# WORLDWIDE POLICIES ON HAEMOCHROMATOSIS AND BLOOD DONATION: A SURVEY AMONG BLOOD SERVICES



NELE S. PAUWELS, EMMY DE BUCK, VEERLE COMPERNOLLE AND PHILIPPE VANDEKERCKHOVE BELGIAN RED CROSS-FLANDERS, MECHELEN, BELGIUM

## **BACKGROUND AND AIM**

Haemochromatosis is a disorder of iron metabolism, requiring frequent phlebotomy to normalise high serum iron levels. There is currently no consensus relating to the eligibility of these patients to donate blood for transfusion. In order to gain a better understanding of the policies worldwide, a survey amongst blood services was performed.

### METHOD

A web-based questionnaire was developed and distributed among 44 blood services in 41 countries to identify the different policies relating to patients with haemochromatosis and blood donation.



Respondents from 35 blood services (80%) of 33 countries completed the questionnaire:

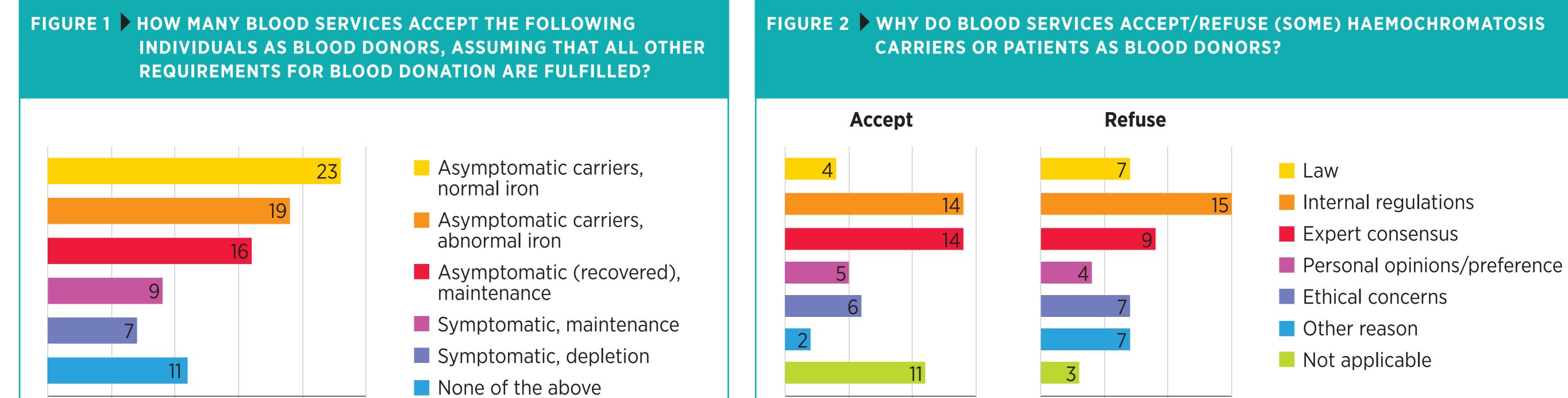
 In 24 blood services among them (69%), individuals with genetic susceptibility for haemochromatosis and/or patients with haemochromatosis are accepted as blood donors (Figure 1).

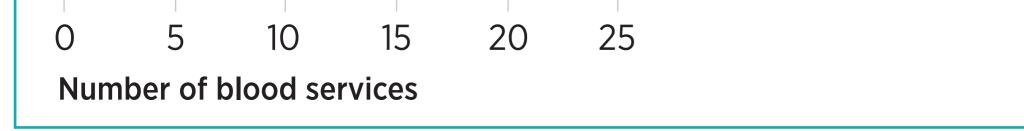
#### > Need for standardisation of policy

• The most common reasons (i.e. indicated by 9-15 blood services) were internal regulations and/or expert consensus. Regulations as a result of personal preference and/or ethical concerns were also listed (i.e. 4-7 blood centres) (Figure 2).

#### > Need for evidence-based policy\*

- In approximately one third of these blood centres (33%), genetic carriers/patients are allowed to donate blood more frequently than regular donors.
- Prescription from/approval by the patient's treating physician and/or a donor physician is required in the majority (87%) of the blood services.
- Similar policies were identified in a few countries, however, in general the policies regarding blood donation from patients with haemochromatosis remain widely variable (Figure 3).





0	5	10	15	0	5	10	15	
Num	iber of l	blood se	rvices	Num	iber of I	plood se	rvices	

#### FIGURE 3 A FLOWCHART REPRESENTING BLOOD SERVICES WITH A COMMON POLICY CONCERNING HAEMOCHROMATOSIS AND BLOOD DONATION

	riers/patients pted as blood		onate	Is prescription/approval of a physician (treating and/or donor physician) obligatory for carriers/ patients with HC to donate blood?	At which location are carriers/patients with HC allowed to donate blood?	The location (country) where the surveyed blood service is located in
		YES		Treating physician	Only fixed	/
					Fixed + mobile	/
				Donor physician	Only fixed	France
					Fixed + mobile	Norway, England (UK)
				Donor physician + treating physician	Only fixed	Northern Ireland (UK), Republic of Ireland, USA** (Portland [OR])
					Fixed + mobile	Australia, Sweden (Uppsala)
				NO	Only fixed	/
					Fixed + mobile	/
YES		NO		Treating physician	Only fixed	South Africa
					Fixed + mobile	/
				Donor physician	Only fixed	Austria, Czech Republic
					Fixed + mobile	Israel, Italy, Germany, Malta, Wales (UK)
				Donor physician + treating physician NO	Only fixed	/
					Fixed + mobile	Scotland (UK), Switzerland, Finland
					Only fixed	/
					Fixed + mobile	Canada (Ottawa and Montréal), The Netherlands
NO						Hong Kong, Belgium, Denmark, Estonia, Iceland, Latvia, Luxembourg, Portugal, Romania, Slovenia, Sweden (Skåne)

Data of blood service in Japan and Spain is not included due to inconsistency of the answers

/ = no blood service was identified with this policy
\*\*USA: data of Red Cross in Portland (OR) is presented here.

## CONCLUSION

The results of our survey demonstrate large differences in the blood donation policies regarding carriers/patients with haemochromatosis, illustrating the need for a

**standard evidence-based**, **cost-effective policy** which could benefit both haemochromatosis patients and the blood supply around the world.



#### For more information: cebap@redcross.be

**Reference**: \* De Buck E, Pauwels NS, Dieltjens T, Compernolle V and Vandekerckhove P. *Is blood of uncomplicated hemochromatosis patients safe and effective for blood transfusion?* J Hepatol. 2012, 57(5):1126-1134.