Issue 6 | www.sanbs.org.za

The Festive Season Edition

Gazlam

The blood that binds us together

Gaz'lam

noun · /gaz-lam/
Zulu word for "blood relatives" or "brotherhood"

The mission of the South African National Blood Service is to provide all parties with sufficient, safe, quality blood products and medical services related to blood transfusions in an equitable and cost-effective manner.

The SANBS is a non-profit organisation, as an incorporated association not for gain. The SANBS receives no funding from Government. With 27 branches and 86 permanent collection sites, the SANBS manages the blood supply and provides products and services to South African parties in all provinces, except the Western Cape.

Gaz'lam is published for donors by the South African National Blood Service.
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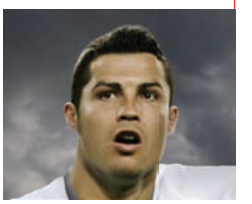


Acting CEO Message

The festive season is upon us, and with it comes new beginnings. The SANBS has a new look and an exciting strategy. We are confident that this, along with the continued help of our selfless blood donors, will assist in improving the essential services we provide in South Africa even further.

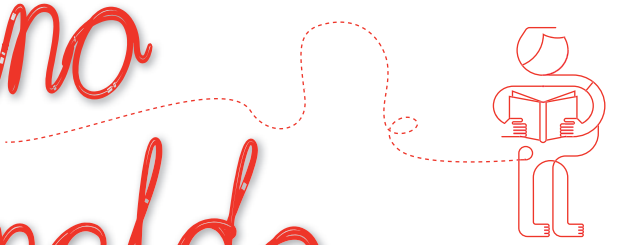
Every single day, we see people donate so much more than just blood – because of our donors, hundreds of thousands of patients are able to share a lifetime with their loved ones.

Throughout the entire year, your constant commitment has been phenomenal, even during the difficult winter months. However, the new season does not allow the SANBS team to slow down. On the contrary, it's the time we have to work extra hard to ensure that we have adequate blood supplies available.

On behalf of the Board, Executive Management and the entire SANBS team, I would like to convey a special "Thank You" to every blood donor who has heeded our call to donate blood. Because, at the end of the day, your blood really does save lives.

All the best,
Jackie

SANBS joins Cristiano Ronaldo



The South African National Blood Service (SANBS) has rallied behind international movement BE THE 1™ Donor to inspire young people to become lifelong blood and plasma donors and help save lives.

This international movement was conceptualised by a worldwide healthcare company, Abbott, which has partnered with Cristiano Ronaldo in an effort to respond to the global decline in the number of new and young donors.

Ronaldo started donating as a 24-year-old, when he witnessed one of his teammates battle with the search for a stem-cell donor for his ailing son. Seven years later, he is still donating blood regularly.

Currently, South African tertiary students and learners contribute about 40 percent to the national blood reserves, and supporting them to continue this as a life-long commitment is an important objective for the SANBS.

SANBS joins Cristiano Ronaldo and Abbott, and urges youth to BE THE 1™ Donor.

A recent SANBS study, conducted to determine the motivation behind the youth's choice to donate, revealed that there was no powerful single-minded call-to-action for them to identify with.

Youth who took part in the SANBS research recommended that the blood service should involve recognisable influencers in order to personalise the brand for them.

These requirements have been met well by BE THE 1™ Donor Movement. It is built around football icon and committed blood donor Ronaldo, who not only represents goodwill and is admired by young people, but also employs emotive messaging that resonates with the younger generation.

"The SANBS is proud to be part of this movement, and we hope that it will not only put blood donations on the agenda for discussion among young people, but that it will also cause them to take a look in the mirror and say: 'I have the power to save lives, and I am going to use it,'" says SANBS Marketing Manager Silungile Mlambo.

The South African campaign, which launched on 1 November, recruits local ambassadors to join Ronaldo, including students as well as radio and TV personalities. They take part in awareness-raising activations and will be prominent on social and traditional media platforms, to spread the word and support the global movement across South Africa.

"Our donors may or may not have such personal reasons for donating as Ronaldo, but our activations aim to remind young donors that someone they might never meet needs their blood and plasma right now," concludes Ms Mlambo.

BE THE 1™ Donor Movement

Every person who donates blood is unique and special. Your blood could be one of a kind. Like Cristiano Ronaldo, inspire and motivate your friends to donate blood and help them realise the profound impact they can have on someone's life. Join Ronaldo and the SANBS to donate blood now. You could save a life. Join the movement on Facebook or sign up to donate at BeThe1Donor.com.


SANBS
South African National Blood Service
BE THE 1™
JOIN CRISTIANO RONALDO AND
THE SANBS TO DONATE BLOOD NOW.
YOU COULD SAVE A LIFE. BE THE 1™.
Sign up to donate at BeThe1Donor.com
BE THE 1 and related brand marks are marks of Abbott Laboratories in various jurisdictions.
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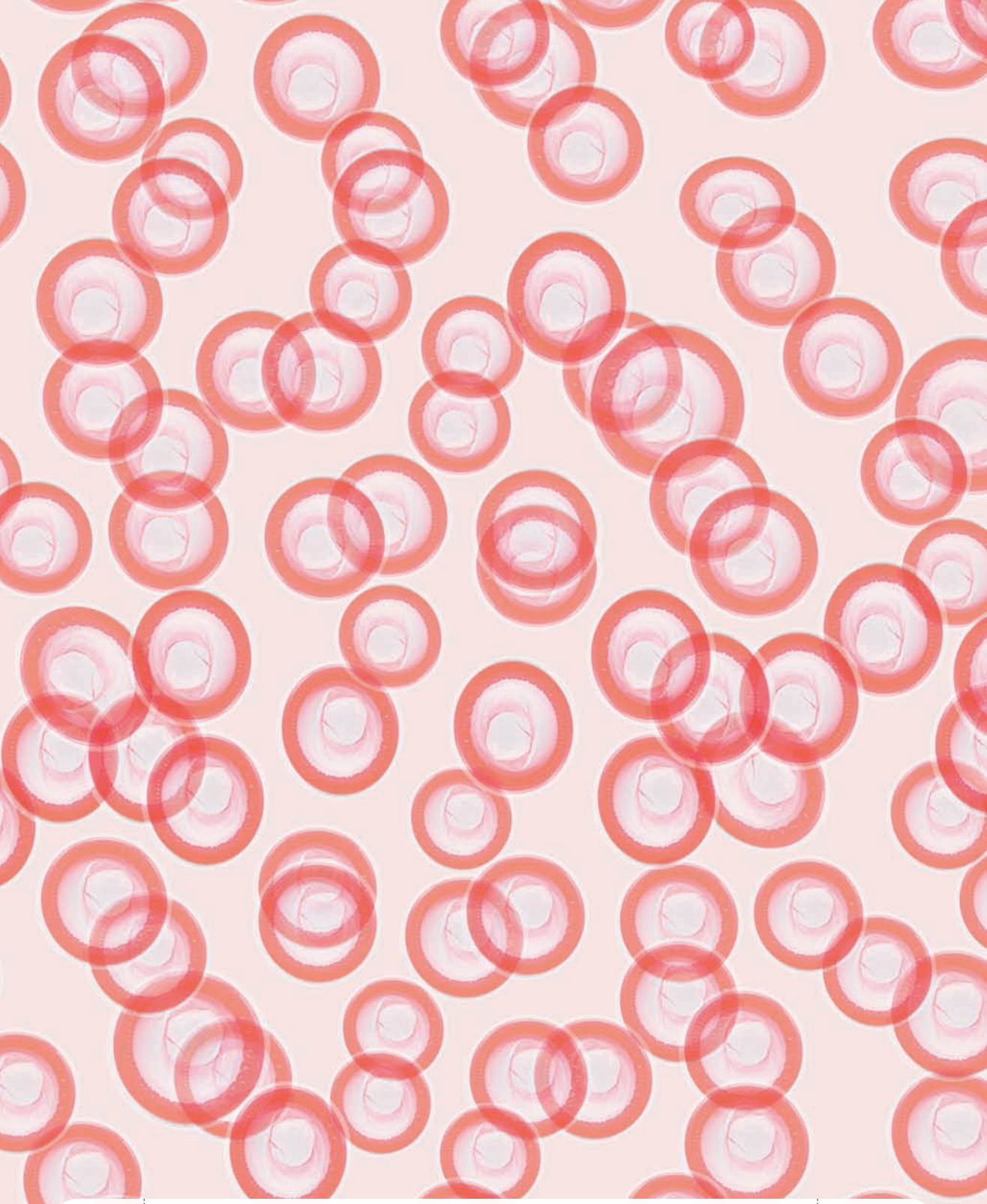


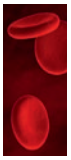
PGD5WK

SAFE BLOOD STARTS WITH YOU

Leading a sexually safe lifestyle by not having more than one partner and knowing your status will help keep your blood safe. To further ensure that all blood donated is safe, it is rigorously tested before it is approved for blood transfusions. Your blood saves lives.

www.sanbs.org.za

SANBS
South African National Blood Service



BREAKTHROUGH in Research and health matters.

"A mind-controlled robotic limb may help those who suffer from paralysis in the future." — Zackary Canepari / The New York Times / Redux

A game-changing new clot-retriever for stroke victims. A way to restore movement by linking the brain to paralysed limbs.

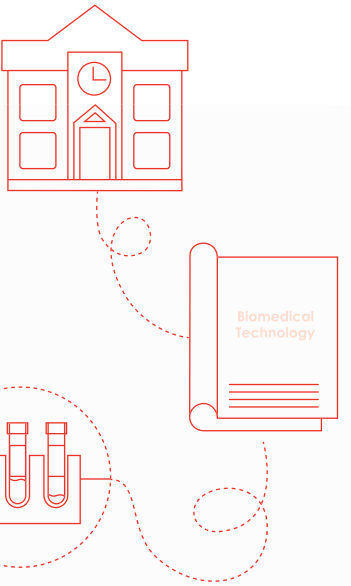
Perhaps the most visually impressive display of healthcare technology innovation is the video of Les Baugh controlling prosthetic arms with his mind alone.

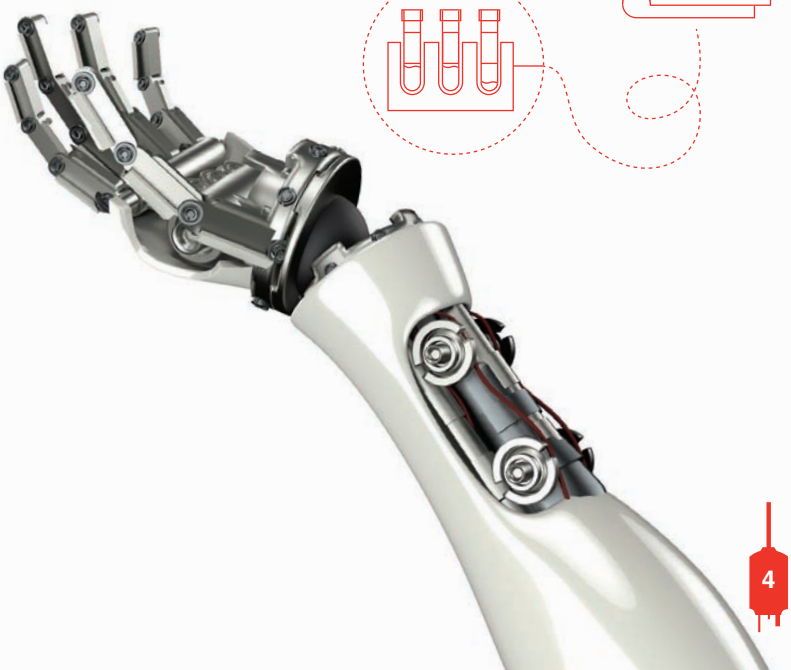
Augmenting human capabilities

Through extensive research on the way, Les's mind controlled his limbs, and researchers were able to determine how his mind managed these connections. With that research they were able to develop a technology that would read his brain activity and send the signals to sockets that controlled the motor functions of his prosthetic limbs.

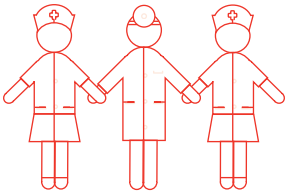
It is an exciting technology, spearheaded by an exciting pioneer, Mike Mclaughlin, who likens the current stage of this technology to the beginning of the internet. Funded by DARPA, Johns Hopkins Applied Physics Laboratory is being tasked with creating naturally controlled artificial limbs, which one can see is already becoming a reality.

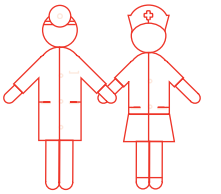
The reality of this science is that all of our lives will be changed, whether we know it now or not; just like the beginning of the internet when no one believed it would be useful, this will change the course of history.





