PREVENTION OF HEPATITIS B AND C INFECTION AND BLOOD SAFETY IN LATIN AMERICA AND THE CARIBBEAN

Pan American Health Organization

World Health Organization

PREVALENCE OF TTI AMONG MULTITRANSFUSED PATIENTS LAC 2005

EPIBLOOD STUDY, JCV 34 (SUPPL 2) 2005

N	HCV	HBV	HIV
3,499	20.0%	14.5%	2.1%

HCV PREVALENCE AMONG MULTITRANSFUSED PATIENTS

(n=3499)

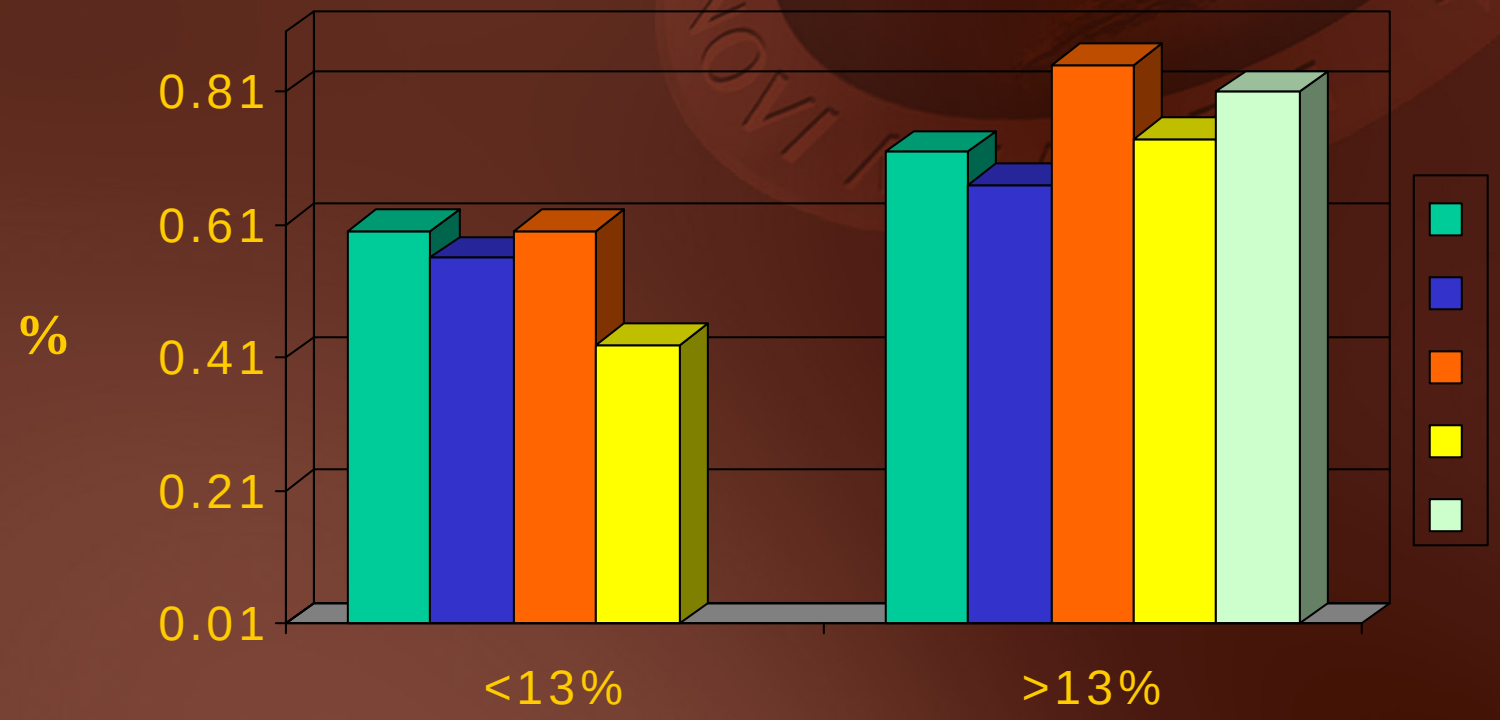
COUNTRY	PLH	DIAL	HbP	ONCO	HEMO	TOTAL	%
ARG	41/96	0/5	2/35	2/309	2/54	47/499	9.4
BRA	18/28	3/23	33/97	5/186	0/19	59/353	16.7
COL	29/90	5/82	1/14	8/236	2/78	45/500	9.0
CUB	49/83	86/90	14/66	15/77	0/2	164/318	51.6
HON	17/63	7/71	1/50	11/261	3/57	39/502	7.8
MEX*	19/41	14/89	1/7	7/145	0/18	41/300	13.7
NIC*	61/102	0	26/35	57/127	1/3	145/267	54.3
PER	47/84	45/74	0	9/102	8/91	109/351	31.1
URU	45/75	4/64	0.5	0/118	3/147	52/409	12.7
TOTAL	49.3%	32.9%	25.2%	7.3%	4.1%	701	20.0%

