What Should I Know?

Safety & Testing

South African National Blood Service (SANBS) is issuing over one million blood components annually and offers world-class products.

Blood donor recruitment in South Africa is based on a World Health Organisation endorsed programme, which specifies the selection of voluntary, non-remunerated blood donors.

Low-risk blood donors are identified as volunteer blood donors who donate blood solely to help those in dire need of blood. Securing and maintaining a safe blood supply in a country with one of the highest HIV infection rates in the world is a constant challenge to SANBS.

The HIV/Aids pandemic in South Africa has focused particular attention on the importance of preventing transfusion-transmitted infection. In the past, strategies to promote blood safety tended to focus primarily on screening blood for transfusion-transmissible infections (TTIs). However, while systematic screening is essential, it is insufficient in itself to ensure the safety of the blood supply.

SANBS' strategy for blood safety emphasises on an integrated three-fold approach. Effective quality assurance forms an essential part of this approach.

1. The collection of blood only from voluntary non-remunerated blood donors from low-risk blood donors and the use of stringent donor selection procedures;

2. The screening of all donated blood for transfusion-transmissible infections, including HIV, hepatitis viruses, syphilis and other infectious agents, and blood grouping, compatibility testing and processing of blood.

3. A reduction in unnecessary transfusions through the appropriate clinical use of blood. These include the use of intravenous replacement fluids and other simple alternatives to transfusion.

Recruiting voluntary, non-remunerated blood donors

SANBS employs various educational strategies to inform members of the public and regular blood donors of issues pertaining supply of sufficient, safe blood. The message of safe blood is disseminated through local and national media or conducting educational talks.

Both potential blood donors and regular blood donors are required to complete a self-exclusion questionnaire each time they wish to donate blood. They also need to undergo a “mini-medical” prior to donating blood, where trained staff check their haemoglobin level and blood pressure and ensure that the donor is healthy and not at risk of contracting sexually transmitted diseases.

If the potential donor is unable to donate blood for a health or medical reason, they are deferred for a period of time. People who participate in sexual behaviour which places them at increased risk (such as having casual sex or men who have sex with men), are advised not to donate blood and will not be accepted as blood donors.

The commitment, honesty and responsibility of regular blood donors ensure the safety of blood supply. SANBS encourages donors to give blood for purely altruistic reasons - solely for the sake of helping others.

Behind the scenes

Laboratory testing systems have changed from a previously semi-automated system to a fully automated system where sampling and processing occur on the same instrument.

SANBS ensures that before transfusion every unit of blood donated blood is tested for:

- HIV 1 and 2;
- Hepatitis B;
- Syphilis; and
- Hepatitis C.

SANBS has developed a national policy and strategy to ensure the systematic and effective screening of blood for transfusion-transmissible infections.

These require:

- Development of protocols for the testing, selection and evaluation of the most appropriate and effective screening assays to be used;
- Development of quality systems for screening, blood grouping, compatibility testing and component preparation;
- Training, updating and continuing education of laboratory technical staff;
- Central procurement, storage and distribution of reagents and materials to ensure continuity in screening; and
- Adequate budget.

All donated units of blood are also routinely tested for ABO and Rh (D) blood grouping and screened for red cell antibodies.

Good laboratory practice using standard operating procedures and the maintenance of an effective blood cold chain for the storage and transportation of blood and blood products is stringently followed.

Quality assurance

QA department ensures that all blood and blood components processed by SANBS comply with the required standards. This is achieved through a system by which products are tested while they are being manufactured, and also at the end of processing. Quality assurance ensures that all blood components and activities carried out by the SANBS meet required specifications.

Reducing unnecessary transfusion

The primary responsibility for ensuring appropriate clinical use of blood lies with clinicians. SANBS plays a key role in promoting effective transfusion practice by contributing to the development of a national policy and guidelines on clinical use of blood.

Safe blood starts with me

SANBS staff members are responsible for recruiting and retaining regular, safe blood donors, who are essentially the lifeblood of our organisation. Strict procedures are in place to ensure that donors act responsibly when pledging their support by donating blood and that they are not donating blood to get a free HIV/AIDS test.

Blood donated by a volunteer donor is treated with utmost respect, as each unit of safe donated blood is invaluable to patients in dire need of this precious gift.

Low-risk blood donors

The safer the source of donated blood, the safer the final product is likely to be. Voluntary, non-remunerated blood donors from low-risk populations who give blood regularly are the foundation of a safe and adequate blood supply.

A system of voluntary, regular, non-remunerated donation also enables more cost-effective use to be made of limited resources by reducing the volume of donated blood that has to be destroyed because of evidence of infectious disease markers.

Many countries have introduced legislation that allows blood donation only by voluntary non-remunerated donors. This can be

achieved through the establishment of an effective programme of blood donor recruitment and retention, trained personnel equipped with an efficient donor information, education and motivation programme.

It also sets down strict criteria for donor selection and screening to identify donors for deferral or exclusion, together with efficient blood donor record systems. The identification of donor populations at low risk for transfusion-transmissible infections, and the monitoring of transfusion-transmissible infections in both the general population and the donor population are also key elements of the strategy for blood safety.

SANBS encourages South Africans to commit themselves to maintaining a safe blood supply for the country. Blood is essential in the treatment of many serious illnesses and it is of utmost importance that there is sufficient safe blood available for South African patients. Blood and blood products are used for open-heart surgery, burn victims, newborn babies and in the treatment of diseases such as leukaemia and cancer, among others.

Never donate blood to have a "Free HIV test"

Some people still live under the misconception that they can get a free HIV test if they donate blood at one of the blood donation clinics. This misconception poses a risk to patients and is a constant challenge to SANBS. The company is committed to providing sufficient, safe blood to patients who need blood transfusion as part of their medical treatment