v1.0

### Change Notification for the UK Blood Transfusion Services

No. 31 - 2025

#### **Tropical Viruses**

This notification includes the following changes:

	BM-DSG  Bone Marrow & Peripheral Blood Stem Cell	CB-DSG	GDRI Geographical Disease Risk Index	TD-DSG Tissue - Deceased Donors	TL-DSG Tissue - Live Donors	WB-DSG Whole Blood & Components	Red Book  Guidelines for the BTS in the UK
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Kemeth Doylus

Dr Kenneth Douglas

Chair, Standing Advisory Committee on Cellular Therapy Products (SACCTP)

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Dr Stephen Thomas Professional Director of JPAC

Changes are indicated using the key below. This formatting will not appear in the final entry.

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### 1. Changes apply to the Bone Marrow DSG

# **Tropical Viruses**

## (revised entry)

Includes	Chikungunya Virus, also known as CHIKV				
	Dengue Virus, also known as Dengue Fever				
	Yellow Fever, also known as YF				
	Zika Virus, also known as ZIKV, and Zika Virus Fever				
Definition	Tropical Virus Endemic Areas: are shown in the Geographical Disease Risk Index (GDRI) as a Tropical Virus Risk.				
Obligatory	Must not donate if:				
	a) It is less than six months from a donor's return from a Tropical Virus Risk endemic area and the donor has been diagnosed with Chikungunya, Dengue, Yellow Fever, or Zika virus infection whilst there or following their return to the UK.				
	b) It is less than six months from a donor's return from a Tropical Virus Risk endemic area and the donor has either had a history of symptoms suggestive of Chikungunya, Dengue, Yellow Fever or Zika virus infection whilst there or following their return to the UK.				
	<ul> <li>In other cases, it is less than four weeks from a donor's return from a Tropical Virus Risk endemic area.</li> </ul>				
Discretionary	All donors may be accepted six months after their return from an affected area or resolution of symptoms. This may be reduced to four weeks, if they have had no clinical evidence of infection «while abroad and in the first four weeks of return to the UK.				
	If donor clearance is being carried out at less than four weeks since the donor has returned to the UK, a risk assessment will be required as to whether to proceed or delay the donation so that there is a clear four weeks since return to the UK and the donor has remained well».				
See if Relevant	Geographical Disease Risk Index				
	Infection – General				
	«Infection – Tropical»				
	<u>Malaria</u>				
	South American Trypanosomiasis				
Additional Information	«When an allogeneic stem cell donor who has been asymptomatic has returned from a tropical virus endemic area, the preferred option is to wait for 28 days from return before clearing the donor if the stem cell collection can be delayed. In exceptional circumstances and if there is a pressing clinical need to proceed to clearing the donor or collection within 28 days of return, a risk assessment should be undertaken in conjunction with the transplant centre clinicians as to how they will manage their patient. This should include awareness of the timing of the return of the donor from the tropical virus endemic area, the likelihood of receiving a tropical virus positive donation (with its associated risks) from an asymptomatic donor, and the option of delaying the clearance of the donor and stem cell collection plus				

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conditioning of the patient as far as possible towards the day 28 of the return of the donor.

In a situation where a risk assessment is being undertaken to clear a donation for clinical use before the preferred 28-day return from an endemic area due to urgent clinical need, consideration should be given to referring samples for any relevant available laboratory testing (e.g. to the Porton Down reference laboratory). Please note, if testing for these viruses (if available) is negative, it does not necessarily mean there is no risk of transmission at less than 28 days post travel.»

Chikungunya is an alpha virus that can cause a wide spectrum of disease. This may range from no or minimal symptoms to death. Most commonly it causes arthritis (typically in the knee, ankle and small joints of the extremities), high fever and a maculopapular rash.

It is geographically widespread but since 2005 it has reached epidemic proportions in parts of India and islands in the Indian Ocean. It is known to be spread by blood in symptomatic cases and on theoretical grounds could be spread by transfusion and transplantation of tissues and organs from people with pre-symptomatic or asymptomatic disease. A number of visitors returning from endemic areas to the UK have been diagnosed with this infection.

Dengue Virus is a flavivirus that typically gives rise to abrupt high fever with a range of accompanying symptoms. Dengue fever (DF) is the most common arthropod borne disease worldwide. Dengue is currently considered endemic in approximately 128 countries.

Overall, 15-90% of cases may have an asymptomatic course of infection, but clinical presentation varies with age group. However, there is a risk of change in disease presentation and potential for increased incidence of more severe disease in older age groups due to co-circulation of different dengue types and emergence of new types in endemic areas patterns.

Yellow Fever Virus is a Flavivirus. Symptoms of Yellow Fever include high temperature, headache, nausea and vomiting, muscle pains and backache. One in four individuals may suffer from jaundice and bleeding from the gastrointestinal tract and other sites.

Zika virus is a flavivirus that is transmitted to humans through the bite of a carrier mosquito. Zika Virus can also be transmitted human to human through sexual contact. Zika infection is a rapid acute infection that in the majority of cases is asymptomatic or has very mild general symptoms. A small number of cases may have more apparent symptoms but hospitalisation is rare. Zika infection may be mistaken for Chikungunya or Dengue infections as the virus often cocirculate.

The main vector for these viruses is Aedes aegypti (Aedes albopictus is another emerging vector), which is found worldwide between latitudes 35°N and 35°S. There is no epidemiologically important animal reservoir for these viruses. The main geographical areas affected by these viruses include the Caribbean, South and Central America, Mexico, Africa, the Pacific Islands, SE Asia, Indian subcontinent, Hawaii. Additionally, Dengue fever has been reported in Australia and there have been outbreaks of Dengue and Chikungunya in Europe.

Position statements are available in the JPAC <u>Document Library</u>.

*Information* 

This entry is compliant with the Blood Safety and Quality Regulations 2005.

Reason for Change

«Discretionary and Additional Information sections have been revised. An Information statement regarding compliance with BSQR has been deleted.»

Discretionary guidance has been revised.