#The Missing Type Campaign





The letters that save lives.

Blood donation saves lives, but the South African National Blood Service (SANBS) is uniting with blood-donor organisations across 21 countries to highlight an almost 30% international drop in people becoming blood donors, compared to a decade ago.

In a survey for the **#MissingType** campaign, participating blood services reported that the number of people becoming donors and giving blood for the first time was 1 830 003 in 2005 and 1 324 980 in 2015 – **a drop of 27.6%.**

The campaign – first held in England and North Wales by NHS Blood and Transplant in 2015 – this year brought together 25 blood services from 21 countries covering one billion of the world's population, each calling for new donors to ensure blood donation for future generations.

In South Africa, there is a particular need for new donors with O-negative blood. O-negative blood can be transfused to anyone, so these donors are referred to as "universal donors".

However, all blood groups are required to ensure adequate stocks at all times.

Key barriers to people coming forward to donate that were identified by blood services around the world, include:

- increasing urbanisation;
- wider and more exotic travel;
- people having less time to donate in an increasingly busy, digital world;
- a lack of awareness about the need for more diverse blood donors; and
- a rise in the popularity of tattoos.

Throughout the campaign, A's, B's and O's – the letters of the main blood groups – disappeared in everyday iconic locations in Australia, America, Japan, Ireland, England and many more countries, as well as famous brand names. Celebrities who supported the campaign included actress Jamie Lee Curtis and rapper LL Cool J, as well as local celebs Thapelo Mokoena, Christopher Jaftha, Mzokoloko Gumede, Joe Mann, Sandile Kubheka, Cameron Classens and Phindi Gule.

Additionally, patients from around the world whose lives were saved by transfusions, thanked blood donors in a moving video called Talking Heads, to highlight that they would not be here today in a world without A's, B's and O's.

Silungile Mlambo, Senior Marketing Manager for the SANBS, said: "Blood transfusions save lives and transform health for millions across the world, but they are dependent on people donating blood.

"Whether it is patients receiving treatment for cancer, blood disorders, after accidents or during surgery, or new moms who lost blood in childbirth, blood is an absolutely essential part of modern healthcare."

SNS

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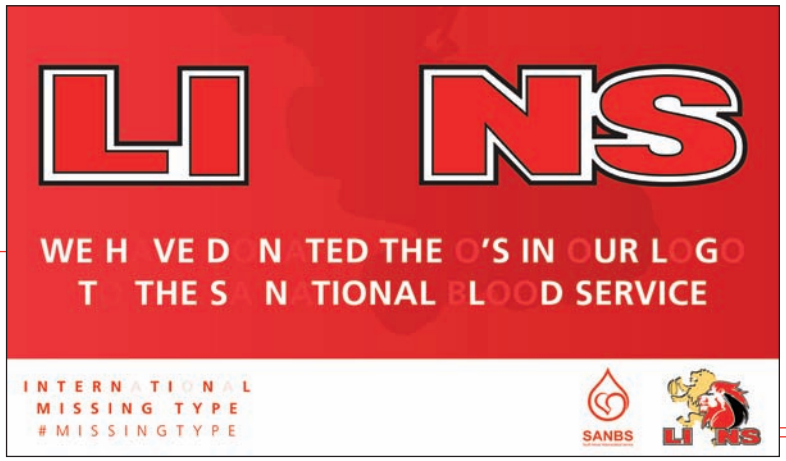
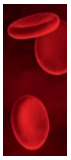




#The Missing Type Campaign

"We really hope that people living in South Africa were inspired by the Missing Type campaign to start saving lives by becoming blood donors.

It's incredibly easy and painless to donate blood, by simply visiting one of 86 donor sites, or 66 mobile teams in the country."

A number of high-profile brands, individuals and organisations backed the campaign in South Africa. These included Lions, Tile Africa, Bulls, Midvaal Hospital & Lead SA.

According to the SANBS, just 7% of new blood donors are people between the ages of 16 and 25 (according to 2015 stats). You can start donating blood across South Africa from the age of 16, if you weigh over 50 kilograms and lead a sexually safe lifestyle. Keep in mind that one must never donate blood to receive a free HIV test, as it places the lives of patients at risk.

Jon Latham from NHS Blood and Transplant, the service that co-ordinated the campaign, said:

"We're delighted the South African National Blood Service is taking part in the Missing Type campaign. It doesn't matter where you're from in the world, there will be patients in your country whose lives depend on transfusions. And I really hope that the Missing Type campaign will inspire more people to come forward to start saving lives. Hopefully, by working together, we can reverse the international decline in new donors."

The inspirational story of Maurice Creswick

381

Mr Maurice Creswick, the world-record blood donor, donated his 381st unit of blood at the Linksfield Blood Donor Centre.

The 84-year-old's record of blood donations was recorded in the Guinness World Records in July 2003, when he donated his 336th unit of blood. This makes Maurice the oldest living voluntary blood donor with the most donations.

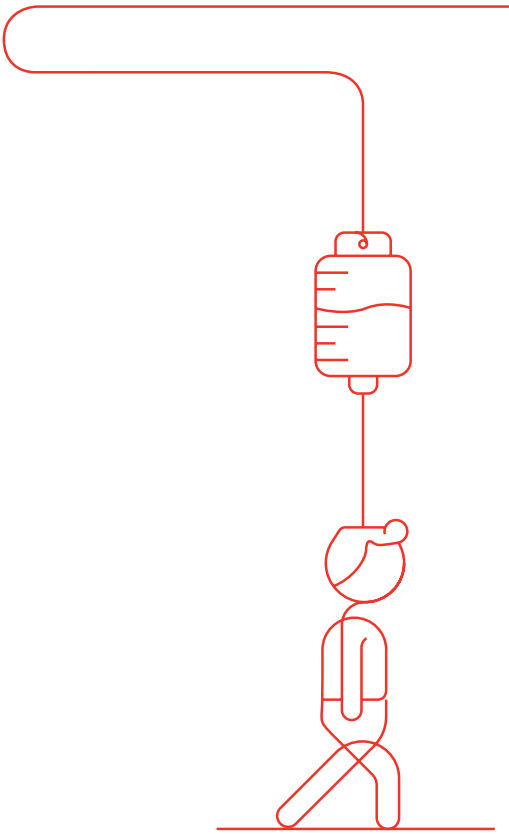
The determined blood donor started donating blood in 1944, when he turned 18 years old. He said that he has always been fond of participating in voluntary humanitarian services.

Maurice received other certificates of recognition from the SA Blood Transfusion Service in 1992 at 250 units of blood, and the SA National Blood Service in 2005 at 350 units of blood. On the day he donated his 381st unit of blood, he encouraged most of the first-time donors who came to donate, to continue donating.

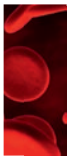
He said that it would be ideal for the young, first-time donors to join the Six Times donations programme, in which you donate blood six times each year.

With 381 pints of blood as an unpaid volunteer, Maurice Creswell is the essence of selfless donation.

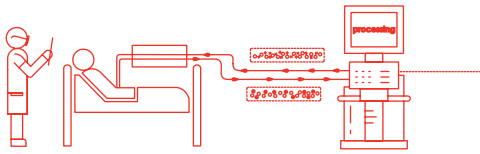
We don't take any chances, so that you can have a second chance



At SANBS we pride ourselves in using the healthiest blood from the healthiest donors and every aspect of the transfusion process is meticulously monitored to ensure the absolute safety of our donors and recipients. Your blood saves lives.



Donor for life Awards



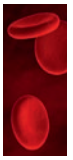
SANBS Vereeniging welcomed over 150 guests to the presentation evening where dedicated blood donors were presented with their medals and gifts for the different milestones.

The different milestones for the night ranged from the Igazi-Madi (meaning Blood) award, which is the first award for 50 units, to the William Harvey award, which pays tribute to people who have made 250 donations.

The proceedings were overseen by our ambassador, Mr Christopher Jaftha, who is also a regular blood donor with 21 blood donations. Making the different addresses were senior SANBS staff members Ravi Reddy (COO), Sr Sarah Tshabalala and Donor Committee member Ms Hettie Gouws. The guest speaker for the evening was Jacob Mohapi, a recipient of blood transfusions. He gave an inspirational speech, talking about his story and how the selfless act of blood donation saved his life after a tragic accident.

Guests were entertained during the evening with a superb musical performance from a talented live band with South African jazz singer Lucia Mthiyane on the vocals. Guests also had an opportunity to enjoy some refreshments and a delicious three-course meal. Some took to the dance floor, where we saw some foxtrot and sokkie.

Board member Alex Christians gave special thanks to all SANBS staff for their continued dedication.



Donor Awards Milestones

CLUB 25 AWARD
Given to a youth who commits at an early age, this award recognises donors who have donated 20 units before turning 26.

IGAZI-MADI MEDAL
Meaning "blood" in Zulu and Tswana, this is the first medal in the range, acknowledging donors who have donated 50 units.

REV. JOHN PENDER-SMITH MEDAL
The award commemorates Rev. Pender-Smith for his contributions over 50 years to the cause of blood transfusion in South Africa. It takes between 15 to 20 years to donate 75 units, which touches up to 225 lives due to the current technology of component separation.

JAMES BLUNDELL MEDAL
This award recognises 100 donations. In 1818, James Blundell performed the first successful transfusion of human blood to a patient who had haemorrhaged badly during childbirth. A pioneer in blood transfusion, he devised various instruments to improve the procedure.

ANTHON HEYNS MEDAL
Recipients of this award have donated 125 times. Anthon Heyns, a haematologist of international repute, was the principal driving force in the establishment of the South African National Blood Service (SANBS). He led the task team that devised the model of the SANBS, and was its first Chief Executive Officer from its inception on 1 April 2001 until his retirement on 31 March 2006.

KARL LANDSTEINER SILVER MEDAL
Recipients represent dedication to the service with 150 donations. Karl Landsteiner, considered the most important individual in the field of transfusion medicine, documented the first three human blood groups, A, B and O, in 1900 which will remain one of the most significant dates in the history of blood and blood transfusion.

COOMBS MORESCHI MEDAL
Recipients of this award capture and display dedication with 175 donations. Carlo Moreschi first published his demonstration of the principle of the anti-globulin reaction in 1908. Almost forty years later, Robin Coombs independently developed the anti-globulin test, which was almost as important as the discovery of the ABO blood groups.

MAURICE SHAPIRO MEDAL
This award honours 200 donations. Dr Maurice Shapiro was one of the pioneers of blood transfusion in South Africa. In 1937, he was one of the founders of the Rand Blood Transfusion Society (later the SA Blood Transfusion Service) of which he was the medical director until his retirement in 1999. He was acknowledged and honoured nationally and internationally for being at the forefront of transfusion practices in South Africa.

PAUL EHRLICH MEDAL
This is awarded to persons who have made 225 donations. Paul Ehrlich (1854-1915) was one of the founders of the discipline of haematology, the branch of medical science concerned with diseases of the blood and blood-forming tissues.

WILLIAM HARVEY MEDAL
William Harvey was an English physician who was the first to describe correctly, and in exact detail, the systemic circulation and properties of blood being pumped around the body by the heart. Recipients of this award have reached 250 donations.

ANTONIE VAN LEEUWENHOEK MEDAL
Recipients of this award best exemplify the spirit of giving, having given 275 donations. Antonie van Leeuwenhoek (1632-1723) gave the first accurate description of red blood cells in 1648, and made a study of the connections between arteries and veins.

KARL LANDSTEINER GOLD MEDAL
This award recognises outstanding lifetime contributions of 300 donations. Karl Landsteiner, considered the most important individual in the field of transfusion medicine, documented the first three human blood groups, A, B and O, in 1900, which will remain one of the most significant dates in the history of blood and blood transfusion.

Movies November & December

ALMOST CHRISTMAS

(Showing Friday 2 December 2016)

A new comedy from writer/director David E. Talbert (Baggage Claim) and producer Will Packer (Ride Along, Think Like a Man series, This Christmas), Almost Christmas tells the festive story of a beloved patriarch who asks his family for one gift this holiday season: to get along. If they can honour that wish and spend five days under the same roof without killing one another, it will be a Christmas miracle. The all-star cast of Almost Christmas is led by Kimberly Elise, Danny Glover, John Michael Higgins, Romany Malco, Mo'Nique, JB Smoove, Gabrielle Union, Omar Epps, Nicole Ari Parker, Jessie T. Usher and DC Young Fly.

