarded					
Whole food	42.00	0	8.00	80.00	24.14
Packed red blood cells	12.00	9.96	8.38	0.57	6.19
Fresh frozen plasma	14.00	20.27	9.20	4.87	5.19
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	14.00	52.83	18.75	3.64	18.92

2008: 14 units of whole blood + 74 tested positive for TTI were discarded.

2009: 982 units tested, 56 were reactive, 2 donors were co-infected.

Data submitted by:

2005: Kamarla Questelles, Student, Medical Technologist.

2006/2007/2008: Dalrie Cole-John, Medical Technologist- Blood Bank

	2005	2006	2007	2008	2009
SURINAME (SUR)					
Number of units collected	7,525	7,881	8,925	10,330	9,774
Number of Autologous donors	1	0	2	4	0
Percent type of allogeneic donors					
Voluntary, altruistic donors	100	100	100	100	100
Family/Replacement donors	0	0	0	0	0
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive					
HIV	0.01	0.05	0.01	0.01	0.01
HBsAg	0.07	0.13	0.01	0.06	0.05
HCV	0.06	0.04	0.04	0.02	0.04
Syphilis	NR	0.03	0.03	0.13	0.04
HTLV I-II	NR	0.04	0.02	0	0.02
Percent units separated into components					
Packed red blood cells	96.00	100	100	100	99.98
Fresh frozen plasma	17.00	14.16	17.15	15.12	14.52
Frozen plasma	NR	0	0	0	0
Cryoprecipitate	NR	0	0	0	0
Platelets	18.00	19.71	20.52	18.38	19.03
Percent units discarded					
Whole food	100	0	0	0	100
Packed red blood cells	2.00	1.32	0.80	0.96	0.96
Fresh frozen plasma	1.00	0.99	0.13	2.25	2.75
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	NA	NA	NA	NA
Platelets	16.00	25.55	32.93	27.51	25.43

2006/2007: The selected first time donors should wait three months for blood donation. At the moment of the selection it is only collected a sample for screening (sample tube test).

2007: 406 units are not included in collected units. Donors screened 9,331.

2008: Received for separation into components 9,689 units.

2009: Extrated and screened were 10,437 blood samples – test tubes – (from the ones that were not deferred). Received for separation into components 9,774 blood units.

Data submitted by:

2005/2006/2007/2008/2009: María Tjon A. Loi, Medical Director of the National Blood Bank Suriname Red Cross Society.

	2005	2006	2007	2008	2009
TRINIDAD AND TOBAGO (TRT)					
Number of units collected	13,625	19,771	21,017	22,011	22,368
Number of Autologous donors	68	165	106	95	95
Percent type of allogeneic donors					
Voluntary, altruistic donors	13	8	6	12	13
Family/Replacement donors	87	92	94	88	87
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
Syphilis	100	100	100	100	100
HTLV I-II	100	100	100	100	100
Percent of units reactive/positive	100	100	100	100	100
HIV					
HBsAg	0.26	0.23	0.25	0.21	0.22
HCV	0.60	0.47	0.41	0.35	0.31
Syphilis	0.79	0.56	0.29	0.15	0.21
HTLV I-II	1.97	1.20	1.58	1.49	1.36
Percent units separated into components	0.05	0.08	0.78	0.03	0.05
Packed red blood cells	1.07	0.90	0.85	0.72	0.94
Fresh frozen plasma					
Frozen plasma	NR	64.90	47.02	68.66	78.51
Cryoprecipitate	NR	40.48	35.54	49.81	64.32
Platelets	NR	0	NR	NR	0
Percent units discarded	NR	0.52	1.35	2.34	1.61
Whole food	NR	40.41	35.60	49.79	63.31
Packed red blood cells					
Fresh frozen plasma	NR	16.35	6.03	11.82	1.09
Frozen plasma	NA	2.34	5.11	2.31	2.10
Cryoprecipitate	NA	9.09	22.08	34.83	19.86
Platelets	NA	NA	NA	NA	NA
Crioprecipitado	NA	NR	NR	54.07	100
Plaquetas	NA	26.07	17.33	10.47	10.58

YEAR	UNITS SCREENED	SEPARATED INTO COMPONENTS	NO. OF CENTERS THAT GAVE INFORMATION
2005	13,625	6,635	1
2006	19,771	12,931	1
2007	21,017	14,737	2
2008	21,933	14,688	2
2009	22,273	14,803	2

Data submitted by:

2005/2006/2007/2008/2009: Kenneth Charles, Medical Director.

LATIN AMERICAN COUNTRIES

	2005	2006	2007	2008	2009
ARGENTINA (ARG)					
Number of units collected	365,313	345,502	708,560	773,097	926,451
Number of autologous donors	0	0	16,530	21,000	24,988
Percent type of allogeneic donors					
Voluntary, altruistic donors	8	11	8	15	19
Family/Replacement donors	92	89	92	85	81
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
SYPHILIS	100	100	100	100	100
<i>T. cruzi</i>	100	100	100	100	100
HTLV I-II	NR	100	100	100	100
Anti-HBc	NR	100	100	100	100
Percent of units reactive/positive					
HIV	0.25	0.30	0.25	0.21	0.24
HBsAg	0.39	0.47	0.39	0.33	0.27
HCV	0.98	0.95	0.98	0.63	0.67
Syphilis	1.12	1.14	1.12	1.07	0.92
<i>T. cruzi</i>	3.75	3.99	3.75	3.80	3.08
HTLV I-II	NR	0.27	NR	0.25	0.21
Anti-HBc	NR	2.90	2.45	0.87	2.03
Percent units separate into components					
Packed red blood cells	87.00	89.99	85.00	90.00	89.97
Fresh frozen plasma	61.00	53.99	40.00	37.86	71.97
Frozen plasma	26.00	35.04	45.00	52.20	17.99
Cryoprecipitate	22.00	7.96	18.70	10.80	6.75
Platelets	46.00	52.33	22.10	32.48	59.13
Percent units discarded					
Whole blood	67.00	NR	NR	NR	58.50
Packed red blood cells	8.00	NR	NR	NR	16.21
Fresh frozen plasma	0.06	NR	NR	NR	0.37
Frozen plasma	0.03	NR	NR	NR	3.80
Cryoprecipitate	10.00	NR	NR	NR	2.84
Platelets	21.00	NR	NR	NR	15.22

2006: Data from the public subsector, estimated to represent 50% of the National Blood System

2009: Units screened 901,463.

YEAR	SEPARATED
2005	365,313
2006	314,111
2007	690,560
2008	773,097
2009	877,143

Data Submitted by:

2005: Daniel Fontana, Coordinador General Plan Nacional de Sangre.

2006/2007/2008/2009: Esther Mabel Maschio, Coordinadora General del Plan Nacional de Sangre.

	2005	2006	2007	2008	2009
BOLIVIA (BOL)					
Number of units collected	46,764	49,954	54,951	61,808	69,073
Number of autologous donors	140	113	56	44	95
Percent type of allogeneic donors					
Voluntary, altruistic donors	28	27	29	31	33
Family/Replacement donors	72	73	71	69	67
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	99.21	99.98	99.99	100	100
HBsAg	99.21	99.98	99.99	100	100
HCV	99.20	98.92	99.99	100	100
SYPHILIS	99.10	99.98	99.99	100	100
<i>T. cruzi</i>	99.26	90.34	99.84	100	100
HTLV I-II	NR	NR	NR	NR	NR
Anti-HBc	NR	NR	50.53	100	NR
Percent of units reactive/positive					
HIV	0.19	0.11	0.10	0.15	0.11
HBsAg	0.47	0.40	0.38	0.24	0.31
HICV	0.75	0.66	0.97	1.03	1.07
Syphilis	0.98	0.90	1.01	0.94	0.94
<i>T. cruzi</i>	8.61	1.93	2.53	2.36	2.62
HTLV I-II	NA	NA	0.05	NA	NA
Anti-HBc	NA	NA	3.32	NR	NA
Percent units separate into components					
Packed red blood cells	67.00	72.35	78.69	86.26	88.77
Fresh frozen plasma	26.00	52.42	54.52	66.64	68.54
Frozen plasma	35.00	15.71	10.94	13.54	13.69
Cryoprecipitate	7.00	4.59	5.48	5.82	6.36
Platelets	16.00	17.71	25.29	28.97	31.14
Percent units discarded					
Whole blood	7.00	7.57	16.01	13.66	17.84
Packed red blood cells	6.00	5.71	6.63	7.09	6.61
Fresh frozen plasma	30.00	13.55	22.78	24.02	31.74
Frozen plasma	15.00	43.18	78.80	54.60	72.82
Cryoprecipitate	9.00	80.03	32.20	26.11	22.91
Platelets	34.00	41.84	38.63	35.78	39.10

2006: Screened units for HIV, HBsAg 49,948; HCV 49,416; Syphilis 49,944; *T. cruzi* 45,128.

2007: Screened units: Anti-HBc 27,946, *T. cruzi* 54,861.

2008: Separated into components 61,798 units.

Data submitted by:

2005: Armando Luis González Treasure, Responsable Garantía de Calidad y Hemovigilancia.

2006/2007/2008/2009: María del Carmen García de Luna Orosco - Coordinadora Nacional / Rubén Dario Roca Oyola - Responsable Técnico.

	2005	2006	2007	2008	2009
BRAZIL (BRA)					
Number of units collected	3,738,580	3,129,882	1,305,785	707,464	458,235
Number of autologous donors	3,759	0	23,013	10,387	599
Percent type of allogeneic donors					
Voluntary, altruistic donors	52	58	72	53	57
Family/Replacement donors	48	42	28	47	43
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	NR	100	100	100
HBsAg	100	NR	100	100	100
HCV	100	NR	100	100	100
SYPHILIS	100	NR	100	100	100
<i>T. cruzi</i>	100	NR	100	100	100
HTLV I-II	NR	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR	NR
Percent of units reactive/positive					
HIV	0.46	NA	0.69	0.40	0.56
HBsAg	0.50	NA	0.48	0.35	0.22
HCV	0.52	NA	0.53	0.37	0.34
Syphilis	0.84	NA	0.96	0.50	0.34
<i>T. cruzi</i>	0.61	NA	0.59	0.32	0.20
HTLV I-II	NR	NA	0.23	NA	NA
Anti-HBc	NR	NA	NR	NA	NA
Percent units separate into components					
Packed red blood cells	38.00	NR	90.44	59.30	95.25
Fresh frozen plasma	32.00	NR	15.06	48.62	78.19
Frozen plasma	8.00	NR	79.35	NR	NR
Cryoprecipitate	2.00	NR	7.21	3.54	6.02
Platelets	17.00	NR	49.76	29.64	45.90
Percent units discarded					
Whole blood	NR	NR	36.88	54.01	76.99
Packed red blood cells	NR	NA	15.27	17.23	16.28
Fresh frozen plasma	NR	NA	86.52	54.68	50.24
Frozen plasma	NR	NA	50.55	NA	NA
Cryoprecipitate	NR	NA	16.42	10.79	9.95
Platelets	NR	NA	45.07	37.09	39.40

2006: Partial data. Public Services of the States of Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo, Sergipe, Tocantins. Number of donors interviewed 3,851,001

2007: Partial data. Public Services of the States of Amazonas, Ceará, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Roraima, Sergipe, and Tocantins.

2008: Partial data. Public Services of the States of Ceará, Goiás, Espírito Santo, Maranhão, Minas Gerais, Paraná, Roraima, Santa Catarina, Sergipe, and Tocantins.

2009: Partial data. Public Services of the States of Goiás, Paraná, Ceará, Santa Catarina. The percent of units reactive/positive are based on the total of bags submitted to tests -443,442.