JClin Virol 34(Suppl2) 2005. *Reports to PAHO

ODDS RATIO (OR) FOR HCV IN RELATION TO SCREENING, EPIBLOOD

COUNTRY	INITIAL SCREENING	OR
ARGENTINA	1993	78.8
MEXICO	1993	22.8
COLOMBIA	1995	10.1
PERU	1996	5.6

HCV AB PREVALENCE (2000) AMONG BLOOD DONORS IN EPIBLOOD COUNTRIES



PREVALENCE IN MT PATIENTS

RESIDUAL RISK, SANTA CATARINA BRASIL

(Maresch et al Trasfusion 2008;48:273)

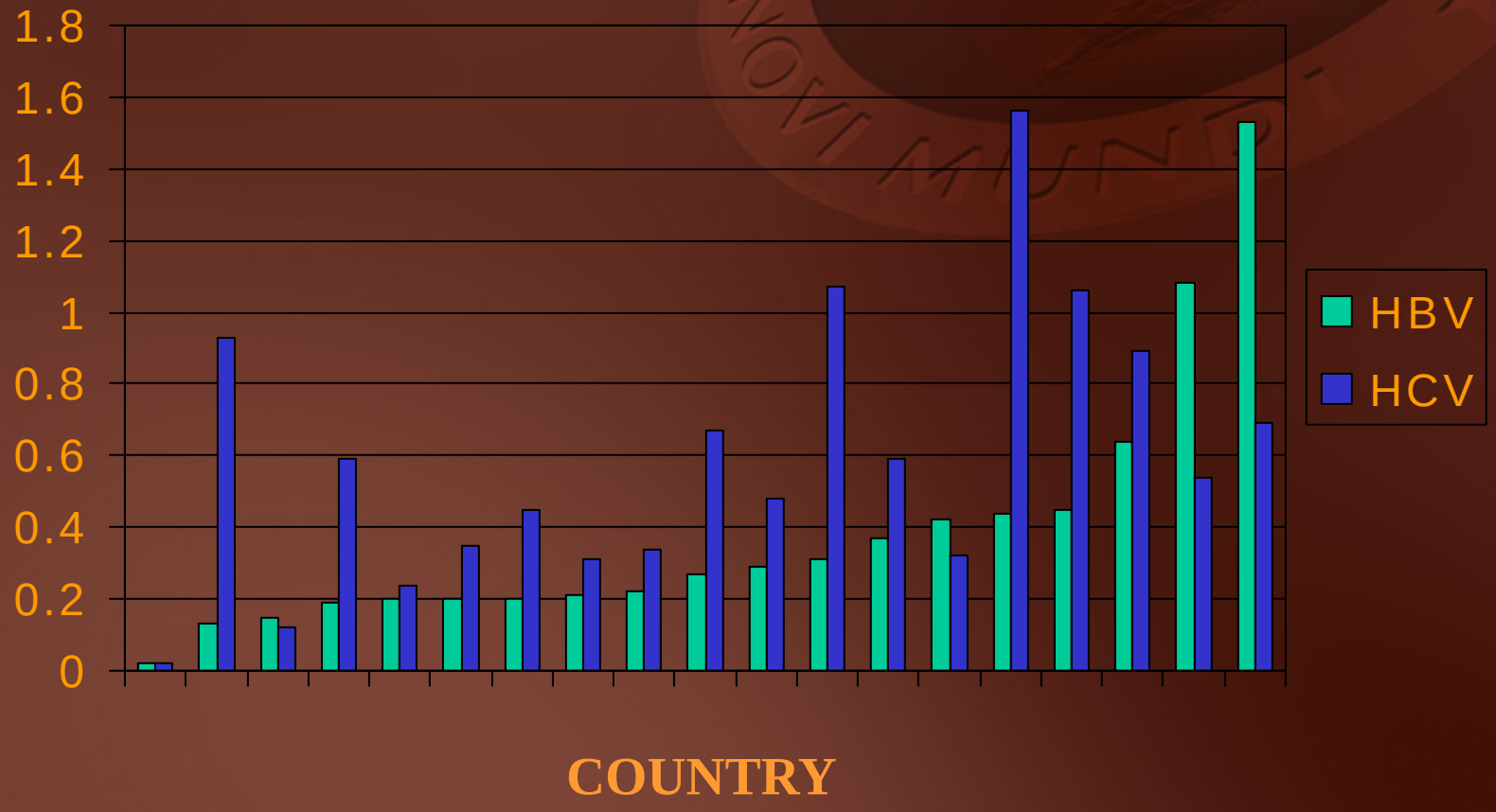
AGENT	PREVALENCE AMONG DONORS 1st TIME	REPEAT	TOTAL	RESIDUAL RISK
VIH	0.43	0.13	0.32	1:26,200
VHB	1.82	0.07	1.14	1:10,700
VHC	0.74	0.06	0.47	1:19,300
HTVL	0.04	0.02	0.03	1:116,300