FALLEN

(Showing Friday 09 December 2016)

Lucinda "Luce" Price is a strong-willed 17-year-old living a seemingly ordinary life until she is accused of a crime she didn't commit. Sent off to the imposing Sword & Cross reform school, Luce finds herself being courted by two mysterious students to whom she feels oddly connected. Isolated and haunted by strange visions, Luce begins to unravel the secrets of her past and discovers the two men are fallen angels, who she learns have loved her for centuries. Luce must choose where her feelings lie, pitting Heaven against Hell in an epic battle over true love.

PASSENGERS

(Showing Friday 30 December 2016)

A spacecraft transporting thousands of people to a distant colony planet has a malfunction in one of its sleep chambers. As a result, a single passenger is awakened 90 years before anyone else. Faced with the prospect of growing old and dying alone, he eventually decides to wake up a second passenger, marking the beginning of what becomes a unique love story.

FANTASTIC BEASTS AND WHERE TO FIND THEM

(Showing Friday 25 November 2016)

Fantastic Beasts and Where to Find Them is an all-new adventure returning us to the wizarding world created by J.K. Rowling. Academy Award Winner Eddie Redmayne (The Theory of Everything) stars in the central role of wizarding world magi-zoologist Newt Scamander. Fantastic Beasts and Where to Find Them opens in 1926 as Newt Scamander has just completed a global excursion to find and document an extraordinary array of magical creatures. Arriving in New York for a brief stopover, he might have come and gone without incident...were it not for a No-Maj (American for Muggle) named Jacob, a misplaced magical case, and the escape of some of Newt's fantastic beats, which could spell trouble for both the wizarding and No-Maj worlds.

Brand Ambassadors

We are grateful for the help we receive from our ambassadors. SANBS brand ambassadors help us spread the important message of saving lives through blood donation. They are blood donors themselves and are active on social media, recruiting fellow South Africans to become blood donors.

Do you have what it takes to be an SANBS brand ambassador?

Send us a direct message on our Instagram page @thesanbs with your contact details. We will get in touch with you.

METRO POLICE DEPARTMENT

ACCIDENT REPORT

Marco St, Johannesburg, GP

PROCESSED

MPDS4241/E34

TIME: 09:52

All personnel in possession of this document require authorisation to enter information that will bear as witness testimony in the court of law. Please ensure that the information gathered and entered is collected lawfully and entered accurately.

FULL NAME: Melody Phongweni

BADGE NO: 23090231

Incident location Bram Fischer Drive
Bryanston North, Sandton
Johannesburg, Gauteng

Enter GPS coordinates below

2 4 3 2 2 9 8 6 6

This information is to be corroborated by vehicle location

Please enter the facts of the scene as you believe them to be true.

03/04/2016.

On the above date and time I responded to a 10/13 call on Bram Fischer Drive. Upon arrival, I ascertained that the accident victim was a pedestrian who had been hit by an oncoming vehicle, registration number CR43FGGP. She was unconscious and unresponsive. Victim was diagnosed with major haemorrhaging in the abdominal region, leading to substantial blood loss. Both mother and unborn foetus were presumed to be recovering well after having a transfusion of 7 units of type A+ blood. The infant, who was delivered by emergency C-section upon arrival, weighs in at 3.7 kg and is in a healthy condition. All signs indicate that neither have suffered any long-term damage.
Both mother and baby were cleared for release.

BY SIGNING THIS DOCUMENT YOU ARE COMPLETELY HONEST AND WITH FULL KNOWLEDGE AND ACKNOWLEDGEMENT OF THE HYPOCRATIC OATH.

SIGNED BY
D.W SUSAN MODISE.

437 CLAYTON DR
RANDBURG, JOHANNESBURG
GAUTENG
1209

St Michael Mediclinic

THIS DOCUMENT HAS BEEN ISSUED TO ST MICHAEL MEDICLINIC. AS SUCH IS DECLARED FOR THE USE OF INTENDED AUTHORISED STAFF. ANY ABUSE OR FRAUDULENT ENTRY OF THIS DOCUMENTATION IS PROSECUTABLE BY THE LAW SECTION #1344 OF MEDICAL LAW PRACTICE.

Donate now, and help continue someone else's story.
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SANBS

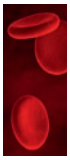
Mags & Jesse's Lifeline

Mags Natasen received a blow during her pregnancy when doctors realised that her unborn child was not growing as quickly as she was supposed to.

Furthermore, the foetal specialist picked up that the child needed a blood transfusion in utero to survive. They had to inject 30ml of blood into the foetus in Mags' womb, which effectively saved the baby's life.

Jesse was born with a hole in her heart and needed further blood transfusions to ensure her survival. She also suffered further health complications that resulted in stunted growth.

Fortunately, through many blood transfusions, Jesse is still alive today, and she and her mother have become ardent advocates for blood donation in South Africa.



Tebogo's Story

When you meet Tebogo Mphahlele, you see a very normal guy. His friendly demeanour and humility are personal attributes that accompany the condition he lives with on a daily basis. Tebogo has a condition known as haemophilia, and he needs blood products in order to survive.

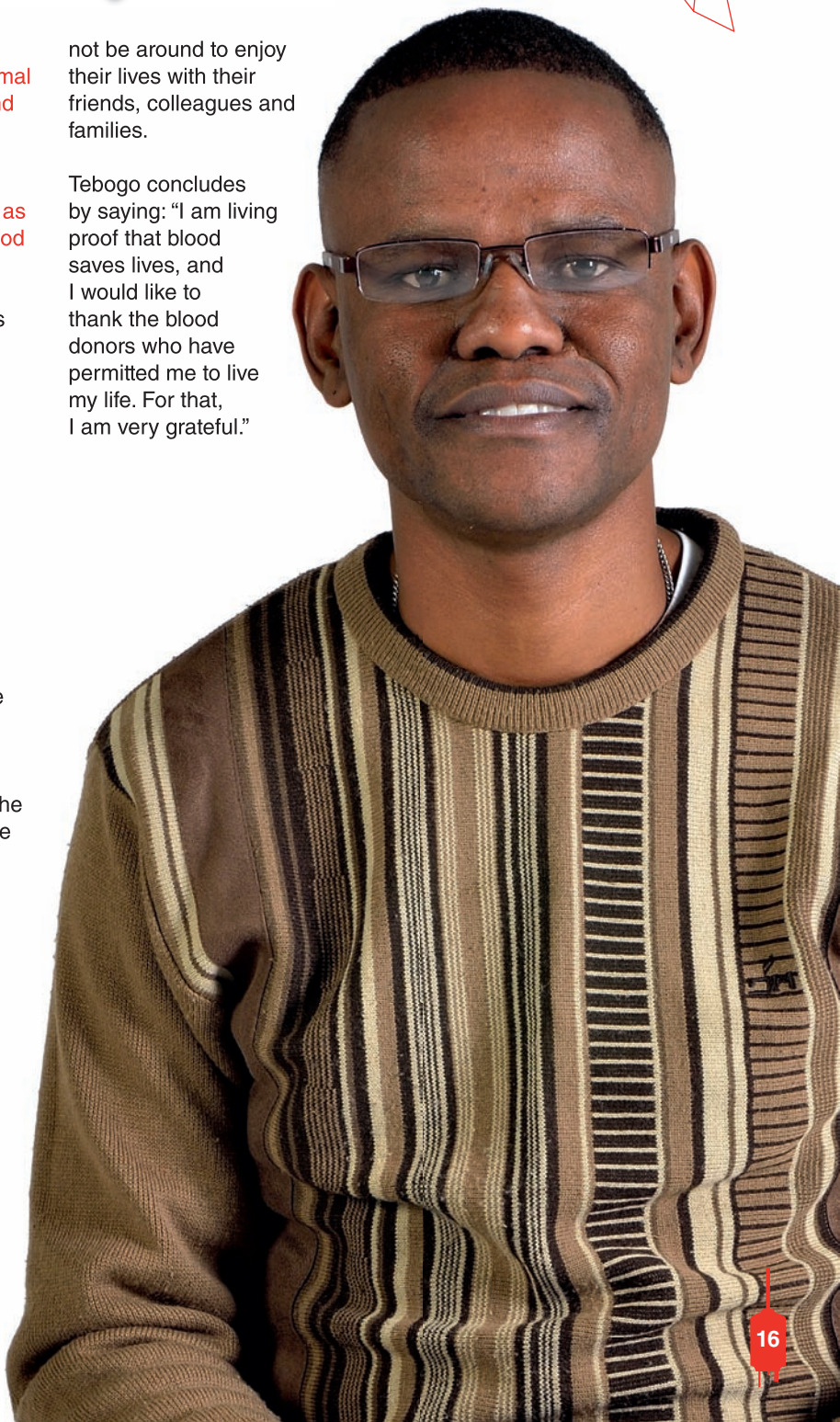
Haemophilia impairs the body's ability to control blood clotting, which normally stops bleeding when a blood vessel is broken. It is treated by replacing the blood-clotting factors in the patient's body. The SANBS is instrumental in the production of these clotting factors, which are made from donated blood.

When he was first diagnosed, Tebogo was told that he could not play contact sports or do many other things that any little boy would normally get to do.

"I was one of those odd kids who couldn't play as much as the other kids. Imagine telling a little boy that he can't play contact sports. Haemophilia basically took away my childhood," says Tebogo. He has subsequently learnt to live with his condition and is an advocate for the cause of blood donation, regularly speaking at formal SANBS events. He's also participated actively in SANBS marketing campaigns.

Without the transfusions they receive from selfless blood donors who so willingly donate the precious gift of life, many people like Tebogo may not be around to enjoy their lives with their friends, colleagues and families.

Tebogo concludes by saying: "I am living proof that blood saves lives, and I would like to thank the blood donors who have permitted me to live my life. For that, I am very grateful."



Focus on Haemo

ophilia

It's a group of hereditary genetic disorders that impairs the body's ability to control blood clotting, which normally stops bleeding when a blood vessel is broken.

What does haemophilia do?
Damage to joints, muscles and other parts of the body.

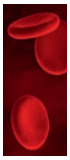
It causes bleeding into joints and swelling of the membrane around a joint. Over time, it can lead to changes in the shape of the joint and impair a joint's function, which subsequently causes disability. Pressure on the joint from swelling can destroy the joint.

How is it treated?
It's treated by replacing the blood-clotting factors. Concentrates of clotting factor are slowly dripped or injected into a vein. These infusions help replace missing or low clotting factor.

Where does the treatment come from?
Clotting-factor concentrates can be purified from human donor blood, or can be made in the laboratory through methods that do not require donor blood. This type of therapy is known as replacement therapy. With clotting-factor concentrates made from human blood, the blood is treated to prevent the spread of diseases such as hepatitis. With the current methods of screening and treating donated blood, the risk of getting an infectious disease from human clotting factor is very small.

Up to a few decades ago, a considerable number of patients with haemophilia died prematurely. Tragically, many deaths were the result of childhood injury or surgery (including circumcision).

Over the past forty years, treatment has advanced so much that the vast majority of patients today are expected to live long and active lives.



Anaemia

Understanding blood.

Blood is made up of the following components that are suspended in a fluid called plasma:

- Red blood cells, which transport oxygen to the tissues in the body.
- White blood cells, which are part of the immune system and defend the body against infection.
- Platelets, which help the blood to clot in the event of injury.
- Proteins and other chemicals, which have various functions.

Red blood cells are made in the bone marrow, and millions are released into the bloodstream each day. A constant new supply of red blood cells is needed to replace old cells that break down within 120 days. Red blood cells contain a protein called haemoglobin, which readily takes up oxygen as it passes through the lung and transports it to all parts of the body.

To continuously make red blood cells and haemoglobin, you need healthy bone marrow as well as nutrients such as iron and certain vitamins that you get from food.

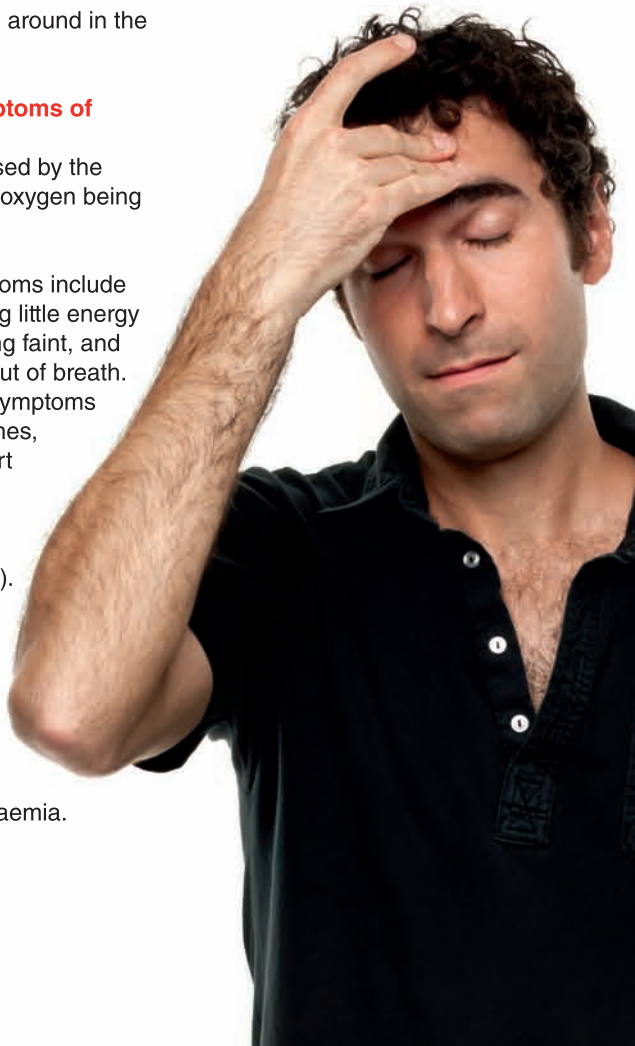
What is anaemia?