	2005	2006	2007	2008	2009
CHILE (CHI)					
Number of units collected	178,079	NR	238,124	NR	NR
Number of autologous donors	178		0		
Percent type of allogeneic donors					
Voluntary, altruistic donors	9		8		
Family/Replacement donors	91		92		
Remunerated donors	0		0		
Percent of units screened					
HIV	100		100		
HBsAg	100		100		
HCV	100		100		
SYPHILIS	100		100		
<i>T. cruzi</i>	68.70		72.28		
HTLV I-II	0		56.00		
Anti-HBc	0		0		
Percent of units reactive/positive					
HIV	0.06		0.04		
HBsAg	0.04		0.02		
HCV	0.17		NR		
Syphilis	0.50		0.13		
<i>T. cruzi</i>	0.27		0.34		
HTLV I-II	0		NR		
Anti-HBc	0		NA		
Percent units separate into components					
Packed red blood cells	95.00		97.44		
Fresh frozen plasma	0		70.51		
Frozen plasma	88.00		16.40		
Cryoprecipitate	29.00		15.24		
Platelets	54.00		55.20		
Percent units discarded					
Whole blood	28.00		NR		
Packed red blood cells	6.00		3.92		
Fresh frozen plasma	0		*		
Frozen plasma	55.00		*		
Cryoprecipitate	10.00		3.47		
Platelets	28.00		20.67		

2007: Received for screening and separated into components 238,514 units. Screened: HIV-HBsAg-HCV-Syphilis 232,818, *T. cruzi* 168,281, HTLV I-II 130,400. (*) The 5.37% - does not indicate if it is for FP or FFP.

Data submitted by:

2005: Homero Vásquez, Departamento de Calidad en Salud.

2007: María Cristina Martínez, Secretaria Ejecutiva de la CNST.

	2005	2006	2007	2008	2009
COLOMBIA (COL)					
Number of units collected	527,711	552,421	582,011	614,752	692,487
Number of autologous donors	10,554	943	1,031	776	492
Percent type of allogeneic donors					
Voluntary, altruistic donors	58	61	67	71	76
Family/Replacement donors	42	39	33	29	24
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	99.99	99.99	100	100	100
HBsAg	99.99	100	100	100	100
HCV	99.99	99.99	100	100	100
SYPHILIS	99.99	99.99	100	100	100
<i>T. cruzi</i>	99.99	99.99	100	100	100
HTLV I-II	0	58.60	57.53	60.75	63.39
Anti-HBc	0	64.40	62.73	64.75	66.66
Percent of units reactive/positive					
HIV	0.34	0.46	0.44	0.38	0.25
HBsAg	0.39	0.35	0.27	0.24	0.20
HICV	0.54	0.57	0.58	0.61	0.45
Syphilis	1.43	1.51	1.58	1.65	1.06
<i>T. cruzi</i>	0.41	0.40	0.48	0.55	0.45
HTLV I-II	0	0.27	0.28	0.26	0.19
Anti-HBc	0	2.86	2.76	2.43	1.66
Percent units separate into components					
Packed red blood cells	39.00	96.80	97.63	96.32	90.36
Fresh frozen plasma	28.00	70.24	74.27	73.79	71.97
Frozen plasma	0	NR	NR	13.12	14.43
Cryoprecipitate	3.00	7.23	5.81	15.84	4.83
Platelets	17.00	45.14	47.43	45.62	43.28
Percent units discarded					
Whole blood	2.00	28.15	43.40	46.19	51.43
Packed red blood cells	10.00	8.28	8.48	7.63	9.66
Fresh frozen plasma	69.00	71.69	NR	46.40	48.33
Frozen plasma	0	NA	64.81	93.98	100
Cryoprecipitate	2.00	17.02	23.00	9.80	28.02
Platelets	18.00	37.46	36.96	35.90	34.12

2006: Screened units: HIV, HCV, Syphilis, *T. cruzi* 552,366; HbsAg 552,421; Anti-HBc 355,759; HTLV I-II 323,553.

2009: Units screened for HTLV I-II and Anti-HBc - non-obligatory markers. Separated into components: 99,918 units of frozen plasma. Discarded: residual and frozen plasma 102,255 units.

SCREENED	HTLV I-II	ANTI-HBC
2006	323,553	355,759
2007	334,811	365,076
2008	373,468	398,076
2009	439,001	461,591

Data submit by:

2005: Mauricio Beltrán Durán, Coordinador de la Red Nacional de Bancos de Sangre.

2006/2007: Luis Eduardo Mejía Mejía, Director General del Instituto Nacional de Salud / Mauricio Beltrán Durán, Coordinador Red Nacional de Bancos de Sangre.

2008/2009: Mauricio Beltrán Durán, Coordinador de la Red Nacional de Bancos de Sangre.

	2005	2006	2007	2008	2009
COSTA RICA (COR)					
Number of units collected	54,170	54,170	53,914	57,996	59,336
Number of autologous donors	11	13	46	67	72
Percent type of allogeneic donors					
Voluntary, altruistic donors	59	59	59	63	65
Family/Replacement donors	41	41	41	37	35
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	NR	100	100
HBsAg	100	100	NR	100	100
HCV	100	100	NR	100	100
SYPHILIS	100	100	NR	100	100
<i>T. cruzi</i>	100	100	NR	100	100
HTLV I-II	0	100	NR	100	100
Anti-HBc	0	100	NR	100	100
Percent of units reactive/positive					
HIV	0.03	0.11	0.02	0.16	0.12
HBsAg	0.10	0.23	0.04	0.17	0.13
HICV	0.09	1.30	0.17	1.27	0.93
Syphilis	0.18	0.55	0.22	0.79	0.61
<i>T. cruzi</i>	0.09	0.34	0.08	0.49	0.42
HTLV I-II	0	0.33	0.02	0.31	0.54
Anti-HBc	0	2.61	1.06	2.92	2.35
Percent units separate into components					
Packed red blood cells	89.00	92.07	NR	96.00	94.34
Fresh frozen plasma	0	0	NR	0	25.10
Frozen plasma	0	92.07	NR	96.00	69.24
Cryoprecipitate	15.00	15.37	NR	12.37	18.19
Platelets	71.00	71.06	NR	76.94	70.57
Percent units discarded					
Whole blood	28.00	21.63	NR	23.36	80.20
Packed red blood cells	23.00	11.30	NA	11.33	9.94
Fresh frozen plasma	NA	NA	NA	NA	0
Frozen plasma	NA	21.35	NA	17.02	30.19
Cryoprecipitate	15.00	40.90	NA	0.015	14.43
Platelets	63.00	29.51	NA	35.63	48.90

2008: Units collected - this data is from the general total of the donation on the part of the CCSS, not available broken down. 54,452 separated into components.

Data submitted by:

2005/2006: José Luis Salas Oviedo, Jefe del Área de Laboratorios Clínicos y Bancos de Sangre.

2007: Vilma Carvajal Gutiérrez, Jefa del Área de Regulación y Sistematización de Laboratorios Clínicos y Bancos de Sangre.

2008/2009: Vilma Carvajal Gutiérrez, Jefa Suba del Área de Laboratorios Clínicos.

	2005	2006	2007	2008	2009
CUBA (CUB)					
Number of units collected	495,343	475,959	400,292	393,937	403,060
Number of autologous donors	0	0	0	0	0
Percent type of allogeneic donors					
Voluntary, altruistic donors	100	100	100	100	100
Family/Replacement donors	0	0	0	0	0
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	100	NR	100	100
HBsAg	100	100	NR	100	100
HCV	100	100	NR	100	100
SYPHILIS	100	100	NR	100	100
<i>T. cruzi</i>	NA	NA	NA	NA	NA
HTLV I-II	NR	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR	NR
Percent of units reactive/positive					
HIV	0.02	0.02	NA	0.02	0.02
HBsAg	0.51	0.49	NA	0.37	0.44
HICV	0.60	0.53	NA	1.20	1.56
Syphilis	0.52	0.59	NA	0.57	0.67
<i>T. cruzi</i>	NA	NA	NA	NA	NA
HTLV I-II	NA	NA	NA	NA	NA
Anti-HBc	NA	NA	NA	NA	NA
Percent units separate into components					
Packed red blood cells	NR	43.16	52.48	95.13	95.06
Fresh frozen plasma	NR	7.72	11.76	19.30	16.42
Frozen plasma	NR	2.49	16.76	4.15	1.58
Cryoprecipitate	NR	8.20	8.00	9.77	13.93
Platelets	NR	6.83	9.01	14.57	15.66
Percent units discarded					
Whole blood	NR	NR	NR	7.46	7.71
Packed red blood cells	NA	NR	NR	11.33	14.74
Fresh frozen plasma	NA	NR	NR	8.16	8.20
Frozen plasma	NA	NR	NR	68.56	5.63
Cryoprecipitate	NA	NR	NR	3.55	2.40
Platelets	NA	NR	NR	20.51	19.14

Data submitted by:

2005/2006/2007: José M. Ballester, Director.

2008/2009: Ángel Suárez Escandon, J. Programa Nacional de Sangre.

	2005	2006	2007	2008	2009
ECUADOR (ECU)					
Number of units collected	124,724	124,724	144,600	155,700	NR
Number of autologous donors	NR	NR	0	0	
Percent type of allogeneic donors					
Voluntary, altruistic donors	NR	NR	35	37	
Family/Replacement donors	NR	NR	65	63	
Remunerated donors	NR	NR	0	0	
Percent of units screened					
HIV	100	100	100	100	
HBsAg	100	100	100	100	
HCV	100	100	100	100	
SYPHILIS	100	100	100	100	
<i>T. cruzi</i>	100	90.00	100	100	
HTLV I-II	0	0	0	NR	
Anti-HBc	0	NR	0	NR	
Percent of units reactive/positive					
HIV	0.58	0.58	0.43	0.20	
HBsAg	0.34	0.34	0.29	0.37	
HICV	0.57	0.57	0.43	0.59	
Syphilis	0.80	0.80	0.57	0.46	
<i>T. cruzi</i>	0.16	0.16	0.17	0.18	
HTLV I-II	NA	NA	NA	NA	
Anti-HBc	NA	NA	NA	NA	
Percent units separate into components					
Packed red blood cells	77.00	77.17	90.84	65.73	
Fresh frozen plasma	46.00	45.58	44.36	54.12	
Frozen plasma	17.00	16.71	14.69	5.12	
Cryoprecipitate	18.00	18.33	20.53	2.69	
Platelets	31.00	31.48	12.72	25.26	
Percent units discarded					
Whole blood	6.00	6.00	8.30	4.46	
Packed red blood cells	5.00	4.92	2.40	1.65	
Fresh frozen plasma	2.00	1.85	14.99	5.17	
Frozen plasma	55.00	54.91	18.26	35.26	
Cryoprecipitate	7.00	7.18	3.33	12.01	
Platelets	13.00	12.84	19.96	7.46	

2008: Donors interviewed 235,909; deferred 80,209.

Data submitted by:

2005/2006/2007: Marco Antonio Herdofza Holguín, Secretario Nacional de Bancos.

2008/2009: Diana Almeida Ubidia, Técnica del Programa de Seguridad Transfusional.

	2005	2006	2007	2008	2009
EL SALVADOR (ELS)					
Number of units collected	80,142	80,460	81,246	81,992	82,757
Number of autologous donors	1	0	0	11	10
Percent type of allogeneic donors					
Voluntary, altruistic donors	10	11	11	10	12
Family/Replacement donors	90	89	89	90	88
Remunerated donors	0	0	0	0.014	0.012
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
SYPHILIS	100	100	100	100	100
<i>T. cruzi</i>	100	100	100	100	100
HTLV I-II	NR	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR	NR
Percent of units reactive/positive					
HIV	0.09	0.10	0.09	0.09	0.08
HBsAg	0.28	0.24	0.24	0.17	0.15
HICV	0.19	0.32	0.29	0.17	0.12
Syphilis	1.02	0.83	1.14	0.91	1.11
<i>T. cruzi</i>	2.40	2.17	2.09	2.46	1.93
HTLV I-II	0	NA	NA	NA	NA
Anti-HBc	0	NA	NA	NA	NA
Percent units separate into components					
Packed red blood cells	93.00	95.23	93.13	99.61	96.06
Fresh frozen plasma	NR	67.93	61.64	72.83	73.49
Frozen plasma	NR	NR	0	NR	NR
Cryoprecipitate	NR	9.42	11.45	10.43	6.82
Platelets	NR	52.55	54.13	58.08	60.82
Percent units discarded					
Whole blood	6.00	40.11	69.69	100	54.27
Packed red blood cells	NR	5.22	5.20	6.68	5.93
Fresh frozen plasma	NA	23.75	21.78	14.14	19.70
Frozen plasma	NA	NA	NA	NA	NA
Cryoprecipitate	NA	4.01	1.74	4.27	3.55
Platelets	NA	10.33	7.71	15.38	14.81

2007: Also 510 apheresis were collected, not included in calculations.

2008: 481 units collected by apheresis included in calculations.

2009: 545 units collected by apheresis included in calculations.

Data submitted by:

2005/2006/2007/2008/2009: Ana Vilma Guevara de Aguilar, Jefa de Área Clínica.

