

# **NATIONAL BLOOD TRANSFUSION SERVICE OVERVIEW**

## **NATIONAL POLICY ON BLOOD TRANSFUSION PRINCIPLES**

The National Blood Service (NBS), established by the Ministry of Health, shall be the sole authority responsible for the provision of safe, adequate and accessible supply of blood and blood products in Botswana; in special cases NBS may recommend to the Ministry of Health for authorisation of procurement of blood and blood products from pre-approved source;

Blood donation shall, in all circumstances, be voluntary and non-remunerated from low-risk populations. No coercion of any kind shall be imposed on the donor;

Any healthy person from 16 to 65 years of age may be eligible to be a blood donor. Blood can also be collected from healthy blood donors who are above the age of 65 who meet agreed medical and physical requirements and have already been regular blood donors. In cases of blood donation below the age of consent it may be necessary to obtain consent from parents, or guardians;

Blood shall be collected from voluntary, non remunerated donors who fall within the criteria defined in the Blood Donation Guidelines;

Blood donors must pass a medical examination comprising personal medical history and routine physical examination internationally agreed for blood donation, before blood is collected (as per WHO Guidelines);

All units of blood for transfusion must be screened for relevant infectious agents using approved screening tests, and must be submitted to standard procedures prior to being issued and being available to recipients.

Counselling and referral of relevant blood donors, including confidentiality of blood donor information and records shall be assured;

Patients should be informed of the known risks and benefits of blood transfusion and/or alternative therapies and have the right to accept or refuse the procedure. Any valid advanced directive should be respected;

## **NATIONAL BLOOD TRANSFUSION ORGANIZATIONAL STRUCTURE**

NBTS is operating with 2 centres: National Blood Transfusion Centre in Gaborone and Francistown Regional Blood Transfusion Centre

Technically both centres are under the NBTS Management consisting of an Acting Medical Director, a Technical Head ( Chief Operation Officer), a Quality Manager reporting to the Medical Director, 2 Blood Donor Managers and 2 Laboratory Managers all reporting to the Technical Head.

Administratively the National Blood Transfusion Centre is under the National Health Laboratory while the Francistown Regional Blood Transfusion Centre is under Nyangabgwe Referral Hospital

Blood Donor Centres Structure

Blood Donor Section

Blood Donor Recruitment Unit

Blood Donor Counselling and Blood Collection Unit

Aphaeresis Unit

Blood Donor Relation Unit

Laboratory Section

Testing and Grouping Unit

Component and Dispatch Unit

Quality Section

Quality Unit

Safety, Health and Environment Unit

Training Coordination Unit

### **BLOOD COLLECTION**

As per World Health Organization blood is collected from voluntary non-

remunerated blood donors who are considered safer than family replacement and commercial/paid donors.

2013: Collection: 20207 (50% of the national requirement)

Panels

Secondary schools: 47%

Donor Centres: 28%

Tertiary education institutions: 11%

Companies: 5%

Campaigns: 3%

Churches: 2%

Blood donor selection

Interview on health condition and behaviour based on donor registration form

Physical exam including weight

Haemoglobin test

Deferral: temporary or permanent

### **BLOOD TESTING**

Transfusion transmissible infections

HIV 1-2

Hepatitis B virus

Hepatitis C virus

Syphilis

Reactive units are discarded and incinerated

### **BLOOD GROUPING**

## **COMPONENTS PREPARATION**

Collected blood is separated in 3 components that have different clinical indication (use)

Packed red blood cells (E.g. Trauma)

Platelets ( E.g. Cancer)

Plasma (E.g. Burns)

## **DISPATCH**

To public and private hospitals

## **APHAERESIS**

Collection of specific component: platelet in higher dose from identified blood donors

## **BLOOD DONOR RELATION UNIT**

Recall donor through SMS and Emails

## **QUALITY SECTION**

Implementation of Quality Management System: Quality Laboratory

Safety, Health and Environment

## **DISTRICT BLOOD COLLECTION**

Decentralization of blood collection with the aim to go where the potential donors are.

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Started in August 2013

From August to end of April 2014: 2038 units of blood collected