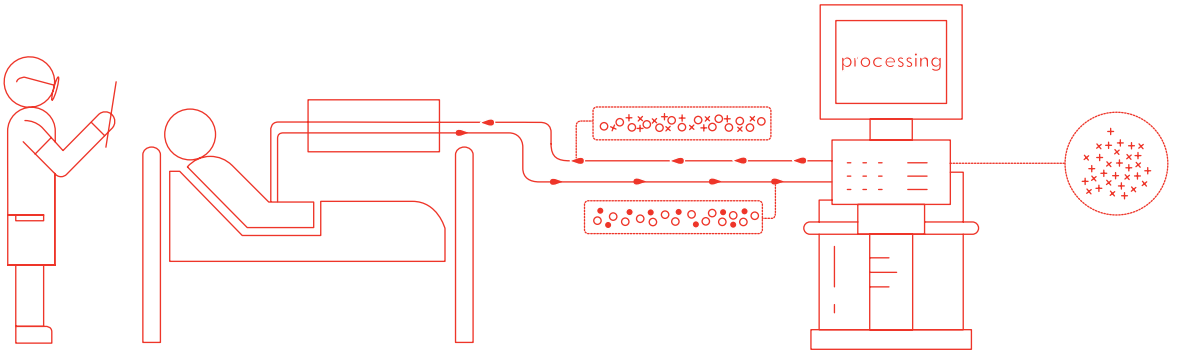
Anaemia means that you have fewer red blood cells than normal, or you have less haemoglobin than normal in each red blood cell. In either case, a reduced amount of oxygen is carried around in the bloodstream.

What are the symptoms of anaemia?

Symptoms are caused by the reduced amount of oxygen being carried in the body:

Common symptoms include tiredness, having little energy (lethargy), feeling faint, and easily running out of breath. Less common symptoms include headaches, a thumping heart (palpitations), altered taste, and ringing in the ears (tinnitus). You may look pale. Various other symptoms may develop, depending on the underlying cause of the anaemia.





What are the causes of anaemia?

Iron-deficiency anaemia

Lack of iron is the most common cause of anaemia in South Africa (Iron-deficiency anaemia = Reviewed by Dr Yasmin Goga MBBCH (Wits), DCH (SA), FCPaeds (SA), Cert Clin Haem Paeds (SA), June 2011). This is called iron-deficiency anaemia. If you eat a normal, balanced diet, it usually contains enough iron.

The following are some reasons that may lead to a lack of iron, resulting in iron-deficiency anaemia:

Pregnancy, or childhood growth spurts – These are times when you need more iron than usual. The amount of iron you eat during these times may not be enough.
Heavy menstrual periods – The amount of iron you eat may not be enough to replace the amount you lose through bleeding each month.
Poor absorption of iron – This may occur with some gut diseases such as coeliac disease and Crohn's disease.
Bleeding from the gut (intestines) – Some conditions of the gut can bleed enough to cause anaemia, and you may not even be aware that you're losing blood this way. The bleeding may be slow or intermittent, and you may pass blood in your stools (faeces) without noticing.
Poor or restricted diet – Your diet may not contain enough iron.

Sickle-cell anaemia

Sickle-cell anaemia is caused by a mutation in the gene that tells your body to make haemoglobin – the red, iron-rich compound that gives blood its red colour.

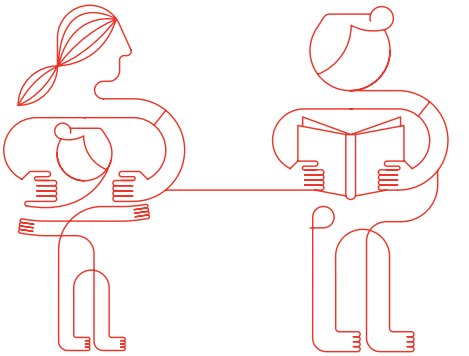
Haemoglobin allows red blood cells to carry oxygen from your lungs to all parts of your body. In sickle-cell anaemia, the abnormal haemoglobin causes red blood cells to become rigid, sticky and misshapen.

The sickle-cell gene is passed from generation to generation in a pattern of inheritance called autosomal recessive inheritance. This means that both the mother and the father must pass on the defective form of the gene for a child to be affected.

If only one parent passes the sickle-cell gene to the child, that child will have the sickle-cell trait. With one normal haemoglobin gene and one defective form of the gene, people with the sickle-cell trait make both normal haemoglobin and sickle-cell haemoglobin.

Anaemia

Understanding blood.



Their blood may contain some sickle cells, but they generally don't experience symptoms. However, they are carriers of the disease, which means they can pass the defective gene on to their children. With each pregnancy, two parents with sickle-cell traits have:

- a 25 percent chance of having an unaffected child with normal haemoglobin;
- a 50 percent chance of having a child who is also a carrier; and
- a 25 percent chance of having a child with sickle-cell anaemia.

Other causes

There are many other causes of anaemia, including the following:

Lack of certain vitamins such as folic acid and vitamin B12 (see the separate leaflets called Folic Acid Deficiency Anaemia and Vitamin B12 Deficiency and Pernicious Anaemia for further information regarding diet).

Red-blood-cell problems such as thalassaemia, sickle-cell anaemia and other causes of haemolytic anaemia. In these conditions the red cells are fragile and break easily in the bloodstream.

Bone-marrow problems

Other conditions such as rheumatoid arthritis and chronic kidney diseases can also cause anaemia.

Finding the cause of anaemia and treating it

A simple blood test can measure the amount of haemoglobin in your blood and count the number of red blood cells per millilitre (ml). Although this test can confirm that you are anaemic, it does not identify the cause of your anaemia.

Sometimes the underlying cause is obvious. For example, anaemia is common in pregnancy and in women who have heavy menstrual periods. In these situations, no further tests may be needed, and treatment with iron tablets may be advised. However, the cause of the anaemia may not be clear, so further tests may be advised.

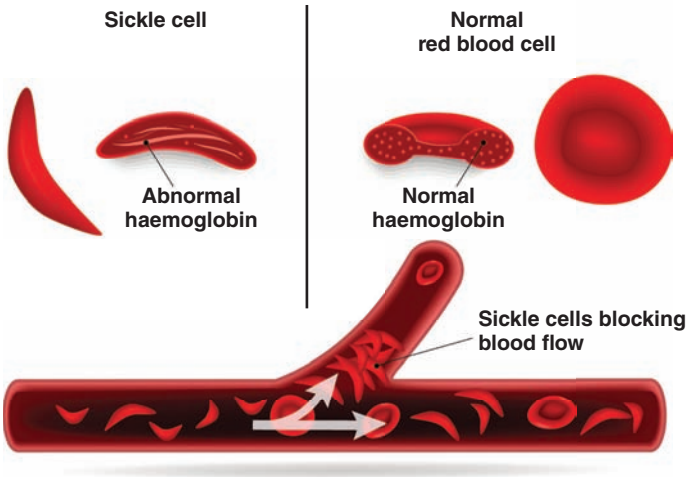
Some causes of anaemia are more serious than others, and it is important to find the reason behind the anaemia.

The treatment of anaemia depends on the underlying cause. For many people, this may be as simple as taking iron tablets. For others, it may be a course of vitamins or other, more complex treatments.

The role of iron

The main role of iron is to carry oxygen around the body. It is a major component of the protein called haemoglobin that carries oxygen from the lungs to all parts of the body. Iron is stored mainly in our liver and muscles.

Iron is found in many foods and is present in two forms: haem and non-haem. Haem iron is better absorbed by the body and is found in animal products such as meat (including poultry) and fish. Non-haem iron is found mainly in plant sources such as beans, pulses and green leafy vegetables. It is also added to many foods such as bread, cereals and flour.



Keeping the balance of iron in the body

In order to maintain the balance of iron in the body, we must match the iron we absorb with the iron we lose. Iron is lost in stools (faeces), urine, skin, sweat, hair and nails. In women, it is also lost during menstruation, which is why women need more iron in their diet.

We need enough iron from our diet to maintain adequate iron levels in the long term. However, the amount we absorb cannot meet our daily iron needs, so the body conserves and recycles iron to ensure there is enough.

If we do not get enough iron, the amount of iron available gradually decreases. Our iron stores are then used to top up the iron needed.

If this continues over time, our stores get used up and iron-deficiency anaemia occurs.

Folic-acid-deficiency anaemia

A lack of folic acid (folate) is one cause of anaemia. The usual cause is not eating enough foods that contain folic acid. It is treated easily by taking folic-acid tablets.

Pregnant women should also take extra folic acid to help prevent spina bifida and other related problems in the baby.

Folic acid is a vitamin that is needed to make new cells in the body, including red blood cells. The body does not store a lot of folic acid.

You need a regular fresh supply to keep healthy. A normal, balanced diet contains enough folic acid. However, a lack of folic acid will cause anaemia and, sometimes, other symptoms.

A simple blood test can measure the amount of haemoglobin in your blood and count the number of red blood cells per millilitre (ml).

Vitamin B12 deficiency

Vitamin B12 is essential for life. It is needed to make new cells in the body such as the many new red blood cells that are made every day. A normal, balanced diet contains enough vitamin B12. A lack of vitamin B12 leads to anaemia and, sometimes, to other problems such as nerve damage and heart disease.

Vitamin B12 deficiency from a lack of dietary vitamin B12 is rare. Vitamin B12 is found in foods such as meat, fish, cheese, milk and eggs. It is generally not found in plant foods, so people who follow a vegan diet or have a poor diet for a long time are at significant risk. Deficiency over a prolonged period of time can lead to pernicious anaemia.

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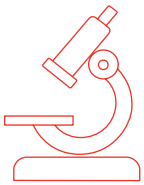
Blood Donation and Transfusion

Is it safe?



This is one of the first questions to arise when the topic of blood donation/ transfusion comes up. It is certainly a very valid question, and a very important one.

In South Africa, we are not only confronted by the widespread HIV/Aids pandemic, but we also face other infections such as Hepatitis B and C, as well as Syphilis, all of which can be transmitted through blood.

It is therefore critical that the South African National Blood Service remains constantly vigilant about the safety of the blood and blood products it ultimately issues to patients.

More than one million blood products are issued to patients in South Africa every year. The SANBS is proud to say that we save hundreds of thousands of lives annually, but without adequate testing and safety precautions, the current good-news story would be a very different tale.

Before blood is collected, every donor is screened individually using a donor questionnaire, to assess if they are leading a safe lifestyle. Unfortunately, this initial screening process is by no means foolproof, so the SANBS still subjects each and every unit of donated blood to a rigorous testing process.

Every day, the SANBS collects about 3 000 blood donations, and three samples from each donation are sent to either Johannesburg's or Durban's testing laboratories. Each donation is tested to determine the blood group.

At the same time, the donation is tested via serological methods for anti-HIV, anti-HCV, Hepatitis B surface antigen (HBsAg) and anti-Syphilis.

Serological methods do not detect the virus directly, but often detect the antibodies that are developed by the body when a person is infected with a virus. In such cases, the blood is discarded.

Serology testing is very effective, but as it does not detect the virus directly, there is still a window period during the early, highly infectious period of the infection. The window period is the time from when a person has been infected to when the virus can be detected via testing. This is the most risky period, as the window period could be between three and eight weeks, depending on the virus.

In order to mitigate this risk, the SANBS was the first blood service in the world to introduce the revolutionary Individual Donation Nucleic Acid Amplification Test (ID-NAT) for all donations. ID-NAT detects the virus directly and therefore significantly reduces the window period to between 2.3 and 10 days, depending on the virus. This reduction has resulted in a tremendous increase in the safety of the blood we issue to patients in need.

The SANBS evaluates new testing methods at least every five years to ensure that the best screening strategy is used to test the donated blood.