PREVALENCE (%) OF TTI MARKERS, LAC 2009

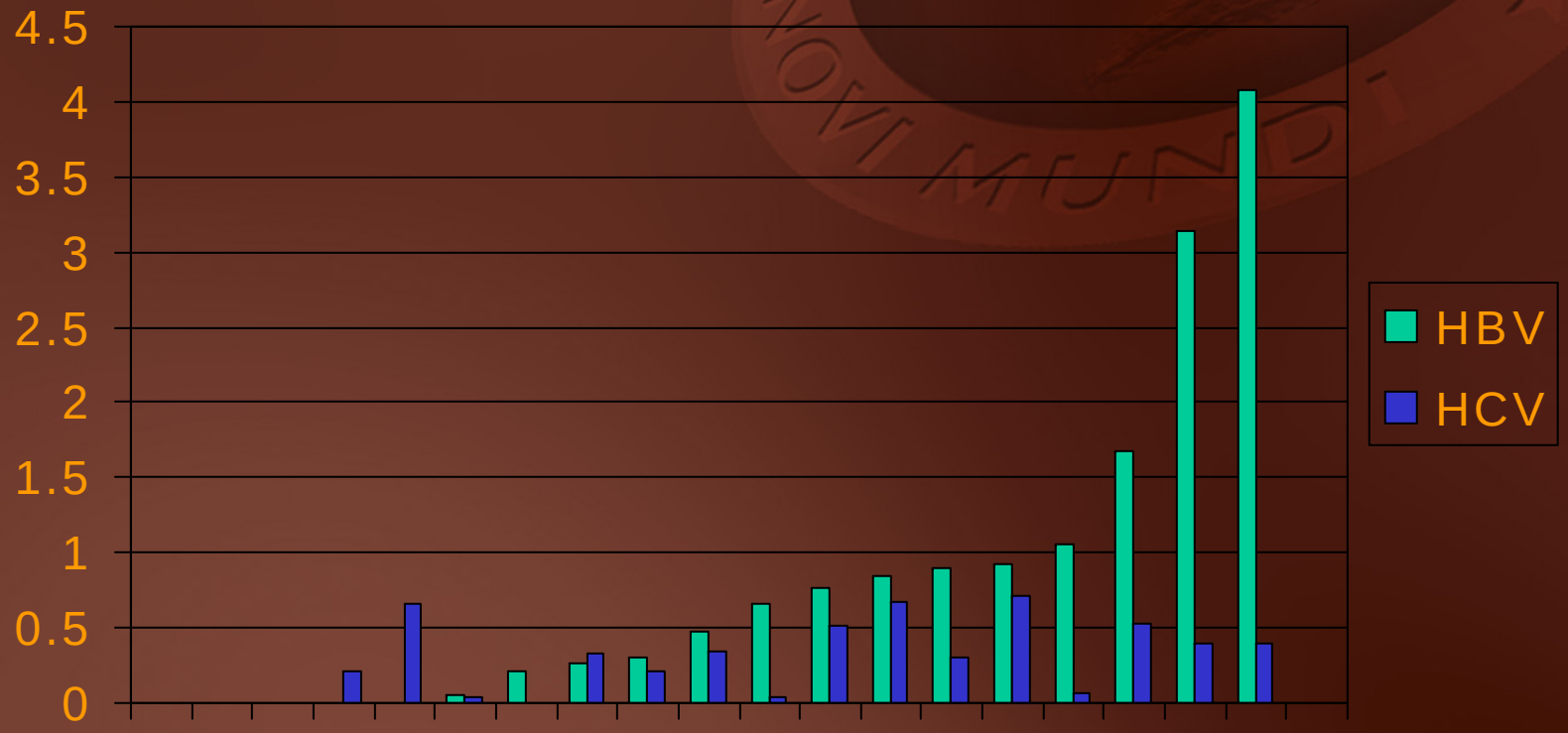
AGENT	SANTA CATARINA	LATIN AMERICA	CARIBBEAN
VIH	0.43	0.02 – 0.60* 0.22**	0.00 – 1.41* 0.17**
HBsAg	1.82	0.02 – 1.53* 0.27**	0.00 – 4.08* 0.48**
VHC	0.74	0.04 – 1.56* 0.54**	0.00 – 0.71* 0.30**