	2005	2006	2007	2008	2009
GUATEMALA (GUT)					
Number of units collected	77,290	NR	76,485	84,357	91,554
Number of autologous donors	23		69	47	45
Percent type of allogeneic donors					
Voluntary, altruistic donors	4		6	5	4
Family/Replacement donors	96		94	95	96
Remunerated donors	0		0	0	0
Percent of units screened					
HIV	100		100	100	100
HBsAg	100		100	100	100
HCV	100		100	100	100
SYPHILIS	100		100	100	100
<i>T. cruzi</i>	100		100	100	100
HTLV I-II	0		0	NR	NR
Anti-HBc	0		0	NR	NR
Percent of units reactive/positive					
HIV	0.61		0.82	0.76	0.60
HBsAg	0.80		1.21	0.55	0.64
HCV	0.93		0.69	0.88	0.89
Syphilis	2.65		2.10	2.31	2.15
<i>T. cruzi</i>	1.40		0.97	1.42	1.75
HTLV I-II	0		NA	0.23	0.05
Anti-HBc	0		NA	2.09	1.54
Percent units separate into components					
Packed red blood cells	NR		NR	79.67	87.21
Fresh frozen plasma	NR		NR	54.72	53.25
Frozen plasma	NR		NR	NR	NR
Cryoprecipitate	NR		NR	1.97	0.79
Platelets	NR		NR	33.51	32.66
Percent units discarded					
Whole blood	7.00		NR	26.36	51.37
Packed red blood cells	8.00		NA	10.93	11.51
Fresh frozen plasma	NA		NA	27.32	19.74
Frozen plasma	11.00		NA	NA	NA
Cryoprecipitate	0.40		NA	17.96	78.58
Platelets	6.00		NA	24.06	24.41

2008: Remunerated donors information was no collected. Units screened and separated into components 84,310. Reactive/positive CMV 0.91%.

2009: Data of remunerated donors was not collected. The screening of HTLV I-II, Anti-HBc is partial; it is not obligatory by the Medicine Services Law. Reactive/positive CMV 1.21%. Separated into components 83,906.

Data submitted by:

2005: Amelia Flores, Coordinadora del Programa de Medicina Transfusional y Bancos.

2007/2008/2009: Claudia María García González, Coordinadora del Programa de Medicina Transfusional y Bancos de Sangre.

	2005	2006	2007	2008	2009
HONDURAS (HON)					
Number of units collected	52,317	NR	52,497	54,498	58,317
Number of autologous donors	52		54	25	24
Percent type of allogeneic donors					
Voluntary, altruistic donors	NR		15	12	12
Family/Replacement donors	NR		85	88	87
Remunerated donors	NR		0.23	0.39	1
Percent of units screened					
HIV	100		100	100	100
HBsAg	100		100	100	100
HCV	99.84		100	100	100
SYPHILIS	100		100	100	100
<i>T. cruzi</i>	100		100	100	100
HTLV I-II	0		0	0	70.20
Anti-HBc	0		0	0	70.11
Percent of units reactive/positive					
HIV	0.24		0.25	0.28	0.27
HBsAg	0.30		0.43	0.30	0.29
HICV	0.99		0.43	0.48	0.48
Syphilis	0.98		0.75	1.08	1.04
<i>T. cruzi</i>	1.47		1.06	1.56	1.55
HTLV I-II	0		NA	NA	0.15
Anti-HBc	0		NA	NA	3.09
Percent units separate into components					
Packed red blood cells	32.00		70.19	35.99	39.12
Fresh frozen plasma	0		58.11	29.57	33.46
Frozen plasma	24.00		0	NR	0
Cryoprecipitate	3.00		3.78	1.70	2.43
Platelets	27.00		60.25	30.35	30.43
Percent units discarded					
Whole blood	NR		NR	NR	NR
Packed red blood cells	NR		NR	NR	NR
Fresh frozen plasma	NA		NR	NR	NR
Frozen plasma	NR		NA	NA	NA
Cryoprecipitate	NR		NR	NR	NR
Platelets	NR		NR	NR	NR

2007: Received units to be screened 52,497. Screened units: HIV 52,847; HBsAg 52,848; HCV 52,487; Syphilis 52,901; *T. cruzi* 52,847.

2008/2009: The national register form does not allow to obtain separate information regarding discarded components.

2008: Donors interviewed 67,540, and deferred 13,042, not reported by donors type. The screening of the units is greater than the extracted units, this is due to the fact that some hospitals reported repeated testing. Number of units screened: HIV 54,581, HbsAg 54,587, HCV 54,587, Syphilis 54,653, *T. cruzi* 54,580. The Secretary of Health did not fraction this year components, only obtained 1,355 units of platelets apheresis.

2009: The instruments of data collection used until 2009 did not permit to separate the information of permanent and temporary donors. Separated 28.98% centrifugal blood platelets and 1.56% apheresis blood platelets. The registered data for separation into components of the Secretary of Health corresponds to 1 hospital. Screened units for Anti-HBc 40,884; HTLV I-II 40,937.

Data submitted by:

2005/2008/2009: Inés Adela Zelaya Pineda, Jefa del Departamento de Bancos de Sangre y Servicios de Transfusión.

2007: Inés Adela Zelaya Pineda, Jefa del Departamento de Bancos de Sangre y Servicios de Transfusión/ Elizabeth Vinella, Directora del Programa Nacional de Sangre.

	2005	2006	2007	2008	2009
MEXICO (MEX)					
Number of units collected	1,351,204	1,400,137	1,501,641	1,484,031	1,602,071
Number of autologous donors	3,378	5,506	7,967	4,795	2,026
Percent type of allogeneic donors					
Voluntary, altruistic donors	4	3	3	3	3
Family/Replacement donors	96	97	97	97	97
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	96.62	94.09	98.70	100	100
HBsAg	96.22	93.60	94.83	100	100
HCV	96.47	93.98	95.37	100	100
SYPHILIS	91.31	89.39	91.63	99.78	100
<i>T. cruzi</i>	36.34	42.62	53.31	66.26	82.10
HTLV I-II	NR	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR	NR
Percent of units reactive/positive					
HIV	0.29	0.38	0.28	0.33	0.30
HBsAg	0.22	0.20	0.19	0.19	0.19
HICV	0.64	0.68	0.66	0.62	0.59
Syphilis	0.24	0.30	0.32	0.39	0.45
<i>T. cruzi</i>	0.50	0.50	0.41	0.45	0.41
HTLV I-II	NR	NA	NA	NA	NA
Anti-HBc	NR	NA	NA	NA	NA
Percent units separate into components					
Packed red blood cells	88.00	91.56	90.73	93.07	94.47
Fresh frozen plasma	66.00	NR	68.70	74.28	77.06
Frozen plasma	NR	69.23	NR	NR	NR
Cryoprecipitate	7.00	6.39	5.91	6.16	5.82
Platelets	36.00	37.81	37.06	42.45	40.58
Percent units discarded					
Whole blood	2.00	27.74	30.55	40.58	51.43
Packed red blood cells	6.00	6.65	6.03	6.65	6.47
Fresh frozen plasma	32.00	NA	37.83	37.48	37.46
Frozen plasma	NA	33.67	NA	NA	NA
Cryoprecipitate	15.00	17.95	19.43	13.35	3.20
Platelets	26.00	24.57	26.25	24.81	27.51

The screening of *T. cruzi* is obligatory only in endemic areas.

2006: Screened units: HIV 1,317,458; HBsAg 1,310,648; HCV 1,315,894; Syphilis 1,251,595; *T. cruzi* 596,762.

SCREENED					
YEAR	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>
2006	1,317,458	1,310,648	1,315,894	1,251,595	596,762
2007	1,482,063	1,424,019	1,432,087	1,376,010	800,576
2008	1,484,031	1,484,031	1,484,031	1,480,702	983,311
2009	1,602,071	1,602,071	1,602,071	1,602,071	1,315,323

YEAR	SEPARATED	APHERESIS PROCEDURE
2006	1,352,369	47,768
2008	1,484,031	49,826
2009	1,547,104	54,967

Data submitted by:

2005: Rafael Antonio Marín y López, Director Gene

2006: C. José de Jesús Estrada Chavez, Jefe del Departamento de Metodología.

2007: Rafael Antonio Marín y López, Director General.

2008/2009: Julieta Rojo Medina, Director General.

	2005	2006	2007	2008	2009
NICARAGUA (NIC)					
Number of units collected	54,117	53,970	59,755	68,288	69,632
Number of autologous donors	0	0	0	0	0
Percent type of allogeneic donors					
Voluntary, altruistic donors	44	46	39	48	87
Family/Replacement donors	56	54	61	52	13
Remunerated donors	0	0	0	0	0
Percent of units screened					
HIV	100	91.84	100	100	100
HBsAg	100	91.28	100	100	100
HCV	98.90	91.03	100	100	100
SYPHILIS	100	91.43	100	100	100
<i>T. cruzi</i>	100	89.96	94.50	98.50	100
HTLV I-II	0	NR	NR	NR	NR
Anti-HBc	0	NR	NR	NR	NR
Percent of units reactive/positive					
HIV	0.80	0.84	0.27	0.39	0.08
HBsAg	0.03	1.32	0.41	0.33	0.21
HICV	0.73	0.47	0.67	0.69	0.31
Syphilis	1.36	0.90	1.04	1.48	0.83
<i>T. cruzi</i>	0.90	0.89	0.31	0.43	0.12
HTLV I-II	0	NA	NA	NA	NA
Anti-HBc	0	NA	NA	NA	NA
Percent units separate into components					
Packed red blood cells	78.00	68.77	86.97	88.04	89.50
Fresh frozen plasma	5.00	47.79	63.54	54.02	36.13
Frozen plasma	64.00	3.02	0.94	NR	1.91
Cryoprecipitate	1.00	0	2.57	11.10	10.80
Platelets	52.00	26.43	61.11	57.46	49.10
Percent units discarded					
Whole blood	90.00	3.99	39.29	5.64	67.78
Packed red blood cells	1.00	1.77	2.51	2.95	6.38
Fresh frozen plasma	0	1.54	5.05	1.93	100
Frozen plasma	1.00	0	0	NA	100
Cryoprecipitate	0.20	NA	11.86	0.07	9.65
Platelets	1.00	1.70	26.00	1.96	30.17

2006: Units screened: HIV 49,565; HBsAg 49,266; HCV 49,133; Syphilis 49,346; T.cruzi 48,549..

2007: Units screened 62,702. Screened T.cruzi 59,259. Units separated into components 54,741.

2008: Data of replacement donors received from the Nicaraguan Red Cross: 36,986 interviewed, deferred 6,685, extracted 30,301. Screened units T.cruzi 67,253. Units separated into components 64,308.

2009: Descarte de PFC y PC incluye unidades preparadas antes del período de este informe.

Data submitted by:

2005: Justo Reyes Cerros, Director de Microbiología.

2006/2007/2008/2009: Alcides González Mairena, Director General.

	2005	2006	2007	2008	2009
PANAMA (PAN)					
Number of units collected	42,771	45,650	46,947	49,575	51,539
Number of autologous donors	0	132	180	256	189
Percent type of allogeneic donors					
Voluntary, altruistic donors	3	3	4	5	5
Family/Replacement donors	70	73	76	76	80
Remunerated donors	27	24	20	19	15
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
SYPHILIS	100	100	100	100	100
<i>T. cruzi</i>	97.64	97.94	100	96.52	100
HTLV I-II	0	24.70	30.25	43.24	81.78
Anti-HBc	0	100	100	100	NR
Percent of units reactive/positive					
HIV	0.07	0.06	0.07	0.06	0.05
HBsAg	0.27	0.29	0.26	0.21	0.20
HICV	0.67	0.32	0.96	0.34	0.24
Syphilis	0.15	0.30	1.18	1.38	1.28
<i>T. cruzi</i>	0.12	0.15	0.06	0.38	0.36
HTLV I-II	0	0.04	0.07	0.25	2.99
Anti-HBc	0	NR	2.30	2.24	1.77
Percent units separate into components					
Packed red blood cells	NR	69.89	82.41	88.69	91.20
Fresh frozen plasma	NR	0.06	NR	0.46	0.14
Frozen plasma	NR	37.23	45.76	43.88	49.17
Cryoprecipitate	NR	5.01	8.27	8.17	8.21
Platelets	NR	50.41	50.50	53.88	63.44
Percent units discarded					
Whole blood	NR	10.75	14.15	2.95	21.92
Packed red blood cells	NA	2.68	2.59	11.91	8.35
Fresh frozen plasma	NA	100	NA	92.16	NR
Frozen plasma	NA	0	1.32	NR	2.32
Cryoprecipitate	NA	0	NR	4.52	2.43
Platelets	NA	25.00	24.21	28.15	18.86

2006: Units screened Syphilis 46,160, *T. cruzi* 44,710, HTLV I-II 11,272.