The SANBS also performs residual risk analysis annually by different blood donor groups to determine low-risk groups that can be leveraged to collect more donations, and to determine high-risk donor groups, where the risk can be mitigated, by providing additional educational information about risk factors.

Annually, the SANBS tests over 830 000 units of donated blood, and also provides testing support to other SADC countries.The tests, conducted at the SANBS, focus on much more than just the safety of blood. The SANBS also has a highly sophisticated laboratory that carries out specialised testing procedures. This lab rivals some of the best testing facilities in South Africa. The SANBS conducts antenatal testing in most public hospitals in the country.

This testing is done to determine the presence of obstetrically significant antibodies in order to manage and prevent Haemolytic Disease in newborn babies. The SANBS assists the South African Bone Marrow Registry by conducting the testing for human leucocyte antigens, which is a vital step in the bone-marrow-transplant process.

In the next edition of Gaz'lam Magazine, you can read more about all the specialised services offered at the SANBS.

Dr Jackie
Medical Director

Frequently asked questions.

Every year, the South African National Blood Service collects thousands of units of blood from people from all over South Africa. With blood being such a sensitive topic, many opinions, myths and misconceptions arise, and it is the SANBS's responsibility to do its utmost to dispel these misconceptions and myths. We spoke to the SANBS's Medical Director, Dr Jackie Thompson, to answer some of the questions that SANBS employees encounter on a regular basis.

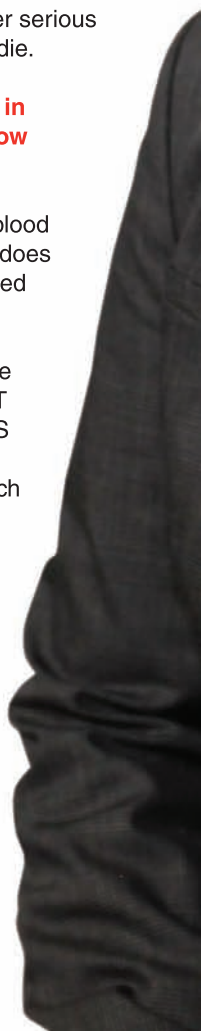
What is the most common reason people can't donate blood, and why?
Having a low iron level is still the most common reason why people are not allowed to donate blood. Iron deficiency could be as a result of ongoing blood loss, poor diet, dietary habits like drinking coffee or tea with your main meals, inadequate vitamin C intake that promotes iron absorption, increased iron requirements by your body such as during pregnancy, or certain medical conditions. The health of donors is very important to the SANBS, and their welfare cannot be jeopardised by extracting red cells (that contain iron) from them if their iron is already below normal levels.

What is your take on the myth that a person cannot contract HIV if they have group O blood?
Although several studies indicated that persons from blood group O may have some resistance to certain forms of Malaria infection, this is not true for infection with the HI virus. HIV infection does not show a different prevalence among different blood groups.

How do we get our blood groups, and why are there different ones?
Blood groups are genetically inherited from both biological parents, as indicated in this article from http://www.pregnancy.org/article/babys-blood-type: "Each parent donates an A, B or O blood group gene to a child. Gene dominance is like cooking with spices. Some are more aggressive than others. Your dish might contain equal amounts of garlic and paprika, but you'll only notice the garlic. A and B genes are both dominant over O genes, which means a child who receives an A blood type from the father and an O from the mother will have an A blood type."

What type of patient needs my blood the most?
The majority of blood products in South Africa are used by women in childbirth, by cancer patients, and by patients undergoing surgery. However, all types of patients may require your donated blood, e.g. paediatric and trauma patients. Remember, irrespective of the type of patient, if there is not an adequate blood supply when the patient needs it, the patient may suffer serious complications or even die.

When I receive blood in hospital, how do I know who donated it?
You will not know who donated your specific blood product. However, this does not matter, as all donated blood products are screened for possible transfusion-transmissible infections using ID-NAT testing, and the SANBS advises all doctors to request a full cross-match and compatibility test when they order your products, to ensure that the product you receive is fully compatible with your body.



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A SIMPLE ACT OF GENEROSITY CAN BE LIFE-CHANGING.

Blood is to the body what water is to plants.
We cannot live without it. Blood transfusions have saved millions of lives and that is why for over 60 years Adcock Ingram Critical Care has committed to producing life-saving products for the storage of blood and blood components. We care about each and every life.

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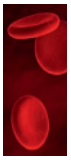
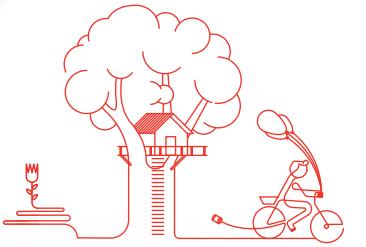
SANBS
South African National Blood Service



Did you know?



Berries for your belly.
Blueberries, strawberries and raspberries contain plant nutrients known as anthocyanidins, which are powerful antioxidants. Blueberries rival grapes in concentrations of resveratrol – the antioxidant compound found in red wine that has assumed near mythological proportions. Resveratrol is believed to help protect against heart disease and cancer.

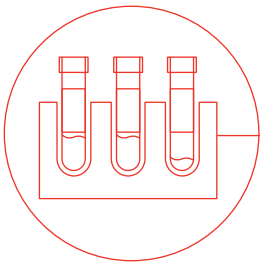
Restrictive diets may cause thyroid problems in children.
Children may develop iodine deficiency if their diets lack salt, dairy products, bread and other sources of the mineral.

Beetroot juice boosts stamina.
Drinking beetroot juice boosts your stamina and could help you exercise for up to 16% longer.

Drink milk and live longer.
Shunned by many as a source of artery-clogging cholesterol, calcium-rich dairy products consumed in childhood may in some cases add years to one's life, reported a study.

Energy drinks boost the brain.
Research shows that sugary drinks can significantly boost performance in endurance events, and so can a tasteless carbohydrate – and they do so in unexpected ways.

10 facts on HIV/AIDS



This fact file provides current data on the disease, and ways to prevent and treat it, as we commemorate World Aids Day on 1 December.

HIV (human immunodeficiency virus) infects cells of the immune system.

Infection results in the progressive deterioration of the immune system, breaking down the body's ability to fend off some infections and other diseases. Aids (acquired immune deficiency syndrome) refers to the most advanced stages of HIV infection, defined by the occurrence of any of more than 20 opportunistic infections or related cancers.

36.7 million people are living with HIV worldwide.

Globally, an estimated 36.7 million (34.0-39.8 million) people were living with HIV in 2015, and 1.8 million (1.5-2 million) of these were children. The vast majority of people living with HIV are in low- and middle-income countries. An estimated 2.1 million (1.8-2.4 million) people were newly infected with the virus in 2015. An estimated 35 million people have died from Aids-related causes so far, including 1.1 million (940 000-1.3 million) in 2015.

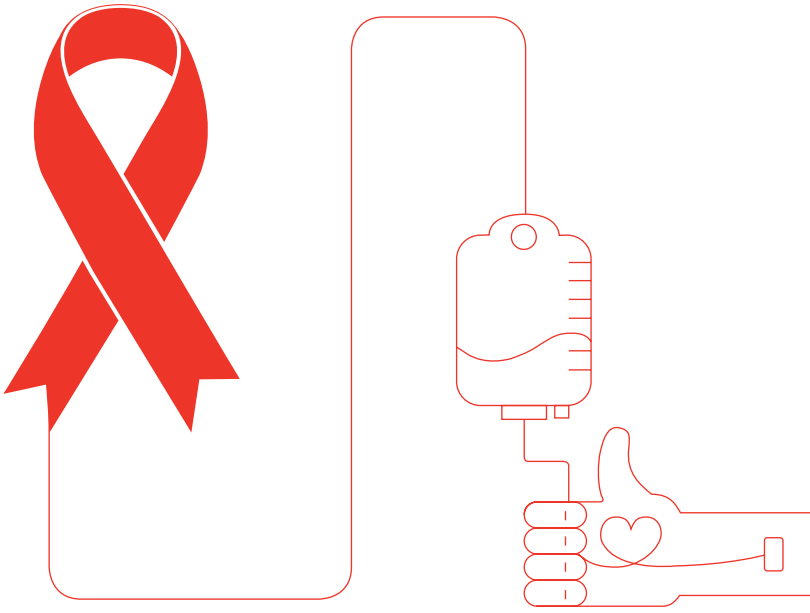
There are several ways to prevent HIV transmission.

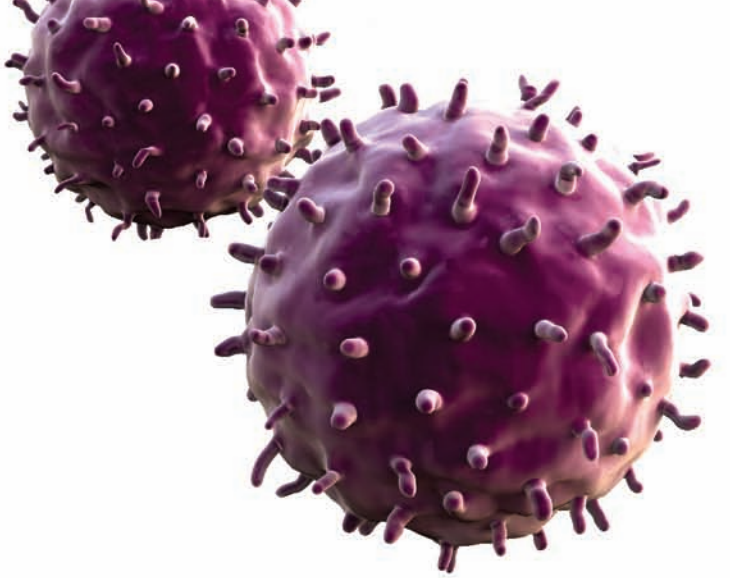
Key ways to prevent HIV transmission include:

- practising safe sex, such as using condoms;
- getting tested and treated for sexually transmitted infections, including HIV;
- avoiding injecting drugs or, if you do, always using new and disposable needles and syringes; and
- SANBS ensuring that any blood or blood products that you might need are tested for HIV.

HIV can be transmitted in several ways, including:

unprotected sexual intercourse (vaginal or anal) or oral sex with an infected person;
transfusions of contaminated blood;
the sharing of contaminated needles, syringes or other sharp instruments; and
the transmission between a mother and her baby during pregnancy, childbirth and breastfeeding.





Combination antiretroviral therapy (ART) prevents the HIV virus from multiplying in the body.

If the reproduction of the HIV virus stops, then the body's immune cells are able to live longer and provide the body with protection from infections. If the HIV-positive partner in a couple is on ART, the likelihood of sexual transmission to the HIV-negative partner decreases dramatically by 96%.

HIV testing can help to ensure treatment for people in need.

Access to HIV testing and medicines should be dramatically accelerated in order to reach the goal of Ending Aids by 2030. Approximately 150 million children and adults in 129 low- and middle-income countries reportedly received HIV testing services in 2014. However, HIV-testing reach is still very limited, as only an estimated 54% of people with HIV know their infection status. The WHO is working to update its guidelines on HIV testing services in 2016, examining innovative approaches such as HIV self-testing.

Elimination of mother-to-child transmission is becoming a reality.

Access to preventive interventions remains limited in many low- and middle-income countries, but progress has been made in some areas, such as the prevention of mother-to-child transmission and keeping mothers alive. In 2015, almost eight out of 10 pregnant women living with HIV (1.1 million women) received antiretrovirals worldwide. In 2015, Cuba was the first country declared by the WHO as having eliminated mother-to-child transmission of HIV and Syphilis. In June 2016, three other countries, Armenia, Belarus and Thailand, were also validated for eliminating mother-to-child HIV.

At end 2015, 17 million people were receiving ART worldwide.