* INTERVAL; ** MEDIAN

PREVALENCE OF HBV AND HCV MARKERS LATIN AMERICAN BLOOD DONORS, 2009



PREVALENCE OF HBV AND HCV MARKERS CARIBBEAN BLOOD DONORS, 2009



COUNTRY

ESTIMATED RISK OF INFECTIOUS DONATION DUE TO LACK OF TESTING, 2005

VIH	VHB	VHC	T. cruzi
0.68 / 100,000	1.82/ 100,000	5.98/ 100,000	31.88/ 100,000
1:147,058	1:54,945	1:16,722	1:3,377

BLOOD UNITS NOT TESTED FOR TTI
AMRO 2009

	HIV	HBsAg	HCV	SYPHILIS	T.cruzi
NUMBER	1.708	1.371	2.861	1.535	288.405
COUNTRIES	1	1	4	1	2

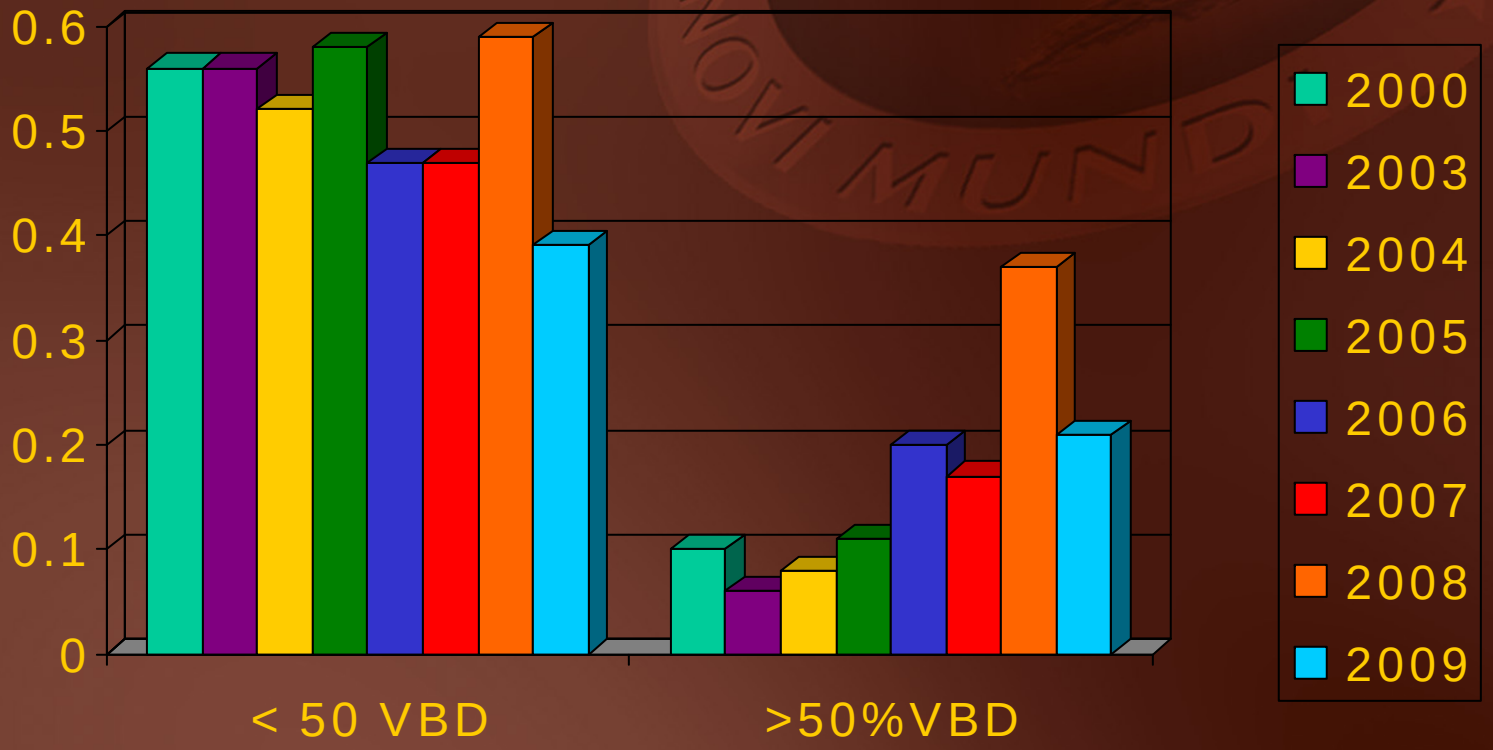
EFFECT OF HCV SCREENING ON TRANSFUSION-TRANSMITTED INFECTION AMRO 2006-2009

	2006	2007	2008	2009
INFECTIONS TRANSMITTED	538	421	22	16
INFECTIONS PREVENTED	31,481	22,110	29,520	42,155
EFFICACY (%)	98.32	98.13	99.93	99.96