2007: Screened units HTLV I-II 14,200.

2008: Screened units *T. cruzi* 47,848, HTLV I-II 21,435. Discarded units: data corresponds to 21 Blood Banks and 1 transfusion center (expired). Separated into components, a figure was given for both FFP and FP.

2009: Units screened HTLV I-II 42,148. Platelets separated, 58.69% manually - 4.75 apheresis. The units discarded correspond to the components of 22 of the 26 blood banks nationwide. of 51,539 collected blood units. Blood platelets discarded manually 9.66% - by apheresis 0.24%.

YEAR	SEPARATED	% INDICATED NATIONWIDE DONATION	
2006	27,814	61	Represents the fraction of 9 banks
2007	32,979	70	Represents the fraction of 9 banks
2008	33,021	66	Represents the fraction of 10 banks
2009	42,652	83	Represents the fraction of 10 banks

Data submitted by:

2005: Gilma S. Bosquez, Hospital Santo Tomás.

2006: Gilma S. Bosquez, Jefa Técnica del Banco de Sangre.

2007/2008: Heriberto Espino R., Jefe Médico / Gilma S. Bosquez, Jefa Técnica.

2009: Gilma S. Bosquez, Jefa Técnica.

	2005	2006	2007	2008	2009
PARAGUAY (PAR)					
Number of units collected	47,060	51,153	54,538	59,757	66,873
Number of autologous donors	56	42	61	54	51
Percent type of allogeneic donors					
Voluntary, altruistic donors	10	9	10	13	14
Family/Replacement donors	90	91	90	87	86
Remunerated donors	0.006	0.004	0	0	0
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	99.83	100	100	100	100
SYPHILIS	100	100	100	100	100
<i>T. cruzi</i>	99.83	100	100	100	100
HTLV I-II	0	49.45	69.81	76.48	100
Anti-HBc	0	90.98	100	100	100
Percent of units reactive/positive					
HIV	0.28	0.45	0.60	0.37	0.61
HBsAg	0.31	0.47	0.49	0.37	0.42
HICV	0.58	0.69	0.72	0.44	0.32
Syphilis	5.51	8.33	8.83	8.13	8.35
<i>T. cruzi</i>	3.30	3.29	3.27	3.22	2.85
HTLV I-II	NA	0.29	0.29	0.29	0.23
Anti-HBc	NA	4.12	4.50	3.98	3.79
Percent units separate into components					
Packed red blood cells	55.00	63.98	58.84	63.47	74.36
Fresh frozen plasma	38.00	39.27	45.34	56.25	58.96
Frozen plasma	8.00	9.02	6.04	0.85	8.79
Cryoprecipitate	3.00	4.18	5.15	5.91	5.06
Platelets	24.00	25.86	36.66	38.53	42.72
Percent units discarded					
Whole blood	9.00	33.62	24.35	20.05	27.74
Packed red blood cells	5.00	10.41	17.46	19.05	17.13
Fresh frozen plasma	6.00	16.98	19.21	21.13	26.08
Frozen plasma	3.00	48.18	34.81	100	90.51
Cryoprecipitate	0.01	0.75	5.45	1.76	1.89
Platelets	10.00	36.80	36.23	39.36	36.35

2006: Units received to be screened and separated into components 51,152. Screened HBc 46,541, HTLV I-II 25,296.

2008: 2 failed extractions in voluntary donors, and 91 in family/replacement donors.

2009: Collected 57,738 units from replenishment donors, 11 failed.

Data submitted by:

2005: Angélica Samudio, Directora del Programa Nacional de Sangre.

2006: María Ofelia Lemir de Zelada, Coordinadora de la Red Nacional de Servicios de Sangre.

2007/2008/2009: Angélica Samudio, Directora / María Ofelia Lemir de Zelada, Coordinadora de la Red Nacional de Servicios de Sangre

	2005	2006	2007	2008	2009
PERU (PER)					
Number of units collected	179,721	174,196	178,060	187,437	221,266
Number of autologous donors	359	411	845	402	469
Percent type of allogeneic donors					
Voluntary, altruistic donors	5	7	8	5	5
Family/Replacement donors	95	93	92	95	95
Remunerated donors	0.17	0.26	0.19	0.01	0.04
Percent of units screened					
HIV	76.76	100	100	99.99	99.20
HBsAg	76.34	100	100	99.96	99.36
HCV	76.38	100	100	99.87	99.35
SYPHILIS	76.61	100	100	99.80	99.28
<i>T. cruzi</i>	76.46	100	100	99.91	99.23
HTLV I-II	0	100	100	99.83	98.64
Anti-HBc	0	100	100	NR	NR
Percent of units reactive/positive					
HIV	0.51	0.51	0.39	0.31	0.54
HBsAg	0.62	0.51	0.49	0.46	0.45
HICV	0.92	1.22	0.81	0.89	1.06
Syphilis	1.30	1.90	1.43	1.35	1.38
<i>T. cruzi</i>	0.57	1.02	0.77	0.54	0.73
HTLV I-II	NA	1.52	1.11	1.03	1.32
Anti-HBc	NA	6.05	4.61	4.70	NR
Percent units separate into components					
Packed red blood cells	NR	92.03	82.52	74.60	79.29
Fresh frozen plasma	NR	NR	0	56.26	65.47
Frozen plasma	NR	66.81	62.60	NR	0
Cryoprecipitate	NR	10.36	15.13	7.77	8.22
Platelets	NR	54.00	44.95	44.34	51.78
Percent units discarded					
Whole blood	NR	20.73	8.43	1.86	1.06
Packed red blood cells	9.00	4.16	6.08	5.55	5.43
Fresh frozen plasma	33.00	NA	0	37.65	36.70
Frozen plasma	0	38.47	37.08	NA	NA
Cryoprecipitate	7.00	12.75	17.31	8.71	17.89
Platelets	26.00	29.78	25.18	23.81	28.51

The number of accepted units is not always the same as the number of collected units, due to different reasons.

2008: Screened units: HIV 187.911, HBsAg 187.855, HCV 187.677, Syphilis 187.557, *T. cruzi* 187.761, HTLV I-II 187.601, HBc 187.440.

2009: Screened units: HIV 212,122; HBsAg 212,459; HCV 212,438; Syphilis 212,295; *T. cruzi* 212,173; HTLV I-II 210,914.

YEAR	COLLECTED	ACCEPTED	SCREENED	SEPARATED
2006	174,196	195,682	191,406	162,054
2007	178,060	189,012	184,464	164,693
2008	187,437	196,356	187,437	187,437
2009	221,266	NA	213,830	213,830

Data submitted by:

2005: Nelly Borja Santa Cruz, Coordinadora de PRONAHEBAS.

2006/2007/2008/2009: Norberto Quezada Velásquez, Coordinador de PRONAHEBAS.

	2005	2006	2007	2008	2009
DOMINICAN REPUBLIC (DOR)					
Number of units collected	62,120	64,219	46,590	81,478	85,169
Number of autologous donors	43	106	99	85	84
Percent type of allogeneic donors					
Voluntary, altruistic donors	20	23	17	24	24
Family/Replacement donors	76	72	79	72	72
Remunerated donors	4	5	4	4	4
Percent of units screened					
HIV	100	100	100	100	100
HBsAg	100	100	100	100	100
HCV	100	100	100	100	100
SYPHILIS	100	100	100	100	100
<i>T. cruzi</i>	NA	NA	NA	NA	NA
HTLV I-II	0	88.80	100	89.97	100
Anti-HBc	0	NR	0	NR	NR
Percent of units reactive/positive					
HIV	0.42	0.58	0.40	0.34	0.22
HBsAg	1.66	1.22	1.33	1.14	1.08
HCV	0.66	0.47	0.42	0.39	0.54
Syphilis	1.00	1.04	0.68	0.64	0.58
<i>T. cruzi</i>	NA	NA	NA	NA	NA
HTLV I-II	0	0.27	0.23	0.26	0.26
Anti-HBc	0	NA	NA	NA	NA
Percent units separate into components					
Packed red blood cells	78.00	32.19	49.00	37.44	38.90
Fresh frozen plasma	5.00	4.69	10.95	4.26	6.71
Frozen plasma	6.00	9.00	5.92	7.28	5.57
Cryoprecipitate	0.20	0.07	0.07	0.06	0.04
Platelets	5.00	6.10	8.77	4.79	5.66
Percent units discarded					
Whole blood	4.00	4.50	10.49	6.71	6.72
Packed red blood cells	0.60	1.46	1.66	1.74	1.42
Fresh frozen plasma	3.00	100	45.48	100	51.37
Frozen plasma	0.60	0	0	0	0
Cryoprecipitate	0	0	0	0	10.00
Platelets	0.30	6.77	5.12	8.17	7.16

It is indicated a greater number of screened units because there are establishments where the tests are repeated, this is due to the lack of confidence and security in test results given by other establishments.

2006: The number of screened units (HIV: 72,875 - HBsAg: 72,871 - HCV: 72,868 - Syphilis: 72,767 - HTLV I-II: 64,713).

2008: Units screened HTLV I-II 75,370.

YEAR	SCREENED
2006	72,500
2007	60,269
2008	83,776
2009	87,237

Data submitted by:

2005/2006/2007/2008/2009: Sócrates E. Sosa Peña, Director del Programa Nacional de Bancos de Sangre.

	2005	2006	2007	2008	2009
URUGUAY (URU)					
Number of units collected	95,686	NR	NR	NR	NR
Number of autologous donors	287				
Percent type of allogeneic donors					
Voluntary, altruistic donors	26				
Family/Replacement donors	74				
Remunerated donors	0				
Percent of units screened					
HIV	100				
HBsAg	100				
HCV	100				
SYPHILIS	100				
<i>T. cruzi</i>	100				
HTLV I-II	0				
Anti-HBc	0				
Percent of units reactive/positive					
HIV	0.05				
HBsAg	0.17				
HICV	0.30				
Syphilis	0.54				
<i>T. cruzi</i>	0.26				
HTLV I-II	NA				
Anti-HBc	NA				
Percent units separate into components					
Packed red blood cells	NR				
Fresh frozen plasma	NR				
Frozen plasma	NR				
Cryoprecipitate	NR				
Platelets	NR				
Percent units discarded					
Whole blood	NR				
Packed red blood cells	NA				
Fresh frozen plasma	NA				
Frozen plasma	NA				
Cryoprecipitate	NA				
Platelets	NA				

Data submitted by:

2005: Andrew Miller, Director del Servicio Nacional de Sangre.

	2005	2006	2007	2008	2009
VENEZUELA (VEN)					
Number of units collected	403,625	NR	NR	NR	NR
Number of autologous donors	0				
Percent type of allogeneic donors					
Voluntary, altruistic donors	7				
Family/Replacement donors	93				
Remunerated donors	0				
Percent of units screened					
HIV	100				
HBsAg	100				
HCV	100				
SYPHILIS	100				
<i>T. cruzi</i>	100				
HTLV I-II	0				
Anti-HBc	0				
Percent of units reactive/positive					
HIV	0.35				
HBsAg	1.25				
HICV	0.37				
Syphilis	1.13				
<i>T. cruzi</i>	NR				
HTLV I-II	0.61				
Anti-HBc	NR				
Percent units separate into components					
Packed red blood cells	81.00				
Fresh frozen plasma	69.00				
Frozen plasma	10.00				
Cryoprecipitate	8.00				
Platelets	36.00				
Percent units discarded					
Whole blood	NR				
Packed red blood cells	NR				
Fresh frozen plasma	NR				
Frozen plasma	NR				
Cryoprecipitate	NR				
Platelets	NR				

Data submitted by:

2005: Maryory Chávez, Coordinadora del Programa Nacional de Bancos de Sangre.