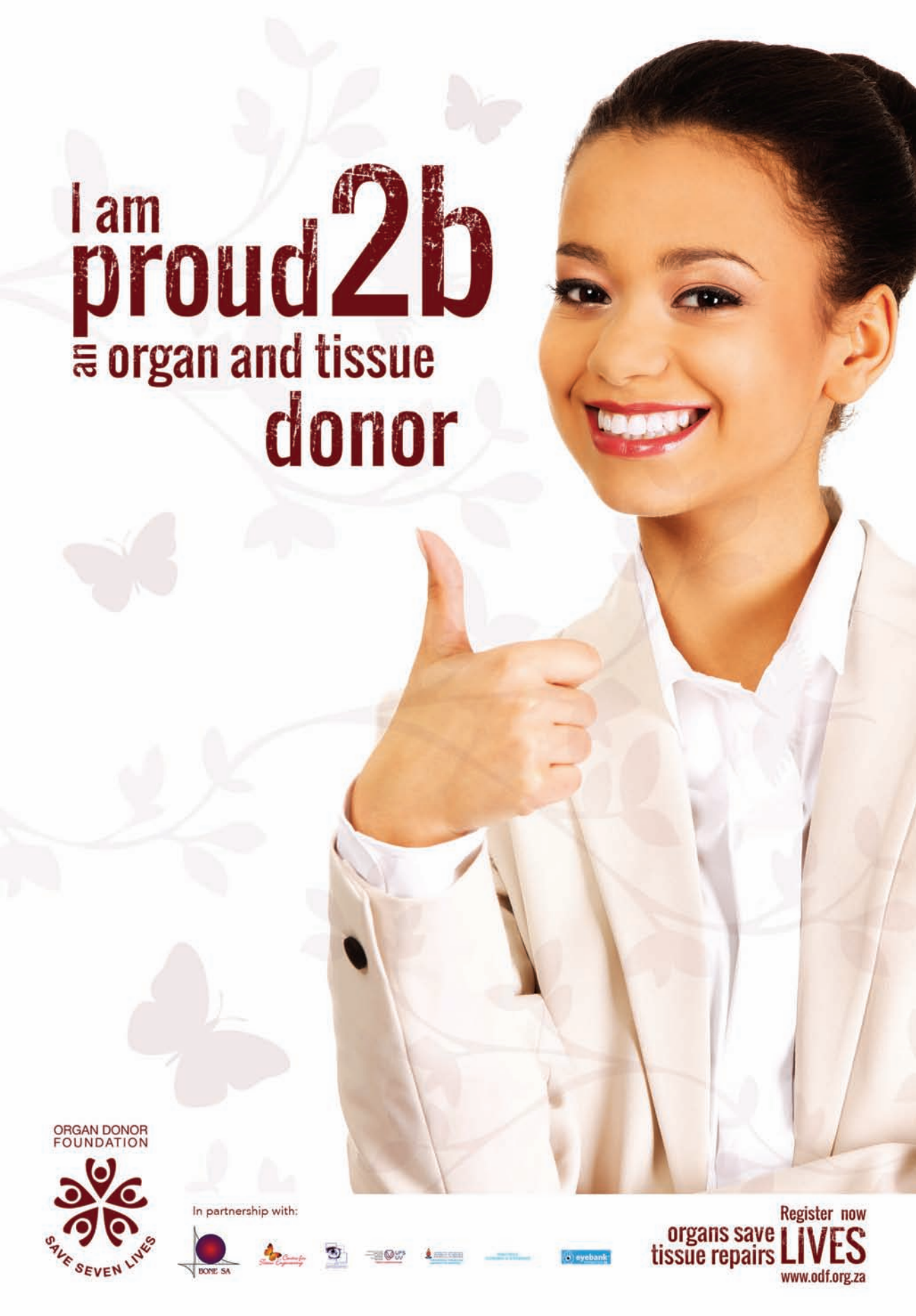
Of these, close to 15.2 million lived in low- and middle-income countries. In September 2015, the WHO issued guidelines containing key recommendations to treat all people living with HIV. They also include new service-delivery recommendations on how to expand coverage of HIV treatment to reach all people living with HIV. Reaching all eligible people with treatment remains a huge challenge.

An estimated 1.8 million children are living with HIV.

According to 2015 figures, most of these children live in sub-Saharan Africa and were infected by their HIV-positive mothers during pregnancy, childbirth or breastfeeding. Close to 150 000 children (110 000-190 000) became newly infected with HIV in 2015.

HIV is the strongest risk factor in developing active TB disease.

In 2014, approximately 390 000 deaths from tuberculosis occurred among people living with HIV. In that year, an estimated 1.2 million (12%) of the 9.6 million people who developed TB worldwide were HIV-positive. The WHO African Region accounted for 74% of the estimated number of HIV-positive incident TB cases.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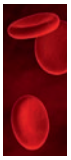


Organ Donor Foundation

Giving the gift of life… after life.

The Organ Donor Foundation (ODF) is a non-profit organisation established in 1988. This organisation generates all its funding from the goodwill of individuals and businesses.

The main objective of the Organ Donor Foundation is to create awareness around the subject of organ donation, and to register as many individuals as possible as organ donors. The Organ Donor Foundation is not a medical organisation, and is therefore not involved in the allocation or procurement of organs or any medical processes involved in the transplantation. There are about 4 300 South African adults and children awaiting life-saving organ and cornea transplants. Organs that can be transplanted include the heart, liver, kidneys, lungs and pancreas.

One organ donor can save seven lives (#SaveSevenLives). The challenge the organisation is facing is recruitment, specifically in the black ethnic group. At this stage, not even 1% of our population is registered as an organ donor. Every day, more critically ill patients are added to the waiting list. This is happening faster than organs are available.

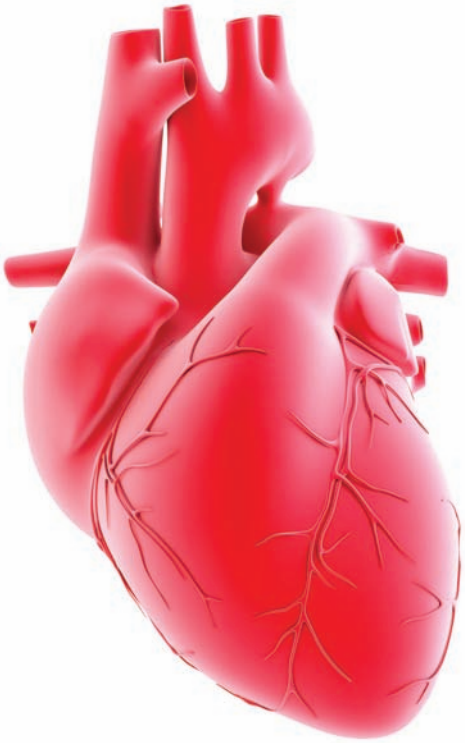
It is possible to be an organ donor, not only after death, but also while you are alive, depending on the organ or tissue required. The organ most commonly given by a living donor is the kidney.

Organ Donor Foundation

Giving the gift of life… after life.

Other donations include parts of the liver, lung or pancreas, or skin donation for serious burn victims. This is common among family members, as the blood groups and tissue types are more compatible and ensure a higher success rate.

Any person who is in good health, and is clear of defined chronic diseases that might adversely affect the recipients, will be considered as a possible donor. Having a medical condition does not necessarily prevent a person from becoming an organ donor. A decision can be made as to which organs can be transplanted. Even as a healthy person, you can decide which organs or tissue you wish to donate.

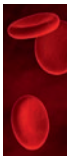


Becoming a potential organ donor can be done in one of these easy steps: Call the Organ Donor Information Line on 0800 22 66 11 or register online at www.odf.org.za.

The removal of organs or tissue without consent is protected by the Human Tissue Act, no. 65 of 1983. You also need to inform your family that you intend to become an organ donor. Some of the information your family needs to know is that this process does not delay your funeral or leave your body disfigured. Many religious affiliations support organ and tissue donation, as they believe in the preservation of life. However, it is important to notify your family to prevent objections due to their traditional or religious beliefs.

Plasma Donation

Hyperimmune plasma.



Plasma Donation

Hyperimmune plasma.

The majority of donors are whole-blood donors. Whole blood is processed into packed red cells, plasma and platelets, which are then infused into patients requiring these specific products. Whole-blood donors may only donate every 56 days.

The plasma portion of a whole-blood donation is made up by the body in a few hours, whereas the red cells take up to six weeks to be regenerated by the bone marrow. Therefore, a minimum span of eight weeks is required between donations.

Plasma donors donate via a process known as plasmapheresis. It's an abbreviation of two words, plasma and apheresis (Greek "apheresis", meaning "withdrawal of"). It is used to denote the withdrawal of plasma from a donor without depleting the donor's red blood cells. Following blood donation via a cell separator, the plasma is separated from the red cells and retained, after which the red cells are reinfused into the donor.

Why is plasma donation necessary?

The procedure is used to obtain antibodies present in the blood donor's plasma. Because the antibodies are carried in the plasma and not in the cells, in plasmapheresis the red cells are returned to the donor and donations may be made as frequently as every two weeks. At present, plasmapheresis is performed on donors who have recently recovered from shingles, or have been immunised against rabies, tetanus or hepatitis B. The antibodies carried in the plasma of these donors are concentrated by a process known as fractionation, and the final product is a clear solution contained in an ampoule.

The product, obtained from donors who have recently recovered from shingles, is administered to children suffering from leukaemia or adults on cancer therapy. Such patients have suppressed body defence mechanisms and are protected by the immunoglobulin from contracting chickenpox, which in these cases could be fatal. The immunoglobulins, made from plasma from donors who have been immunised against rabies, tetanus and hepatitis B, are used to give people immediate protection should they have been exposed to the risk of contracting one of these diseases.

How you can become involved.

If you have been immunised against rabies, hepatitis B or tetanus, or if you've recently recovered from shingles and you meet all the other criteria for blood donation, you can become a plasma donor. If none of the above applies to you but you still want to become involved, you can volunteer to become a plasma donor. The SANBS will provide you with a course of immunisations.

The journey of hyperimmune plasma:

Step 1 A donor decides to get involved in the process and makes an appointment.

Step 2 The donor must meet the appropriate criteria, is assessed and is given either rabies, tetanus or hepatitis vaccines. The donor will also be required to sign a consent form for each vaccination. The donor will then receive his or her first immunisation.

For shingles, only donors who have recently recovered from the condition will be used to create hyperimmune plasma against shingles, and they will not need any immunisations.

Step 3 After seven days, the donor will receive a second immunisation.

Step 4 The third vaccination will take place 21-28 days after the first immunisation.

Step 5 Four weeks after the third immunisation, the donor's antibody level will be tested.

Step 6 If the antibodies are high enough, the donor's plasma will be extracted via plasmapheresis.

Step 7 These donors are able to donate plasma once every two weeks, and ongoing antibody tests will be conducted to ensure that the appropriate levels are maintained.

Step 8 The donated plasma is sent to the National Bioproducts Institute, where it is made into immunoglobulins.

Step 9 These immunoglobulins are then administered to patients who have potentially been exposed to rabies, hepatitis or tetanus respectively.

Anti-D Programme

Anti-D programme.

The SANBS is looking for suitable volunteers to expand its Anti-D Programme, an initiative that prevents Haemolytic Disease of the Newborn (HDN). Volunteers receive a small amount of Rh-positive red cells, which stimulates them to produce anti-D in their plasma. This is then collected via a plasma donation.

What is the aim of the Anti-D Programme?

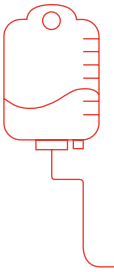
The aim of this programme is to ensure that South Africa will be self-sufficient in the supply of anti-D for the demand that exists.

What is Haemolytic Disease of the Newborn?

HDN is a serious condition, which may occur in babies born to some women who do not have the Rhesus blood group, i.e. Rhesus-negative mothers. Haemolytic disease is caused when a mother develops immunity against her own baby due to the fact that the mother does not have a Rhesus blood group and the baby does have a Rhesus blood group.

These antibodies (immunity build-up against the Rhesus blood group) stay in the mother's blood and will destroy the red blood cells of subsequent babies, causing severe anaemia, jaundice and even stillbirth.

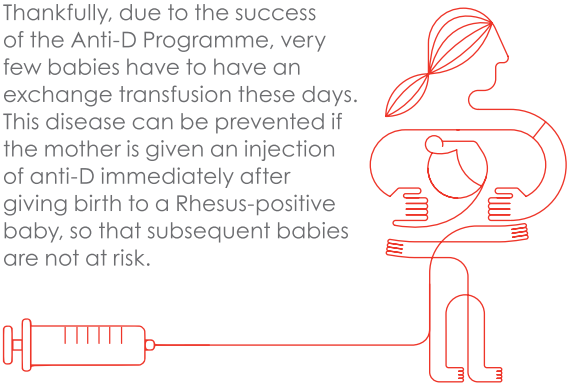
How is this disease treated?



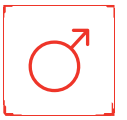
Babies affected by this potentially fatal disease may require an exchange blood transfusion soon after birth. This involves replacing the baby's severely affected blood with donated Rhesus-negative blood to treat and prevent further complications or death of the baby.

How is the disease prevented?

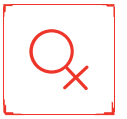
Thankfully, due to the success of the Anti-D Programme, very few babies have to have an exchange transfusion these days. This disease can be prevented if the mother is given an injection of anti-D immediately after giving birth to a Rhesus-positive baby, so that subsequent babies are not at risk.