TTI MARKERS AMONG BLOOD DONORS AMRO 2009

UNITS REPORTED	HIV N	HIV %	HBsAg N	HBsAg %	HCV N	HCV %
9 166 155	34 235	0.37	26 146	0.28	46 839	0.51

ANTI-HCV AB IN BLOOD DONORS AMRO 2000-2009



BLOOD COLLECTION INDICATORS LATIN AMERICAN COUNTRIES 2005

BLOOD DONATION RATE	100.85	115.90	186.81	p<0.0005
VBD (MEAN)	10.4	18.5	51.3	p<0.010
DEFERRED DONORS (%)	20.1	24.7	7.9	p<0.050
OUTDATED RBC UNITS (%)	10.7	9.9	10.3	p>0.90

RESOURCES LOST
LAC 2009

- **DEFERRED DONORS: 1.374.924**
- **15 MIN/ INTERVIEW= 343.721 PERSON-HR**
- **250 DAYS: 1.375 HR/DAY**
- **FULL TIME JOBS: 172**
- **US $ 56 PER UNIT**
- **POSITIVE/REACTIVE UNITS: 319.996**
- **US $ 17 919.776**
- **OUTDATED UNITS: 981.253**
- **US $ 54 950.168**
- **TOTAL DISCARDED US $ 72 869.944**