SUB-REGIONAL SUMMARIES

NUMBER OF UNITS COLLECTED			
YEAR	CARIBBEAN	LATIN AMERICA	CARIBBEAN + LATIN AMERICA
2005	83,223	7,976,737	8,059,960
2006	94,382	6,602,397	6,696,779
2007	99,901	5,585,996	5,685,897
2008	104,767	4,916,097	5,020,864
2009	118,278	4,937,275	5,055,553
TOTAL	500,551	30,018,502	30,519,053

AUTOLOGOUS DONORS						
YEAR	CARIBBEAN		LATIN AMERICA		CARIBBEAN + LATIN AMERICA	
	NUMBER	%	NUMBER	%	NUMBER	%
2005	265	0.32	18,823	0.24	19,088	0.24
2006	358	0.38	7,266	0.11	7,624	0.11
2007	196	0.20	49,951	0.89	50,147	0.88
2008	328	0.31	37,949	0.77	38,277	0.76
2009	369	0.31	29,144	0.59	29,513	0.58
TOTAL	1,516		143,133		144,649	

VOLUNTARY DONORS						
YEAR	CARIBBEAN		LATIN AMERICA		CARIBBEAN + LATIN AMERICA	
	NUMBER	%	NUMBER	%	NUMBER	%
2005	27,679	33.26	2,922,339	36.64	2,950,018	36.60
2006	28,416	30.11	2,826,123	42.80	2,854,539	42.63
2007	36,939	36.98	2,003,021	35.86	2,039,960	35.88
2008	40,309	38.47	1,554,051	31.61	1,594,360	31.75
2009	49,430	41.79	1,590,717	32.22	1,640,147	32.44
TOTAL	182,773	36.51	10,896,251	36.30	11,079,024	36.30

REPLACEMENT DONORS						
YEAR	CARIBBEAN		LATIN AMERICA		CARIBBEAN + LATIN AMERICA	
	NUMBER	%	NUMBER	%	NUMBER	%
2005	55,631	66.85	4,823,806	60.47	4,879,437	60.54
2006	65,608	69.51	3,629,956	54.98	3,695,564	55.18
2007	62,652	62.71	3,521,515	63.04	3,584,167	63.04
2008	63,421	60.54	3,310,767	67.35	3,374,188	67.20
2009	68,657	58.05	3,306,091	66.96	3,374,748	66.75
TOTAL	315,969	63.12	18,592,135	61.94	18,908,104	61.96

REMUNERATED DONORS						
YEAR	CARIBBEAN		LATIN AMERICA		CARIBBEAN + LATIN AMERICA	
	NUMBER	%	NUMBER	%	NUMBER	%
2005	0		15,507	0.19	15,507	0.19
2006	0		14,328	0.22	14,328	0.21
2007	0		11,509	0.21	11,509	0.20
2008	0		12,849	0.26	12,849	0.26
2009	0		11,323	0.23	11,323	0.22
TOTAL	0		65,516	0.22	65,516	0.21

CARIBBEAN COUNTRIES

NUMBER OF UNITS SCREENED					
YEAR	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
2005	83,223	83,223	78,685	83,214	72,856
2006	94,492	94,492	93,130	94,492	92,326
2007	102,763	102,466	98,267	100,373	97,880
2008	104,802	104,802	103,428	104,802	103,231
2009	118,970	118,970	117,501	118,970	111,899
TOTAL	504,250	503,953	491,011	501,851	478,192

PERCENTAGE OF UNITS SCREENED					
YEAR	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
2005	100	100	94.55	99.99	87.54
2006	100	100	98.56	100	97.71
2007	100	100	98.39	100	98.00
2008	100	100	98.69	100	98.50
2009	100	100	98.77	100	94.06

LATIN AMERICAN COUNTRIES

NUMBER OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	HBC
2005	7,888,862	7,882,788	7,886,426	7,817,817	6,460,612	5,006,388	4,682,151
2006	3,411,235	3,404,177	3,408,700	3,345,460	2,122,457	1,015,912	1,039,028
2007	4,743,680	4,685,637	4,693,344	4,637,681	3,933,859	1,470,470	1,387,350
2008	4,908,025	4,907,975	4,907,806	4,904,412	3,926,679	1,534,185	565,404
2009	4,890,993	4,891,330	4,891,309	4,891,166	4,113,999	2,291,381	628,714
TOTAL	25,842,795	25,771,907	25,787,585	25,596,536	20,557,606	11,318,336	8,302,647

PERCENTAGE OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	<i>T. cruzi</i>	HTLV I-II	HBC
2005	98.90	98.82	98.87	98.01	80.99	62.76	58.70
2006	97.52	97.32	97.45	95.64	60.68	29.04	29.70
2007	90.93	89.81	89.96	88.89	75.40	28.19	26.59
2008	100	100	100	99.93	80.01	31.26	11.52
2009	99.97	99.97	99.97	99.97	84.08	46.83	12.85

AVAILABILITY OF COMPONENTS

CARIBBEAN COUNTRIES

SEPARATED INTO COMPONENTS					
YEAR	RBC	FFP	FP	CRYO	PL
2005	48,071	21,793	3,260	1,472	15,926
2006	48,211	11,726	827	2,332	11,498
2007	49,968	19,007	837	1,874	11,275
2008	58,404	22,806	1,633	1,462	15,414
2009	72,020	33,194	1,764	3,259	21,153
TOTAL	276,674	108,526	8,321	10,399	75,266

BLOOD AND BLOOD COMPONENTS DISCARDED						
YEAR	WB	RBC	FFP	FP	CRYO	PL
2005	3,711	3,099	2,968	1,025	2	4,521
2006	2,855	890	899	14	6	3,019
2007	3,557	1,922	2,221	1,463	289	2,634
2008	6,269	1,237	3,324	86	195	2,738
2009	1,443	2,128	3,203	81	387	3,886
TOTAL	17,835	9,276	12,615	2,669	879	16,798

LATIN AMERICAN COUNTRIES

SEPARATED INTO COMPONENTS					
YEAR	CGR	PFC	PC	CRIO	PL
2005	2,677,656	1,653,171	261,893	326,264	1,053,957
2006	2,779,078	780,983	1,267,416	251,763	1,219,352
2007	4,269,555	2,307,850	1,248,959	445,565	1,829,439
2008	3,937,812	2,649,896	581,796	369,630	1,752,800
2009	4,108,133	3,085,772	613,435	289,244	2,036,579
TOTAL	17,772,234	10,477,672	3,973,499	1,682,466	7,892,127

Note: 2005 (CHI): in this table it is not included 157,324 units of plasma, because it was not indicated if they were FFP or FP.

BLOOD AND BLOOD COMPONENTS DISCARDED					
YEAR	WB	RBC	FFP	FP	CRYO
2005	99,508	178,779	582,106	51,157	39,300
2006	61,557	154,165	302,645	384,562	31,642
2007	96,835	283,953	829,314	391,929	42,814
2008	82,966	274,049	902,824	101,218	28,645
2009	104,352	423,580	989,520	434,174	24,449
TOTAL	445,218	1,314,526	3,606,409	1,363,040	166,850



ANNEX



PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION



48th DIRECTING COUNCIL

60th SESSION OF THE REGIONAL COMMITTEE

Washington, D.C., USA, 29 September-3 October 2008

Provisional Agenda Item 4.7

CD48/11 (Eng.)
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IMPROVING BLOOD AVAILABILITY AND TRANSFUSION SAFETY IN THE AMERICAS

Background

1. Since 1975 the World Health Assembly, the World Health Organization Executive Board and the Directing Council of the Pan American Health Organization have adopted several resolutions urging Member States to promote the establishment of coordinated blood services based on voluntary non-remunerated blood donation and on quality assurance, and to enact legislation and formulate national blood policies that facilitate the cost-effective organization and operation of blood services. The Governing Bodies have made it clear that it is necessary for the Member States to focus on blood transfusion safety as a means to improve patient care and to reduce the burden of HIV and other infections in the general population.
2. In 1999 the PAHO Directing Council adopted Resolution CD41.R15 and a Plan of Action that pursued the universal screening of blood units for HIV, hepatitis B (HBV) hepatitis C (HCV), and syphilis in the Region, and for *T. cruzi* in continental Latin America, universal participation of blood banks in programs of external evaluation of performance, 50% voluntary blood donation and the monitoring of high-risk groups for transfusion-transmitted infections. These expected results were not achieved by 2005.
3. In 2005, the PAHO Directing Council adopted Resolution CD46.R5, which urged the Member States to adopt the Regional Plan of Action for Transfusion Safety 2006-2010 and requested the Director to report periodically to the Governing Bodies on the progress of its implementation.

4. A report on the challenges to achieve blood sufficiency, availability and safety in the Americas was presented to the Executive Committee during its 142nd Session in June 2008. The Executive Committee recommended that the Directing Council adopt a resolution as a means to enhance regional efforts to achieve the objective of the Regional Plan of Action for Transfusion Safety 2006-2010.

5. The objective of the Regional Plan of Action is to contribute to the reduction of mortality and to the improvement of patient care by making safe blood available in a timely manner for all those patients who need it. The Plan involves four strategies: Planning and Management of the National Blood Network System, Promotion of Voluntary Blood Donation, Quality Assurance, and Appropriate Use of Blood and Blood Components, and identified nine indicators of progress based on regional data for the period 2000-2003.

Regional Situation in 2005

Screening Coverage

6. In 2003, 99.93% of the units collected by the Latin American and Caribbean countries that officially submitted reports to the Pan American Health Organization were screened for HIV, 99.86% were screened for HBV, 99.52% were screened for HCV, and 99.84% were screened for syphilis. The proportions of units that were screened for the four markers decreased to below 99% in 2004 and 2005 (Table 1). A negative trend was also observed for *T. cruzi*: the rates of screening were 87.17%, 86.20% and 87.06% in 2003, 2004 and 2005, respectively (Table 2).

7. In 2003 there were 19 (46%) countries that reported universal screening of all markers; there were 17 (41%) and 22 (54%) countries that screened all the collected units in 2004 and 2005, respectively (Table 3). Bolivia, Colombia, Honduras, Mexico, Nicaragua, Paraguay and Peru did not test all units for markers of viral infections in 2005. Nevertheless, two countries—Mexico and Peru—contributed 98.8% and 99.6% of the units that were not screened for HIV in 2004 and 2005, respectively. Anguilla, Belize, Dominica, and Saint Kitts and Nevis reported zero screening for HCV in 2005.

External Performance Evaluation

8. The Regional Programs for External Performance Evaluation continued with support from the Spanish Agency for International Cooperation, the UKNEQAS, the International Consortium for Blood Safety, the Hemocentro in São Paulo, Brazil, and the Sevilla Transfusion Center in Spain (Tables 4 and 6). The purpose of these regional programs is to support the national reference centers that are responsible for organizing the national programs with participation of all local services. Local participation,

nevertheless, is limited: in 2003 there were 1,330 (53.01%) national centers participating in national programs for external performance evaluation of serology for transfusion-transmitted infections. The proportion of participants decreased to 46.66% and 46.42% in 2004 and 2005 (Table 5).

9. Results from both the Regional and National Programs for External Performance Evaluation indicate that the quality of screening for serological markers of transfusion-transmitted infections has improved over the last four years. Some weaknesses remain in the immunohematological assays.

Blood Donors

10. The proportion of voluntary blood donors in Latin American and Caribbean countries was 36.06% in 2003; that same year, 0.34% of blood units were collected from paid donors (Table 7). The proportion of voluntary blood donors remained unchanged between 2003 and 2005, although there was a reduction to 33.05% in 2004. Recognized paid donors accounted for only 0.19% of all units collected in 2005 (Table 7), but the actual number of individuals who receive money in exchange for their blood is unknown. In 2003, there were seven (17%) countries that reported more than 50% voluntary blood donors; Aruba, Brazil, Cayman Islands, Colombia, Costa Rica, Cuba, Curacao, Saint Lucia, and Suriname did so in 2005.

11. The median prevalence rate of infectious markers among blood donors was always higher in countries with less than 50% voluntary donation than in those countries with more than 50% voluntary donors (Table 8). Nevertheless, it is noteworthy that, while the prevalence rates of markers remained unchanged in the former group of countries, the rates for countries with more than 50% voluntary donors tended to increase from 2002 to 2005 (Table 8).

12. The higher rate of prevalence of infectious markers among donors in some countries and the larger number of units that were not screened in 2004 and 2005 resulted in higher estimates of transfusion-transmitted infections. In 2002 and 2003 the estimated numbers of HIV infections associated with transfusions were six per year. The corresponding numbers for 2004 and 2005 were 57 and 55, respectively (Table 9). There were also significant increases in the estimated number of HBV and HCV transfusion-associated infections (Table 9).