The requirements for Anti-D are:



Males who are blood group Rhesus-negative.

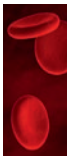


Females who are blood group Rhesus-negative and have been sterilised, have had a hysterectomy or have reached menopause.

Please consider becoming an Anti-D donor.

Please call the Anti-D clinic: 031 719 6895.

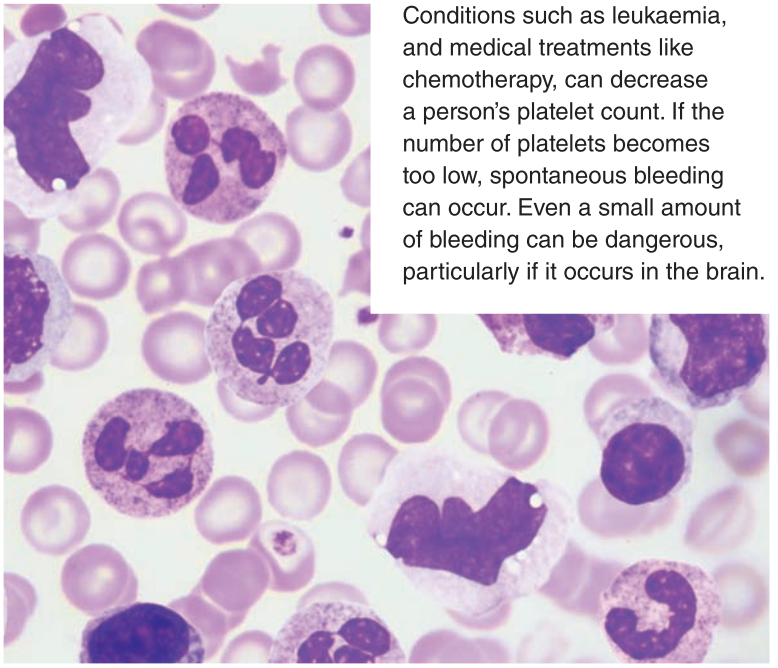
SANBS
South African National Blood Service



Platelet donation

What are platelets?

Our blood is made up of several components: red blood cells, white blood cells, platelets and plasma. Each component has a special function. Platelets are much smaller than red and white cells, and are actually fragments of cells made in the bone marrow. There are about 250 million per millilitre of blood, and their main function is to help clot the blood and seal wounds. If a blood vessel is damaged, platelets clump together to help "plug the leak".



Why do we need platelet donations?

A platelet transfusion can be the difference between life and death. Transfusions of platelets are required for patients:

- who are undergoing chemotherapy for cancer or leukaemia;
- who are undergoing transplantation such as organs or bone marrow;
- with life-threatening bleeding due to trauma or surgery; or
- with severe blood disorders.

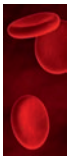
Conditions such as leukaemia, and medical treatments like chemotherapy, can decrease a person's platelet count. If the number of platelets becomes too low, spontaneous bleeding can occur. Even a small amount of bleeding can be dangerous, particularly if it occurs in the brain.

How are platelets collected?

A normal whole-blood donation contains a small number of platelets that can be separated into a "platelet concentrate". However, four to eight times as many platelets can be derived from just one platelet donation. An adult patient typically requires four units of "platelet concentrates" for a single treatment. During a platelet donation, whole blood is drawn from one arm into a sterile kit inside a cell-separating machine. The machine separates the blood so that only platelets and plasma are collected. The other blood components (red cells and white cells) are returned to the donor via the same arm.

Because your red cells are returned to you when you give a platelet donation, you are able to donate as often as every two weeks. Inside the cell-separator is a closed, sterile system of plastic bags and tubing that is used only once and then disposed of. The process is repeated until enough platelets are collected. This takes, on average, a little over an hour.

You can sit back in comfort, watch TV, read a book, or just relax.



Platelet donation

When do we need platelets?

The demand for platelets is ongoing. However, the need becomes more acute around long weekends and holidays such as Christmas and Easter. The limited shelf life of platelets (five days), together with fewer days to donate during public holidays, places extreme pressure on the platelets available to help patients. Unfortunately, holidays can be times when large quantities of blood products may be needed for accident victims.

Are there any side-effects associated with donating platelets?

Healthy people can donate platelets every 2-4 weeks, as platelets are replaced within a few days of each donation. There is a lower risk of iron depletion, because the red cells are returned. Regular blood tests are taken to check if your platelet count is adequate. A small amount of anticoagulant (anti-clotting agent) is mixed with each withdrawal of blood to prevent clotting in the tubing, and some of this goes back to the donor with the non-platelet components. This can sometimes cause a slight tingling sensation around the lips and nose. This is a mild reaction to the anticoagulant, and it subsides after the procedure is completed. The procedure can be stopped early if any reaction causes concern.

Throughout your donation, you will be under the supervision of a trained nurse.

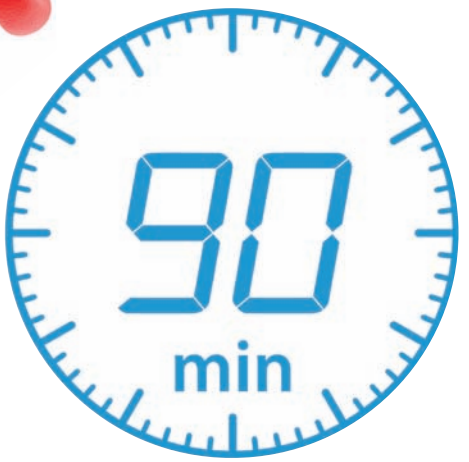
Who can donate platelets?

Registered male plasma donors who have donated plasma in the last 12 months, as long as they are healthy and not on any medication that affects their platelets. Male donors are predominately recruited as a risk-reduction strategy for Transfusion-related Acute Lung Injury (TRALI), a rare but sometimes fatal transfusion complication. It can cause breathing difficulties and low blood oxygen in patients post-transfusion. One of the causes is thought to be antibodies found in the blood of women who have been pregnant.

A platelet donation takes up to 90 minutes.

Generally, a platelet donor must:

- have given at least one successful plasma donation within the previous 12 months;
- be male, aged between 18-70, and weigh over 50kg;
- not have had recent dental work done;
- not have taken aspirin seven days prior or other anti-inflammatory medications three days prior to donation;
- not have any current cuts, abrasions, sores or rashes;
- not have had a recent gastric upset, diarrhoea, abdominal pain or vomiting;
- not have travelled in the previous four months to a country with malarial risk; and
- have plenty of liquid in the 24 hours prior to donation, especially in warm weather, and drink three good-sized glasses of water/juice in the three hours before visiting the Blood Donor Centre.



Other conditions may also affect whether you can donate platelets. As a registered blood donor, these are likely to be noted in your personal record. If you are interested in donating platelets, ask one of our Blood Donor Centre staff members to see if you are eligible.

In the 24 hours before your platelet donation, include foods rich in calcium, magnesium and potassium to your diet, e.g. dairy products, bananas, dates, spinach, cashews, etc.

FREQUENTLY ASKED QUESTIONS

How often can I donate platelets?
Platelet donors may donate up to 24 times a year, with a minimum interval of 14 days between donations.

How long does a platelet donation take?
A platelet donation itself takes up to 90 minutes. You will be asked to undergo a Donor Health Check (as with blood donation) first and encouraged to have a short rest and drink afterwards. You can expect the whole process to take up to two hours.

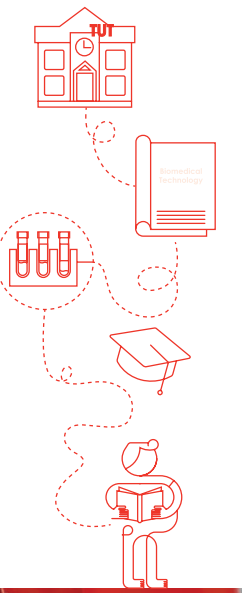
Are the donor eligibility criteria the same for platelet and blood donors?
Eligibility criteria in terms of age and health are the same for blood and platelet donors, but for platelet donation we need to assess your height-to-weight ratio to check your blood.

There is one additional medication rule: you cannot donate platelets if you have taken aspirin, aspirin-containing medications, and piroxicam or nonsteroidal anti-inflammatory drugs such as Ibuprofen, in the last 48 hours. This is because these drugs affect the potency and performance of your platelets.

Once I start donating platelets, can I still donate blood?
Yes. Once you join the platelet panel, we ask you to give platelets only. This helps us maintain our supply of platelets to patients by having a panel of committed donors on whom we can call. If you wish to return to donating blood after donating platelets, then you will need to wait four weeks before donating blood.

What if I change my mind about donating platelets?
You can change your mind at any time. If you do decide that platelet donation is not for you, we hope that you will continue to donate blood.

Is platelet donation safe?
Yes. Platelet donations are performed in a highly controlled, sterile environment by professionally trained staff. All platelet collection equipment is sterilised, and equipment that is in contact with the donor's blood is used only once, eliminating the possibility of transmitting any viral infection.



WHO Update

The topic of discussion is a disease that affects many South Africans: Hepatitis.

A staggering 95% of people infected with hepatitis B or C around the world do not know they are infected. One reason for this is that people can live without symptoms for many years. When they find out they have hepatitis, it is often too late for treatment to be fully effective. As a result, liver damage becomes cirrhosis or liver cancer.

To help countries build up national hepatitis testing and treatment programmes, and to encourage more people globally to get tested, the WHO says that they will shortly release new testing guidelines for hepatitis B and C.

To show how the testing guidelines could translate into real action on the ground, the WHO and its partner, Social Entrepreneurship for Sexual Health (SeSH), recently launched a contest to find real-world examples of innovative ways to reach different populations across various countries and settings, and test for hepatitis.

The #HepTestContest Innovation Contest received 64 contributions from 27 countries. The project selected around 20 of the best approaches to testing for hepatitis, and then whittled down the list to five finalists.

As well as national testing campaigns, approaches included testing in prisons, testing in the workplace and hospital emergency rooms, integrated HIV-hepatitis testing, as well as the use of internet, social media, and electronic medical records to flag higher-risk patients for testing in primary care.

"We needed examples of innovations and best practices to help guide and inspire others," said Philippa Easterbrook from the WHO Global Hepatitis Programme, who co-led the project. The projects from Australia, Ghana, Pakistan, Philippines and Uganda,

the use of an internet-based risk self-assessment tool in the Netherlands, community testing camps for drug users in India, to testing in primary care in Mongolia, we learnt some great lessons about how to build awareness of this hidden disease, improve testing rates and link those infected to treatment and care."

In Manipur, a small state in Northeast India, 92-98 percent of drug users are estimated to have hepatitis C. Although HIV testing is free here, testing for hepatitis is not. Awareness about the virus is low, and treatment is expensive.

A community network organisation, the Community Network for Empowerment (CoNE), led the campaign: "We organised awareness-raising sessions and encouraged free voluntary testing for over a month. Of the 1 011 people tested, just under half tested positive for hepatitis C. We provided post-test counselling and were also able to offer treatment," said Rajkumar Nalinikanta, the organisation's president.

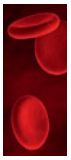
A critical feature of this approach was the strong community involvement and support, as well as strategic partnerships to leverage reductions in the price of treatments. "Bringing together pharmaceutical companies, government, research organisations and communities helped negotiate price reductions to make hepatitis treatments more affordable," says Dr Easterbrook."

Thousands of miles away in the Netherlands, another campaign used an internet-based risk assessment to target populations of people infected with hepatitis C, who were difficult to identify and hard to reach.

"We used social media and the web to draw in people who might be at risk, to undertake a self-assessment in a choice of seven languages," said Janke Schinkel of the Public Health Service of Amsterdam. "The anonymity of the internet helped enormously. This was balanced with highly visible and creative public communication campaigns that reached a cross-section of Dutch society."