DONOR DEFERRAL
TRT 2007

REASON	PROPORTION (%)
LOW HEMOGLOBIN	22.2
HYPERTENSION	17.5
HIGH RISK FOR HIV, HCV, HBV	27.6
OTHER	32.8

Charles KS et al Transf Med 2010, 20:11

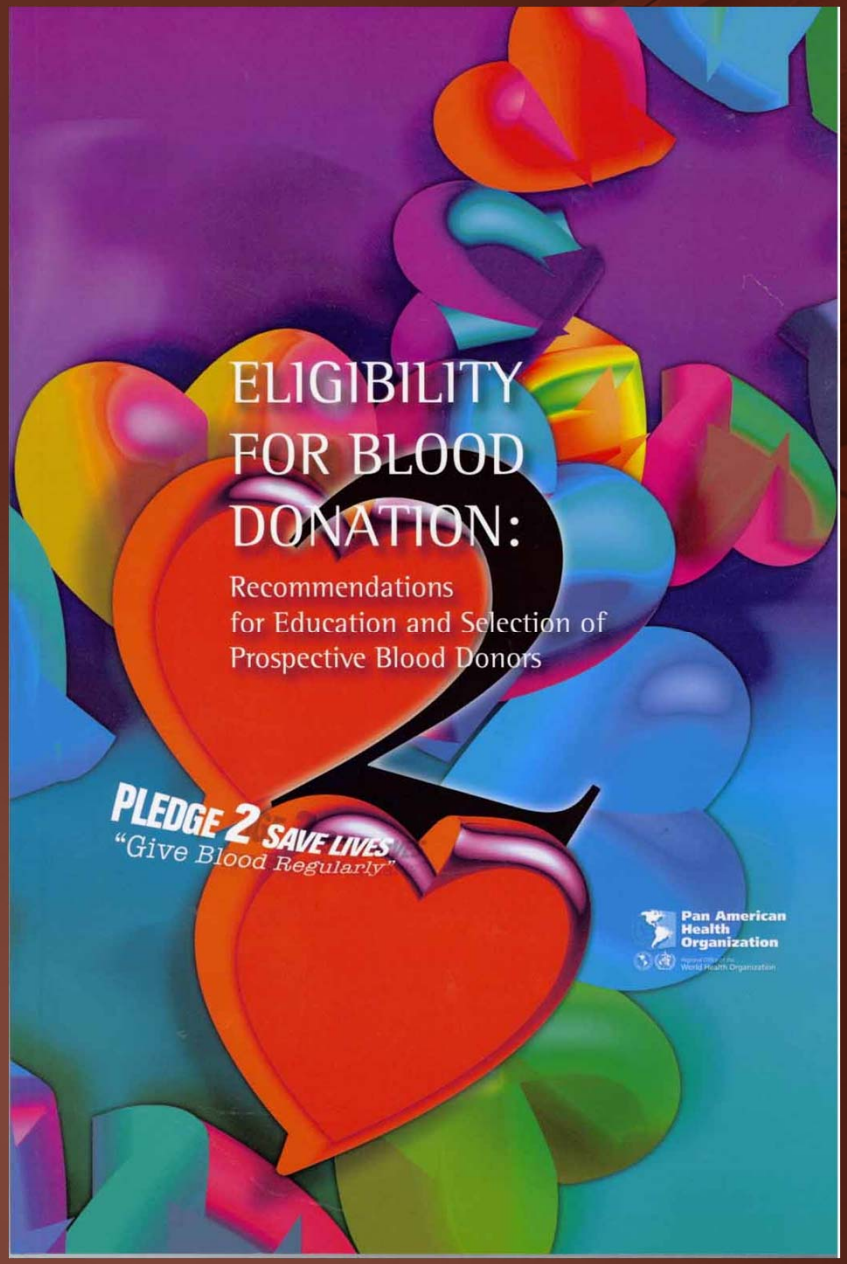
ESTIMATED DEFERRAL DUE TO POTENTIAL TTI

2009

1 374.924 DEFERRED DONORS

27.6% HIGH VIRAL RISK

N= 379.480


ELIGIBILITY
FOR BLOOD
DONATION:
Recommendations
for Education and Selection of
Prospective Blood Donors
PLEDGE 2 SAVE LIVES
"Give Blood Regularly"
Pan American
Health
Organization

Blood services must also inform the donor about the tests that will be performed on donated blood, under which circumstances the donor will be informed of test results, and what information will be released to third parties. Donors have the right to be informed in a timely manner of any medically significant abnormalities that may be detected during the interview and the general health asessment (37, 38). PAHO recommends that any clinically significant findings detected during the pre-donation evaluation or during the blood testing should be released. Blood services should refer for appropriate follow-up donors who have indications of clinically significant conditions, including reactive infectious markers. It is vital, however, that test results not be used as a motivational tool for blood donation, as this would encourage donations from people who engage in risky behaviours, thereby increasing the possibility of TTI (39, 40). Prospective blood donors should also be explained about their rights and those of the patients that may receive blood transfusions (41–49).

At the end of the education session, prospective donors should be asked to become regular donors. Experiences from the United Kingdom and Paraguay show that 78% of individuals who attend 45–50 minute sessions do become blood donors (50, 51). Specific arrangements for the selection of those who will actually donate blood should be made immediately.

THANK YOU VERY MUCH

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