Availability and Safety of Blood for Transfusion

13. The number of blood units collected in Latin America and the Caribbean increased from 7,325,093 in 2003 to 8,059,960 in 2005 (Table 10). The corresponding donation rates were 121.5/10,000 inhabitants in 2003 and 145.0/10,000 in 2005. There

was, however, a wide range among national donation rates in 2005: the rate for Haiti was 12.7 and that for Cuba was 439.6. In all, there were 15 (42%) countries with donation rates below 100/10,000 inhabitants and five (14%) with rates above 200 (Table 13).

14. The actual availability of blood at the national level is affected by the prevalence of infectious markers among blood donors –units from donors who are found to have an infectious marker must not be used for transfusions. In 2005, the cumulative proportion of units discarded because they were reactive/positive in the laboratory tests varied from 0.03% in Curacao to 11.00% in Bolivia, with a median of 3.11% (Table 13). There were at least 3,562 (4.28%) units discarded in the Caribbean countries and 235,134 in Latin America due to reactivity/positivity in laboratory tests, although some countries did not test any of the units collected for markers of HCV and HTLV/II and others reported the rate of donors that were confirmed as positive after being reactive in screening test. The 238,696 units discarded, at a direct cost of basic supplies of US\$ 56 per unit, represented a loss of \$13.4 million.

15. In the Caribbean and Latin American countries, rates of national availability of blood for transfusion are inversely related to national maternal mortality ratios and proportion of maternal deaths associated with hemorrhage.

16. In Latin America, transfusions are given primarily to treat medical and not surgical conditions; one of every seven patients who receive transfusions is under one year of age. Reduction of infant mortality, therefore, must consider availability of blood.

17. Treatment of road traffic injuries, which are predicted to increase by 67% by the year 2020, requires transfusions. Almost two thirds of blood used among patients of acute trauma is given during the first 24 hours of care. Timely availability of blood at the emergency services is a determinant factor of patient survival.

18. The risk of receiving a blood unit contaminated with HIV, HBV or HCV for lack of laboratory screening increased from 1 in 41,858 donations in 2003 to 1 in 11,784 donations in 2005 (Table 10). The risk was 8.79 times higher for HCV and 2.67 times higher for HBV than for HIV (Table 9). In continental Latin America, the risk of receiving a *T. cruzi* positive transfusion was 1 in 3,377 donations in 2005, which is similar to the risk observed in 2003 (1 in 3,330 donations) (Table 10).

Efficiency of National Blood Systems

19. In Latin America, where countries collected between 42,771 and 3,738,580 units of blood in 2005, there is a wide range in the mean number of units processed by the individual blood services in a year: from 761 units in Argentina to 10,320 in Cuba. The seven countries with lowest mean annual collection per service had an average of

11% voluntary blood donors, while the average voluntary donation was 51% in the six countries with the highest mean annual collection per service (Table 11). The mean donor deferral rate was lower, 7.9%, in the six countries with highest annual collection per service than in the other two groups of countries, 20.1% and 24.7%. Furthermore, the blood donation rate was 100.85 per 10,000 inhabitants in the group of countries with the less efficient blood collection systems, 115.90 in the intermediate group and 186.81 in the group of countries with blood services that collected a mean of 5,888 units per year (Table 11). There was no difference in the proportion of blood units discarded, which fluctuated around 10% in the three groups of countries (Table 11).

20. It is estimated that 603,950 units of red blood cells became outdated and were discarded in Latin America in 2005, for an estimated loss of \$33.8 million.

21. In the Caribbean, where countries collected between 114 and 22,155 units of blood in 2005, donor deferral varied between 0% and 53%, with a median of 20%. The estimated number of deferred donors was 29,152 in 2005. Seven countries had deferral rates below 10%; the rate was between 20% and 53% in the other eight countries (Table 12). The median blood donation rate in the first group of countries was 167.6 (range 108.4 – 368.6) per 10,000 inhabitants, and 87.7 (range 12.7 – 118.9) in the second group. The median proportion of units that were reactive for any of the infectious markers was 0.90% (range 0.03% – 6.85%) in the first group and 4.09% (range 0.40% – 10.25%) in the second. Aruba, Cayman Islands, Curacao, and Suriname, the four countries with 100% voluntary blood donors, are in the first group.

22. It is estimated that 6,425 units of red blood cells became outdated and were discarded in the Caribbean countries in 2005, for a loss of \$360,000. The median proportion of red blood cells discarded was 5.9% (range 2.0% – 15.7%) among countries with lower blood donor deferral rates, and 10.8% (range 1.8% – 14.7%) among countries with higher proportion of deferred donors (Table 12).

Progress since 2005

23. The Regional Plan of Action 2006-2010 has nine progress indicators:

- In order to strengthen the organizational and functional capacities of the national blood systems, the legal framework is to be revised. Argentina, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Guyana, Haiti and Jamaica have either started or completed the process. Only Paraguay has enacted a revised blood law.
- To allow the development of national plans, the allocation of resources and appropriate evaluation of the national blood systems, the Regional Plan of Action

- included structured surveys to estimate the geographic and temporary blood requirements and blood components in the country. Aruba, Cuba, Curacao, Haiti, Paraguay, and Suriname have those estimates. Argentina, Bahamas, British Virgin Islands, Colombia, Costa Rica, Grenada, Guatemala, El Salvador, Saint Vincent and the Grenadines have either gross or partial estimates that do not take geographic and time variables into consideration.
- Considering that sufficiency and safety of blood can only be achieved through voluntary blood donation, the countries adopted the goal of collecting more than 50% of their blood units from voluntary blood donors. Aruba, Brazil, Cayman Islands, Colombia, Costa Rica, Cuba, Curacao, Saint Lucia, and Suriname have achieved this goal.
 - Argentina, Brazil, Colombia, Costa Rica, Cuba, Curacao, Haiti, Paraguay and Suriname have initiated the implementation of national quality assurance programs.
 - To facilitate better patient care and planning of the national bloods systems it is necessary to develop national guidelines for the clinical use of blood. Argentina, Aruba, Belize, Bolivia, Brazil, Costa Rica, Cuba, Curacao, Ecuador, El Salvador, Guyana, Haiti, Jamaica, Mexico, Nicaragua, and Paraguay have prepared their guidelines.
 - Belize, Costa Rica, Cuba, Guyana, Nicaragua and Suriname have established national blood transfusion committees.
 - Brazil, Colombia, Cuba and Nicaragua have implemented hemovigilance systems.
 - Colombia, Cuba, Curacao and Nicaragua have prepared components in at least 95% of the blood units collected.
 - Nine Latin American countries—Argentina, Brazil, Colombia, Cuba, El Salvador, Mexico, Nicaragua, Panama and Paraguay—have designed a regionalized national system for blood collection and processing.

Lessons Learned, Enablers and Obstacles for Progress, and Recommendations

24. Progress was made in blood safety in the Region of the Americas from 2000 to 2003 (Tables 1, 2, 3, 7, 9, 10). Unfortunately, despite the fact that some countries initiated or achieved universal screening of blood for infectious markers, the overall risk of receiving a virus-contaminated transfusion—estimated by using the number of

unscreened blood units and the prevalence of infectious markers among blood donors—increased almost fourfold from 2003 to 2005 (Table 10).

25. Similarly, the proportion of voluntary blood donors in the Region increased from 15% in 2000 to 36% in 2003, but remained unchanged in the last two years (Table 7). Despite the increase in the number of voluntary blood donors, the proportion of those who are reactive/positive for infectious markers gradually increased from 2003 to 2005 (Table 8). This observation is associated with first-time or sporadic voluntary blood donors and underscores the need to pursue repeated and regular voluntary blood donation.

26. The number of blood units to be collected annually determines resources necessary to recruit blood donors, to procure supplies, and to collect, process, store and distribute blood components. It is difficult to appropriately plan and allocate national resources to blood systems when the need for blood and blood components in the country are unknown.

27. Central national health authorities have difficulties in organizing the different sectors (provincial or state authorities, social security, private and non-profit organizations) to implement national blood collection, processing and transfusion systems because the local factors that determine availability, opportunity, safety and efficacy of blood for transfusions are not taken into consideration for planning. In countries where structured efforts are being made, the political will and the technical skills of those at the normative level within the ministry of health determine the level of success. The permanent technical involvement of the PAHO Country Office is an important factor.

28. Regional work plans approved by the Directing Council in 1999 and in 2005 included the achievement of the goal of 50% voluntary blood donation. This goal was agreed upon by the national blood programs in order to induce gradual changes that would be acceptable to health workers. In retrospect, aiming for 50% voluntary blood donation results in policy, ethical and operational challenges since half of the recipient patients have to provide replacement donors; voluntary and replacement donors are handled differently by the blood services, and the access to blood in healthcare facilities is hindered by administrative processes of cost recovery. Pursuing the goal of 100% voluntary blood donation in the short term will result in the multidisciplinary operational approaches that were identified as vital in 2005.

29. Blood services need to work in three different spheres: (a) the community, to educate, recruit, select and maintain a healthy and committed donor pool; (b) within the blood processing center, as a factory of essential medicaments; and (c) the clinical services where patients are treated. Staffs with appropriate competencies, adequate

infrastructure and sufficient resources are necessary to educate and service voluntary blood donors, to manage blood processing facilities and to administer, monitor and evaluate blood transfusions.

30. The current organizational system results in a loss of financial resources, limits the efficacy of blood transfusions and has negative effects on morbidity and mortality.

31. The concepts of Resolution CD46.R5 still apply to the Region of the Americas but action is required by national authorities to implement the strategies of the Regional Plan of Action for Transfusion Safety 2006-2010, approved by the 46th Directing Council. It is recommended that the Ministries of Health support their national blood systems using the Health Agenda for the Americas 2008-2017 as the general framework.

32. Blood for transfusions should be considered an essential medicament, a national resource and a public good.

33. It is recommended that the Ministries of Health make a specific entity within their normative level responsible for the planning, oversight and overall efficient operation of the national blood system. The normative level must be clearly separated from the operational one.

34. The normative level should be staffed by personnel from multiple disciplines with competences in planning, management and public health. The National Blood Program should work closely with other groups within the Ministry of Health –Health Promotion, Maternal and Child Health, Immunization, Prevention and Control of Communicable Diseases, Cancer Prevention and Control, Adolescent Health, Pharmacovigilance, Patient Safety—and with other sectors—Ministry of Education, Ministry of Labor, Social Security.

35. The operational level should consider: (1) procurement, collection, processing and distribution of blood components, and (2) transfusion services. The processing centers should not be part of the individual hospitals. Consolidated processing facilities should be responsible for distributing sufficient blood components to a determined group of hospitals. In the smaller Caribbean countries the hospital laboratories may be used to process blood units, but the responsibility for donor education, selection and recruitment, and blood collection should be independent from the hospital administration.

36. Efforts should be made to estimate the annual national need for blood and blood components, by geographic area and by month. The national guides for clinical use of blood and the potential number of cases of the clinical conditions that require transfusions, including voluntary and involuntary injuries, should be used as the basis for the estimate. In order to cover unforeseen emergencies—natural or man-made disasters,

infectious outbreaks, emergency vaccination campaigns—it is recommended that the national blood systems have an additional stock equivalent to 4%, or two weeks, of the annual need.

37. The annual estimates of blood needs should take into consideration the expected increases in (a) numbers of the general and elderly population; (b) social inclusion of currently excluded populations; (c) road traffic injuries; and (d) local adoption of medical technologies such as organ transplants. Sufficient financial resources to collect and distribute enough blood components should be made available to the corresponding responsible unit within the Ministry of Health. National financial resources that are currently being wasted should be invested towards this effort.

38. The number of repeat donors needed in each country should be estimated at least as 50% of the national need of red blood cells. A national program should be put in place to educate and recruit healthy individuals as regular blood donors and to have them donate at least twice a year.

39. Ministries of Health should work to terminate replacement and paid donation before the end of 2010, with the goal of 100% voluntary, altruistic, non-remunerated donors, using the information obtained in the socio-anthropological surveys conducted in at least 18 of the Caribbean and Latin American countries.

40. A social network of volunteers should be established to help educate the community, to promote voluntary blood donation, and to service the donor. Youth programs, such as Pledge 25, should be given special attention.

