**Why Should I Donate?**

Donating a unit of this “precious gift of life” saves lives of those in dire need of blood. One must develop a habit of donating blood in order for the South African National Blood Service (SANBS) to collect sufficient blood that will ensure that in cases of emergency quality blood is always available for needy patients.

## Who needs blood?

Safe blood saves lives. Thousands of patients would die daily if there is insufficient quality blood in stock. When one donates blood, they give patients the gift money cannot buy or science cannot create. A unit of blood can save up to three lives as blood is separated into red blood cells, plasma and platelets.

Below are categories of people who need blood transfusion:

* Women haemorrhaging due to pregnancy complication and other gyneacological complications.
* Children with severe anaemia.
* Accident victims.
* Surgical and cancer patients.

You make a difference in somebody’s life by donating blood.

## Donation procedures:

A donor will:

* Complete a questionnaire containing personal details.
* Answer questions relating to their health and social behaviour and lifestyle.
* Participate in a one-on-one interview as a follow-up to their answers.
* Have their iron (haemoglobin) level checked, blood pressure and pulse rate will be taken.
* Be allowed to donate one unit of blood (480ml).

It's easy ....here's how

Donating blood is a safe and simple procedure that takes about 30 minutes. All needles are new, sterile, used only once and incinerated after use.

Are There Any Risks

We expect that as a regular donor you are aware of some of the complications in relation to blood donation. To widen your knowledge of blood donation processes we have indicated possible complications that relate to the topic.

Remember to refer to pre-donation tips to avoid some of these complications.

## Important

None of the following complications is permanent, it takes a few minutes to few days to resolve. If any complication occurs after donation, please inform the donor clinic immediately.

Further information may be obtained from the donor staff at your local donor clinic.

The process of giving blood involves screening the donor, the actual donation, and a brief recovery period.

Often donors are encouraged to sit down for few minutes after a donation to return to normality, as lightheadedness and faintness may occur.

Throughout the donation process and sometimes after, a donor may be at risk of any of the following complications:

**A.** **Immediate Risks**

**1.** **Needle injuries**

* Minor discomfort due to finger prick or needle insertion
* Bruises or haematomas where the blood was taken
* Pain or paresthesia (pins and needles) on the same arm

**2.** **Vasovagal reactions**

**3. Nausea or vomiting**

* Syncope (light-headedness, dizziness or fainting, which can sometimes be due to a drop in blood pressure)
* Seizures (fits): a very rare occurrence but, can happen especially if a donor is epileptic

**B.** **Delayed risks**

**1.** **Needle injuries**

* Bruising of the arm may occur days after a donation.
* Numbness due to nerve damage
* Thrombophlebitis (rare)
* Needle phobia and severe anxiety prior to donation

**2.** **Aneamia or iron deficiently**

Some donors can become iron deficient if they donate too frequently.

Female donors are more at risk of developing iron deficiency and may be advised not to donate more than four times per year.

**What does your blood comprise of and what is it used for?**

**Blood Products**

Blood is vital to human life. It carries essential nourishment to all the tissue and organs of the body. Without it, the tissues will die. The average person has 25 billion red blood cells and, in a normal healthy person, cells are constantly regenerated in the body. Without the protection of blood, no child could be born.

In the womb, the mother's blood ensures that the foetus is supplied with oxygen and nutrients and benefits from the mother's inbuilt defences against disease.

About 45% of the total volume of blood is made up of:

Red blood cells

White blood cells

Platelets

Red blood cells carry oxygen. The haemoglobin, which gives blood its red colour, is the agent that needs to be present for oxygen to be taken up from the lungs. Red blood cells also transport carbon dioxide back to the lungs, for expulsion from the body. Iron is the key factor in the manufacture of haemoglobin. When iron supplies are deficient, people become anaemic, with a corresponding loss of oxygen-carrying ability.

White blood cells defend the body against disease. They make antibodies and fight infections.

Platelets help to control bleeding by sticking to the injured surfaces of blood vessels, and allowing clotting factors to accumulate at the injury site. Plasma is a fluid which carries all these cells, plus other substances such as proteins, clotting factors and chemicals.

Sometimes, through trauma such as haemorrhage, the volume of blood in the body is reduced to such a level that the body cannot replace it fast enough.

Occasionally, some components of the blood are lacking and do not function correctly, as is the case with haemophilia, where clotting of the blood does not occur. At other times, the bone marrow does not produce sufficient haemoglobin, due to a deficiency of the necessary building blocks.

In most cases, blood and blood components will be transfused to patients. All the different components of blood can be used and each plays an important role in saving the lives of different individuals in the community.

## **Blood has 4 main components:**

• red blood cells;

• white blood cells;

• plasma; and

• platelets all of which are used by patients in need.

One unit of blood can be separated into components and used to treat up to three patients.

The average healthy person can donate blood 330 times in their life.

The rarest blood type is AB negative – less than 1% of the population.

Human blood is 78% water.

## Group O

## **Why is group O blood so extraordinary?**

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Adequate stock of Group O blood is vital for two reasons:  
  
1. Group O blood can usually be given to patients of other ABO blood groups  
Regardless of their blood type, as the red cells in type O blood have neither antigen A nor antigen B. In medical emergencies, when urgent blood transfusions are required, there may be little time to determine a patient’s blood type.

Group O negative blood then comes to the rescue, as it can safely be   
transfused to patients of other blood groups.  
  
2. Group O blood saves the lives of newborns  
Babies born with blood disorders may also require immediate blood transfusions in order to save their lives. In some cases difficulties may occur in determining the blood groups of these infants. Group O blood is therefore important in supplying this ongoing need.  
  
Babies also need "fresher" blood than other patients. While red blood cells stored for up to 42 days can be transfused to most adult patients. Only blood less than five days old may be used for transfusion to newborn infants, or in exceptional cases when babies require transfusions wile still in the womb (intra-uterine transfusion).

**Why is Group O so special?**Patients in need of a blood transfusion as part of their medical treatment rely on blood donors of all blood groups to donate safe blood regularly. Therefore, your blood is vital to those in dire need of blood.  
  
Group O blood is often in greater demand than other blood groups, which is why South African National Blood Service (SANBS) encourages Group O blood donors to donate regularly.

Bibliography