41. National public information strategies should be developed to inform the community on the national needs for blood and blood components, the cost involved in procurement and processing of blood units, the daily level of coverage of the estimated need of blood, and the impact of transfusions on the wellbeing of the patients.

42. Hospital transfusion services should be staffed by medical specialists. Clinical laboratories in hospitals should actively participate in the evaluation of patients both before and after transfusions. Hospital transfusion committees should assess the clinical management of patients and the pertinence of hospital transfusion guidelines.

43. PAHO country offices should have staff specially dedicated to coordinating the technical cooperation given by PAHO on issues pertaining to blood transfusion safety. A coordinated approach is necessary at all levels of the Organization.

44. Local and national data on blood availability and safety and on blood transfusion efficiency should be analyzed periodically by the national health authorities and other stakeholders, including patient groups, blood donors and community volunteers.

Action by the Directing Council

45. The Directing Council, after reviewing the information provided, is invited to consider adoption of the resolution recommended by the 142nd Session of the Executive Committee, in Resolution CE142.R5 (see Annex C.)

Annexes

Table 1: Number and percent of blood units screened in the Region between 2000-2005

	2000	2003	2004	2005
Units collected (N)	6 409 596	7 325 093	7 559 080	8 059 960
Units screened for HIV	6 387 790 (99.66)	7 320 292 (99.93)	7 466 769 (98.77)	7 972 085 (98.91)
Units screened for HBV	6 387 247 (99.65)	7 315 191 (99.86)	7 460 221 (98.69)	7 966 011 (98.83)
Units screened for HCV	6 332 331 (98.79)	7 290 038 (99.52)	7 448 173 (98.53)	7 963 998 (98.81)
Units screened for syphilis	6 381 752 (99.57)	7 313 335 (99.84)	7 383 987 (97.68)	7 900 040 (98.02)

Table 2: Number and percent of units screened for *T. cruzi* in Latin America between 2000-2005

	2000	2003	2004	2005
Units to be screened (N)	5 700 259	7 097 339	6 888 289	7 419 274
Units screened	4 502 114 (78.98)	6 251 932 (88.09)	5 938 183 (86.20)	6 459 612 (87.06)

Table 3: Number and percent of countries reporting universal screening between 2000-2005

	2000	2003	2004	2005
HIV	31/37 (83.8)	33/38 (89.2)	29/37 (78.4)	32/36 (88.9)
HBV	30/37 (81.1)	33/38 (89.2)	29/37 (78.4)	32/36 (88.9)
HCV	19/37 (51.3)	23/38 (62.5)	20/37 (54.1)	24/36 (66.7)
Syphilis	32/37 (86.5)	33/38 (89.2)	30/37 (81.1)	31/36 (86.1)
<i>T. cruzi</i>	6/17 (35.3)	7/17 (41.2)	8/17 (47.1)	12/17 (70.6)

Table 4: Participation in Regional PEED for TTI between 2000-2005

	2000	2003	2004	2005
Number of Latin American countries	18	18	18	18
Number of Caribbean countries	0	18	20	20
Number of Latin American centers	20	20	20	21
Number of Caribbean centers	0	22	21	24

Table 5: Participation in national PEED for TTI between 2002-2005

	2000	2003	2004	2005
Number of centers in Latin America	4 738	2 509	3 071	2 546
Number of participating centers	1 129	1 330	1 433	1 182
% participation	23.82	53.01	46.66	46.42
Number of countries with national PEED	11	16	16	17

Table 6: Number of participants in regional PEED for immunohematology in Latin America and the Caribbean between 2000-2005

	2000	2003	2004	2005
Latin America	24	30	29	48
Caribbean	0	24	24	24

Table 7: Number and percent of voluntary and paid donors between 2000-2005

	2000	2003	2004	2005
Units collected (N)	6 409 596	7 325 093	7 559 080	8 059 960
Voluntary donors (N) (%)	989 885 (15.44)	2 641 739 (36.06)	2 498 174 (33.05)	2 950 018 (36.60)
Paid donors (N) (%)	31 725 (0.50)	24 925 (0.34)	25 398 (0.34)	15 507 (0.19)

Table 8: Median prevalence (percent) of markers for TTI according to proportion of voluntary blood donors between 2000-2005

Marker	Countries with	2000	2003	2004	2005
HIV	< 50% VBD	0.21	0.28	0.23	0.26
	> 50% VBD	0.13	0.01	0.01	0.02
HBsAg	< 50% VBD	0.60	0.60	0.62	0.60
	> 50% VBD	0.37	0.18	0.19	0.26
HCV	< 50% VBD	0.56	0.56	0.52	0.58
	> 50% VBD	0.10	0.06	0.08	0.11
Syphilis	< 50% VBD	0.97	0.92	0.97	1.00
	> 50% VBD	0.55	0.13	0.14	0.18

Table 9: Estimated indicators of blood safety between 2000-2005

Variable	2000	2003	2004	2005
HIV infections transfused (N)	30	6	57	55
Risk of HIV per 100,000 donations	0.47	0.08	0.75	0.68
HBV infections transfused (N)	1 357	22	176	147
Risk of HBV per 100,000 donations	21.18	0.30	2.32	1.82
HCV infections transfused (N)	211	147	537	482
Risk of HCV per 100,000 donations	3.29	2.00	7.10	5.98
<i>T. cruzi</i> infections transfused (N)	7 483	2 193	2 374	2 362
Risk of <i>T. cruzi</i> per 100,000 donations	131.23	28.22	34.46	31.88

Table 10: Availability and safety of blood between 2000-2005

	2000	2003	2004	2005
Number of units collected	6 409 596	7 325 093	7 559 080	8 059 960
Donation rate per 10,000	126.8	138.6	139.4	145.0
Risk of viral transfusion	1: 4 011	1: 41 858	1: 9 817	1: 11 784
Risk of <i>T. cruzi</i> transfusion	1: 762	1: 3 340	1: 3 150	1: 3 377

Table 11: Efficiency of national blood systems in Latin America, 2005

Variable	Group1	Group 2	Group 3
	Argentina Dominican Republic Uruguay Venezuela Guatemala Panama Peru	Bolivia Nicaragua Chile Honduras Mexico El Salvador	Costa Rica Paraguay Colombia Ecuador Brazil Cuba
Mean number of units collected per bank	1,404	2,334	5.888
Mean GNP per capita (US \$)	3,664	3,123	2,628
Population x 1,000	121,613	152,079	266,987
Units collected	1.226,526	1.762,623	4.987,588
Donation rate per 10,000	100.85	115.90	186.81
Mean voluntary donors (%)	11.0	18.5	51.3
Mean donor deferral (%)	20.1	24.7	7.9
Mean units discarded (%)	10.7	9.9	10.3

Table 12: Efficiency of national blood systems in the Caribbean, 2005

Group 1	Donor deferral rate (%)	Voluntary donors (%)	Prevalence TTI (%)	Discard rate (%)
St Kitts and Nevis	0	3	6.85	NR
Curacao	0.3	100	0.03	2.0
Aruba	2	100	0.90	2.0
Suriname	4.6	100	0.14	5.9
Bahamas	5	15	2.23	15.70
Dominica	9	5	5.41	7.1
Cayman Islands	10	100	0.11	20.0
Group 2				
St. Vincent and the Grenadines	20	13	6.68	12.7
Guyana	24	22	4.09	6.5
Grenada	26.7	30	4.20	10.8
Haiti	27	15	10.25	7.2
Belize	39.0	9	1.89	11.5
St. Lucia	39.1	82	1.55	14.7
Trinidad and Tobago	44	13	4.69	NR
Anguilla	53	10	0.40	1.8

Table 13: Blood donation rate per 10,000 inhabitants and proportion of units reactive/positive for infectious markers in 2005

Country	Donation rate	% TTI markers	Country	Donation rate	% TTI markers
Anguilla	87.7	0.40	Argentina	94.2	6.49
Aruba	367.8	0.90	Bolivia	50.9	11.00
Bahamas	159.5	2.23	Brazil	200.5	2.93
Belize	115.1	1.89	Chile	109.2	1.54*
British Virgin Islands	194.3	0.22	Colombia	115.7	3.11
			Costa Rica	125.1	0.49*
Cayman Islands	196.4	0.11	Cuba	439.6	1.65*
Curacao	368.6	0.03	Ecuador	94.3	0.39*
Dominica	109.7	5.41	El Salvador	116.5	3.98
Grenada	92.8	4.20	Guatemala	61.3	6.39
Guyana	70.1	4.09	Honduras	72.6	3.98
Haiti	12.7	10.25	Mexico	126.2	1.89
Jamaica	83.6	5.40	Nicaragua	98.6	3.82
St Kitts and Nevis	108.4	6.85	Panama	132.3	1.28
St Lucia	118.9	1.55	Paraguay	76.4	9.98
St. Vincent and the Grenadines	69.0	6.68	Peru	64.2	3.92
			Dominican Republic	69.8	3.74
Suriname	167.6	0.14	Uruguay	276.3	1.32
Trinidad and Tobago	104.4	4.69	Venezuela	150.8	3.71

* Reported tests confirmed as positive. The rest of the countries reported units that were reactive in screening tests.



PAN AMERICAN HEALTH ORGANIZATION
Pan American Sanitary Bureau, Regional Office of the
WORLD HEALTH ORGANIZATION

CD48/11 (Eng.)
Annex B

ANALYTICAL FORM TO LINK AGENDA ITEM WITH ORGANIZATIONAL AREAS

1. Agenda Item: 4.7

2. Agenda Title: Improving Blood Availability and Transfusion Safety in the Americas

3. Responsible Unit: THR

4. Preparing Officer: José Ramiro Cruz

5. List of collaborating centers and national institutions linked to this Agenda item: Hemocentro/Fundacion ProSangue, Sao Paulo, Brazil; UK National External Quality Assessment Scheme; International Consortium for Blood Safety, New York; Centro de Transfusion de Sevilla, Spain; CAREC, Trinidad and Tobago; International Federation of Red Cross and Red Crescent Societies, Geneva; International Society for Blood Transfusion Regional Delegation, Caracas, Venezuela; International Blood Transfusion, London, UK; Grupo Cooperativo Ibero Americano de Medicina Transfusional; EUROsociAL, Madrid, Spain; Rotary Clubs in USA, Mexico, El Salvador, Colombia, Ecuador, Chile, Peru, Uruguay, Paraguay, St. Lucia, Cayman Islands; Health Canada, Canadian Blood Services, Hema-Quebec, Canada; USA Center for Disease Control and Prevention, Atlanta, USA; Centro Nacional de Transfusión Sanguínea, Mexico; Programa Nacional de Sangre. Instituto Guatemalteco de Seguridad Social, Guatemala; Laboratorio Central Max Bloch, Cruz Roja Salvadoreña, El Salvador; Programa Nacional de Sangre, Cruz Roja Hondureña, Honduras; Centro Nacional de Diagnóstico y Referencia, Cruz Roja Nicaraguense, Nicaragua; Dirección de Laboratorios, Caja Costarricense del Seguro Social, Costa Rica; Hospital Santo Tomás, Panama; Ministerio de la Protección Social, Instituto Nacional de Salud, Instituto Nacional de Vigilancia de Medicamentos y Alimentos, Cruz Roja Colombiana, Colombia; Programa Nacional de Bancos de Sangre, Venezuela; Ministerio de Salud, Cruz Roja Ecuatoriana, Ecuador; Programa Nacional de Sangre, Bolivia; Programa Nacional de Sangre, Cruz Roja Chilena, Chile; Programa Nacional de Hemoterapia y Bancos de Sangre, Instituto Nacional de Salud, Peru; Programa Nacional de Sangre, Paraguay; Plan Nacional de Sangre, Argentina; Centro Nacional de Transfusión, Uruguay; Coordinacion da Politica Nacional de Sangre e Hemoderivados, Agencia de Vigilancia Sanitaria, HEMOBRAS, Brazil; Instituto Nacional de Hematología e Inmunología, Cuba; Secretaría Estatal de Salud Pública y Asistencia Social, Cruz Roja Dominicana, Dominican Republic; National Blood Safety Program, Croix Rouge Haitienne, Haiti; Princess Alexandra Hospital, Anguilla; Stichting Bloedbank, Aruba; Princess Margaret Hospital, Bahamas; Belize National Blood Transfusion Service, Belize; Peebles Hospital, BVI; Cayman Islands Hospital, CI; Red Cross Blood Bank Foundation, Curacao; Princess Margaret Hospital, Dominica; Pathology Laboratory, Grenada; National Blood Transfusion Service, Guyana; National Blood Transfusion Service, Jamaica; Joseph N. France General Hospital, St. Kitts; St. Lucia Blood Bank Service; Milton Cato Memorial Hospital, St. Vincent; National Blood Bank, Suriname; National Blood Transfusion Service, Trinidad and Tobago.

6. Link between Agenda item and Health Agenda of the Americas:

PRINCIPLES

Human Rights, universality, access and inclusion: The Plan of Action for Transfusion Safety 2006-2010 seeks to promote sufficiency, availability, access and opportunity of blood for transfusions in the Region of the Americas, considering the human right to the best attainable level of health.

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

Equity in health: The Plan of Action seeks to eliminate intra and intercountry differences in the availability,

access, opportunity, and quality of blood for transfusions with a public health approach.

Social participation: The document CD48/11 clearly states that a social network is indispensable to attain 100% voluntary blood donation and sufficiency of blood.

AREAS OF ACTION

Strengthening the health authority: The Plan of Action 2006-2010 comprises four strategies. The first, Planning and Management of the National Blood Network System, requires a strong leadership of the Ministry of Health. Paragraphs 27, 29, 30, 31, 33, 34, 39 of document CD48/11 refer to steering role of the Ministries of Health.

Tackling health determinants; Reducing the risk and burden of disease: Safety of blood depends primarily on the quality of the blood donor. National blood requirements depend on the overall health status of the population. Health promotion, health education and interventions to protect the population will result in safer blood donors and reduced needs for blood components. Safe blood contributes to the reduction of HIV, HBV, HCV, T. cruzi and other infections. Paragraphs 6-9, 11-18, 24, 29, 34, and 37, and tables 1-5 refer to these issues.

Increasing social protection and access to quality health services; Diminishing health inequities among countries and inequities within them: Blood availability and access vary within and among countries. The overall objective of the Plan of Action 2006-2010 is to promote equitable access considering increased social inclusion. Tables 10-13 and paragraphs 13, 14, 15, 35, 36, 37, and 41 address social protection and access to blood.

Strengthening health security: Blood for transfusions is an essential component for managing emergencies. Paragraph 36 of the document specifically refers to unforeseen emergencies.

Furthermore, document CE48/11 Reads, in paragraph 31:

“31. The concepts of Resolution CD46.R5 still apply to the Region of the Americas but action is required by national authorities to implement the strategies of the Regional Plan of Action for Transfusion Safety 2006-2010, approved by the 46th Directing Council. It is recommended that the Ministries of Health support their national blood systems using the Health Agenda for the Americas 2008-2017 as the general framework.”

7. Link between Agenda item and Strategic Plan 2008-2012:

The Regional Plan of Action for Transfusion Safety addresses issues related to

- SO1. To reduce the health, social and economic burden of communicable diseases –T.cruzi, HBV, HCV, HTLVII by improving donor selection and laboratory screening.
- SO2. To combat HIV/AIDS, tuberculosis and malaria by improving donor selection and laboratory screening.
- SO3. To prevent and reduce disease, disability and premature death from chronic noncommunicable conditions, violence and injuries by providing enough, safe blood in a timely manner.
- SO4. To reduce mortality and improve health during key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence, and improve sexual and reproductive health and promote healthy aging for all individuals by promoting voluntary blood donation and by making safe blood available in a timely manner.
- SO5. To reduce the health consequences of emergencies, disasters, crises and conflicts, and minimize their social and economic impact by providing blood for transfusion when necessary.

- SO6. To promote health and development, and prevent or reduce risk factors such as use of tobacco, alcohol, drugs and other psychoactive substances, unhealthy diets, physical inactivity and unsafe sex, which affect health conditions by promoting the education of voluntary blood donors
- SO7. To address the underlying social and economic determinants of health through policies and programs that enhance health equity and integrate pro-poor, gender-responsive, and human rights-based approaches by ensuring equitable access to safe blood
- SO10. To improve the organization, management and delivery of health services by improving the planning and management of the national blood network system.
- SO11. To strengthen leadership, governance and the evidence base of health systems by improving the planning and management of the national blood network system.
- SO12. To ensure improved access, quality and use of medical products and technologies

8. Best practices in this area and examples from other countries within AMRO:

Canada: Organization of blood services. Aruba, Cayman Islands, Cuba, Curacao, Suriname in voluntary blood donation.

9. Financial implications of Agenda item:

Better planning and management at the country level will result in more efficient use of national resources. Around US\$ 48 million were wasted in 2005 by the Caribbean and Latin American countries. Paragraphs 14, 20 and 22 refer to financial resources.

Regular and extrabudgetary funding at the regional should not be further reduced in the coming years. PAHO HQ, PWR's and Subregional initiatives should work to implement coordinated approaches of technical cooperation. Paragraph 43 of the document addresses this issue.



PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION



142nd SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., USA, 23-27 June 2008

CD48/11 (Eng.)
Annex C

ORIGINAL: ENGLISH

RESOLUTION

CE142.R5

BLOOD TRANSFUSION SAFETY: PROGRESS REPORT

THE 142nd SESSION OF THE EXECUTIVE COMMITTEE,

Having considered the progress report presented by the Director on Blood Transfusion Safety (Document CE142/20), which summarizes the difficulties observed in the implementation of the Regional Plan of Action for Transfusion Safety 2006-2010;

Concerned about the insufficiency and the poor quality of blood available for transfusions in the majority of countries of the Region; and

Taking into account the Health Agenda for the Americas 2008-2017,

RESOLVES:

To recommend that the Directing Council adopt a resolution along the following lines:

THE 48th DIRECTING COUNCIL,

Having considered the progress report presented by the Director on Blood Transfusion Safety (Document CD48/11), which summarizes the difficulties observed in the implementation of the Regional Plan of Action for Transfusion Safety 2006-2010;

Aware of the central role that transfusions play in the appropriate medical care of patients and in the reduction of mortality among mothers, infants, victims of traffic accidents and other traumas, patients suffering from cancer or clotting disorders, and transplant patients;

Concerned that the current levels of availability and safety of blood for transfusion in the Region are unsatisfactory;

Recognizing that the current national organizational systems limit the efficacy of blood transfusions, have negative effects on morbidity and mortality, and result in major financial losses;

Considering that the concepts of Resolutions CD41.R15 (1999) and CD46.R5 (2005) still apply to the Region of the Americas, and that action is required by national authorities to implement the strategies of the Regional Plan of Action 2006-2010, approved by the 46th Directing Council; and

Recognizing that modifications in current national approaches are needed in order to achieve the regional goals set for transfusion safety by 2010,

RESOLVES:

1. To urge Member States to:
 - (a) proactively implement the Regional Plan of Action for Transfusion Safety 2006-2010 by:
 - i. defining a specific entity within the normative level of their ministries of health as responsible for the planning, oversight and overall efficient operation of the national blood system;
 - ii. estimating the annual national need for blood components, taking into consideration unforeseen emergencies, expected increases of the general and elderly population, social inclusion of currently excluded populations, road traffic injuries, and local adoption of medical technologies, such as

transplants and cancer treatment, and the financial resources necessary to cover those needs;

- iii. establishing a network of volunteers to educate the community and to promote voluntary blood donation and service blood donors, with special attention to youth programs;
 - (b) terminate replacement and paid blood donation before the end of 2010, with a goal of 100% voluntary, altruistic, non-remunerated blood donation, using the information obtained from socio-anthropological surveys conducted in the countries, given that blood collection should not be solely the responsibility of hospital medical teams;
 - (c) share best practices in the recruitment and retention of voluntary blood donors.
2. To request the Director to:
- (a) cooperate with the Member States in the implementation of the Regional Plan of Action for Transfusion Safety 2006-2010 using a multidisciplinary and coordinated approach for health promotion, public education, human and patient rights, quality assurance and financial efficiency;
 - (b) work with Member States and international organizations to assess the implementation of the Regional Plan of Action 2006-2010 and to identify country-specific interventions needed to assure sufficiency and acceptable quality and safety of blood for transfusions at the national level;
 - (c) prepare annual reports on the situation of blood transfusion safety in the Region.

(Seventh meeting, 26 June 2008)



PAN AMERICAN HEALTH ORGANIZATION
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48th DIRECTING COUNCIL

60th SESSION OF THE REGIONAL COMMITTEE

Washington, D.C., USA, 29 September-3 October 2008

CD48/11 (Eng.)
Annex D

Report on the Financial and Administrative Implications for the Secretariat of the Resolutions Proposed for Adoption by the Directing Council

1. Resolution: Blood Transfusion Safety: Progress Report.	
2. Linkage to program budget	
Area of work 21; 01	Expected result 3; 5
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): \$1,780,000	
b) Estimated cost for the biennium 2008-2009 (estimated to the nearest US\$ 10,000; including staff and activities): \$1,420,000	
c) Of the estimated cost noted in (b) what can be subsumed under existing programmed activities? 100%	
4. Administrative implications	
a) Implementation locales (indicate the levels of the Organization at which the work will be undertaken and identify the specific regions, where relevant): HQ, Subregional Units, PWR's, and Collaborating Centers.	
b) Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile): Specific focal points for blood transfusion safety are necessary in each Subregional Unit and PWR.	
c) Timeframes (indicate broad time frames for the implementation and evaluation): The implementation of the activities started in 2005 and must continue to 2010. Regional and national progress should be assessed yearly.	



PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION



48th DIRECTING COUNCIL

60th SESSION OF THE REGIONAL COMMITTEE

Washington, D.C., USA, 29 September-3 October 2008

CD48.R7 (Eng.)
ORIGINAL: ENGLISH

RESOLUTION

CD48.R7

IMPROVING BLOOD AVAILABILITY AND TRANSFUSION SAFETY IN THE AMERICAS

THE 48th DIRECTING COUNCIL,

Having considered the report of the Director on blood transfusion safety (Document CD48/11), which summarizes the difficulties observed in the implementation of the Regional Plan of Action for Transfusion Safety 2006-2010;

Aware of the central role that transfusions play in the appropriate medical care of patients and in the reduction of mortality among mothers, infants, victims of traffic accidents and other traumas, patients suffering from cancer or clotting disorders, and transplant patients;

Concerned that the current levels of availability and safety of blood for transfusion in the Region are unsatisfactory;

Recognizing that the current national organizational systems limit the efficacy of blood transfusions, have negative effects on morbidity and mortality, and result in major financial losses;

Considering that the concepts of Resolutions CD41.R15 (1999) and CD46.R5 (2005) still apply to the Region of the Americas, and that action is required by national authorities to implement the strategies of the Regional Plan of Action 2006-2010, approved by the 46th Directing Council; and

Recognizing that modifications in current national approaches are needed in order to achieve the regional goals set for transfusion safety by 2010,

RESOLVES:

1. To urge Member States to:
 - (a) proactively implement the Regional Plan of Action for Transfusion Safety 2006-2010 by:
 - i. defining a specific entity within the normative level of their ministries of health as responsible for the planning, oversight and overall efficient operation of the national blood system;
 - ii. estimating the annual national need for blood components, taking into consideration unforeseen emergencies, expected increases of the general and elderly population, social inclusion of currently excluded populations, road traffic injuries, and local adoption of medical technologies, such as transplants and cancer treatment, and the financial resources necessary to cover those needs;
 - iii. establishing a network of volunteers to educate the community and to promote voluntary blood donation and service blood donors, with special attention to youth programs;
 - (b) except in limited circumstances of emergency medical necessity, terminate replacement and paid blood donation by the end of 2010, with a goal of 100% voluntary, altruistic, non-remunerated blood donation, using the information obtained from socio-anthropological surveys conducted in the countries, given that blood collection should not be solely the responsibility of hospital medical teams;
 - (c) terminate mandatory patient replacement of transfused blood by the end of 2010;
 - (d) share best practices in the recruitment and retention of voluntary blood donors.
2. To request the Director to:
 - (a) cooperate with the Member States in the implementation of the Regional Plan of Action for Transfusion Safety 2006-2010 using a multidisciplinary and coordinated approach for health promotion, public education, human and patient rights, quality assurance and financial efficiency;

- (b) work with Member States and international organizations to assess the implementation of the Regional Plan of Action 2006-2010 and to identify country-specific interventions needed to assure sufficiency and acceptable quality and safety of blood for transfusions at the national level;
- (c) prepare annual reports on the situation of blood transfusion safety in the Region.

(Seventh meeting, 2 October 2008)



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