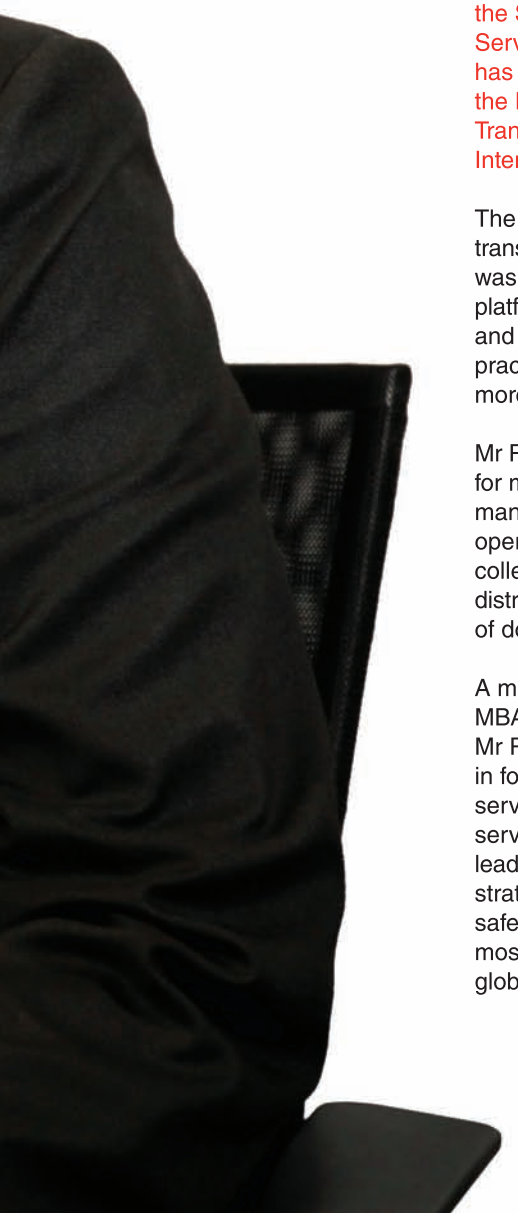
"The contest demonstrated a range of possibilities. It showed that if we can develop acceptable testing approaches to suit different contexts and cultures, then we can increase effective hepatitis testing in more countries and communities," concluded Dr Easterbrook.

These two approaches were among the five finalists selected by a panel of experts, including representatives from the WHO, the World Hepatitis Alliance and Médecins Sans Frontières, who reviewed the testing models for innovation, effectiveness, and plans for sustainability.



Appointment of Ravi Reddy as ISBT President

South African National Blood Service Operations Chief appointed as head of international body.



The Chief Operations Officer of the South African National Blood Service (SANBS), Ravi Reddy, has been installed as President of the International Society for Blood Transfusion (ISBT) at its 34th International Congress in Dubai.

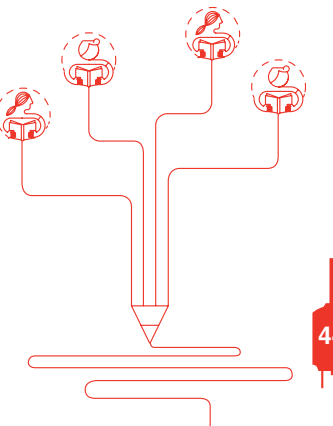
The ISTB, a scientific body for transfusion medicine professionals, was established in 1935 as a platform for exchanging knowledge and advancing blood-transfusion practice. Its membership spans more than 100 countries.

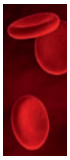
Mr Reddy has served the SANBS for more than 30 years and manages the day-to-day operations of an organisation that collects, tests, processes and distributes more than 800 000 units of donated blood a year.

A medical technologist with an MBA from the University of Natal, Mr Reddy played a critical role in forging a single national blood service from seven regional services. He also provided leadership in shaping the SANBS's strategy for ensuring a consistent, safe blood supply in the country most severely affected by the global HIV pandemic.

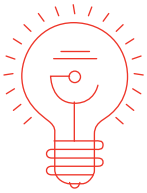
"It is always satisfying to receive a vote of confidence from your professional peers, and I feel privileged to serve the society as President," Mr Reddy said. "But this is genuinely a case where the honour is shared. Without the SANBS's professionalism and reputation for excellence, I would never have been considered for the position."

Mr Reddy represented the African region on the board of the ISBT between 2006 and 2012. He currently serves on the society's Working Party on Transfusion and Transmissible Infections and is an executive committee member of the African Society for Blood Transfusion (ASfBT). He has presented and published a large number of scientific papers, and co-authored the World Health Organisation's publication on screening donated blood for transfusion-transmissible diseases.





Corporate blood drive Spotlight OUTsurance



For the past decade, the SANBS has been cultivating a strong relationship with insurance giant OUTsurance.

Things started off slowly with standard blood drives being the order of the day. Understandably, the results were pretty standard as well. As OUTsurance grew in size, status and innovation, they contacted the SANBS in 2011 with a new proposal. They decided that, instead of arranging monthly blood drives with limited success, they would focus their attention on getting as many staff as possible to donate blood on one day at least four times a year.

This proved to be a huge success, with hundreds of staff (from executive level to the call centre) turning out to save lives. What is even more remarkable is that OUTsurance has continued this trend of saving lives ever since, and is now the top-performing corporate at a single blood drive in the country.

We spoke to the OUTsurance "Gees" and Recognition Manager Eunice McGill to find out how they get their staff so excited about donating blood. She is a real livewire and took our questions to OUTsurance's CEO, Ernst Gouws, and COO, Burton Naicker.

These two bigwigs were happy to give us their answers.

Firstly, why has OUTsurance adopted blood donation as an internal project?
A huge part of our culture is about helping others in our communities, and the SANBS provides a great opportunity for our employees to contribute to our country in a meaningful way – one that could potentially save lives.

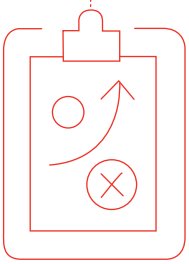
It is amazing how many of your employees are active blood donors. How do you keep the vibe going?
Again, this is largely driven by the culture and the fact that our staff love to be part of such projects, where they can dedicate their time and effort to make a difference in the lives of others.

How important is executive management involvement in ensuring the success of a blood drive?
It is an extremely important occurrence for the management team, and therefore the donations start from the top. Eunice McGill is our dedicated resource who coordinates the event and does most of the marketing well in advance. She ensures that we have a great vibe and that attendance on the day is at its max.

What message would you send to other corporates out there?
By now we all know the importance of consistently donating blood. We have the resources and opportunity in the corporate arena to help save many more lives, so let's encourage even more of our employees to get involved by donating as often as we can.

Every year, OUTsurance blood drives contribute approximately 3 500 units of blood to the national blood supply. Not only does this equate to one full day's blood stock, but OUTsurance employees could potentially save a total of 9 000 lives every year.

Thank you, OUTsurance.
Your blood really does save lives.



Paying **too much** for car insurance? **Switch** to OUTsurance and **save!**

Hatchback

2016 VW Polo Vivo GP 1.4 Conceptline

Premium: **R 763 pm**
OUTbonus: **R 2 915**

29 year-old male | Hail damage cover included

SUV

2016 Ford Ecosport 1.5 Ti-VCT Ambiente

Premium: **R 525 pm**
OUTbonus: **R 2 002**

40 year-old female | Hail damage cover included

Sedan

2016 Toyota Corolla Quest 1.6

Premium: **R 425 pm**
OUTbonus: **R 1 622**

70 year-old male | Hail damage cover included

SUV

2016 Jeep Renegade 1.4 TJET LTD

Premium: **R 765 pm**
OUTbonus: **R 2 920**

43 year-old female | Hail damage cover included

Sedan

2016 Mercedes Benz CLA200 A/T

Premium: **R 755 pm**
OUTbonus: **R 2 881**

48 year-old female | Hail damage cover included

Bakkie

2016 Ford Ranger 2.2TDCi XL

Premium: **R 786 pm**
OUTbonus: **R 3 002**

39 year-old male | Hail damage cover included

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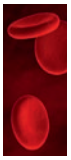


SANBS Procurement

SANBS Procurement seeks to introduce accepted best practice principles while also addressing the preferred procurement policy objectives.

The process commences with the description of user needs, taking into account the strategic business needs enumerated in the budget while taking into account the outcomes of actual expenditure.

It then proceeds to the acquisition and logistics management, where the service provider or supplier is managed to ensure quality service and product delivery.

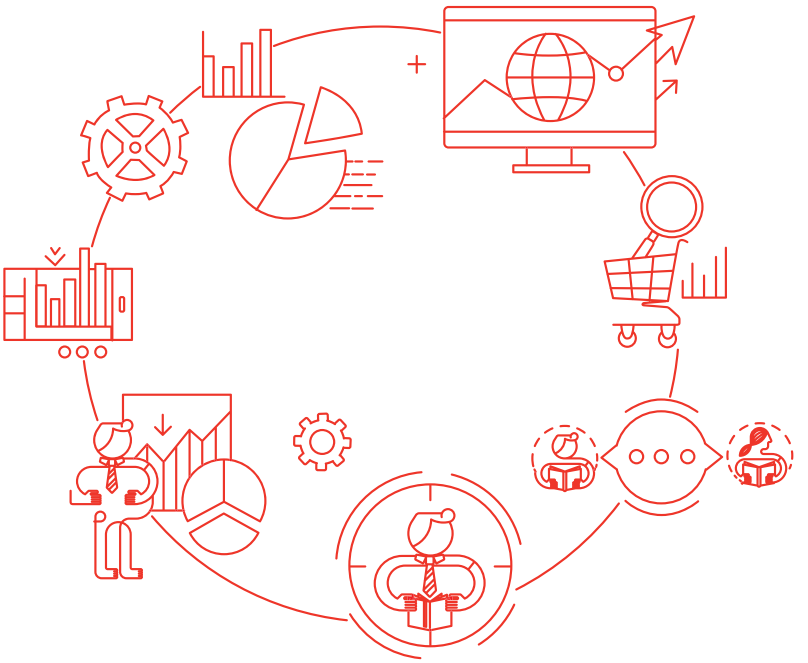
The procurement policy within the SANBS has been developed to ensure that emphasis is placed on compliance to the relevant sections of legislation, regulations and prescripts. The policy ensures that all employees of the SANBS have proper guidelines to follow when involved in procurement processes of goods, services and works.

The process is supported by the necessary infrastructure such as the relevant Procurement Committees, the Procurement Manager and users.

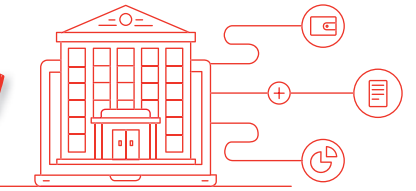
It is SANBS policy to also prepare procurement plans for the year, regardless of amount, in order for the Procurement Division to manage the procurement process more efficiently and effectively.

All SANBS staff associated with procurement commit to conduct themselves in a fair and reasonable manner.

The governance policies in place ensures that the SANBS remains committed to economic growth in the country by implementing measures to support industry generally, and especially to advance the development of small, medium and micro enterprises and historically disadvantaged individuals.



SANBS Donor Centre revamp



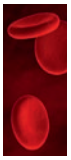
The SANBS is embarking on a major revamp project in its donor centres.

Every two months, our donors spend thirty minutes to an hour at our donor centres, selflessly giving the nation the opportunity to have further life experiences. We want to create an enjoyable experience for them.

We want them to feel appreciated for the gift of life that they give to the nation.

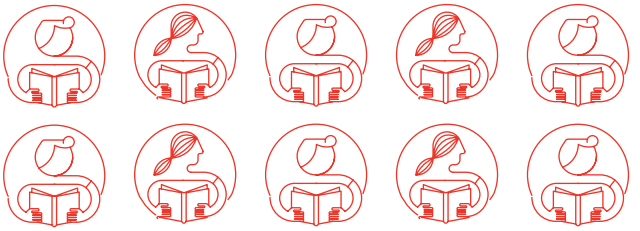
The environment will be warm, with inspiring quotes and educational illustrations with a playful twist. The space will be relaxing while they share a part of themselves.

We have more than 80 donor centres across the South African landscape, and the revamp is currently taking place in phases until we get to the last one.



Donor Committees

Join the SANBS team today.



Have you thought about how you could do things a little better?
Have you thought about how your inputs could make a bigger impact? You can join the SANBS team by joining a donor committee.

The basic governance of the SANBS is dependent on blood donors, and assistance from all members of the community is required to ensure that the SANBS is represented appropriately by its donors.

It is thanks to volunteers such as these that the SANBS is the world-class organisation it is.

So, how does the structure work, and what is expected from its volunteer donor committees?
The SANBS has three donor structures. These structures are the National Donor Council, Zone Donor Committees and Donor Branch Committees. All these structures comprise existing blood donors.

The National Donor Council
The Council comprises blood donors elected from each of the Zone Donor Committees. The Council meets with the Board at least twice a year. Their main functions are to appoint the Non-executive Donor Directors of the SANBS, receive the Annual Report and appoint the auditors.

The Council also assists blood donors and potential blood donors by:

- establishing and promoting a culture of accountability, quality, and excellence;
- monitoring donation outcomes and performance;
- identifying opportunities for donation-process improvement;
- representing the views and requirements of donors and potential donors;
- acting as advocates on behalf of donors and potential donors; and
- utilising the experiences of donors in order to educate prospective donors, increase awareness of the needs of donors and those considering donation, and assist in enhancing the donation process.

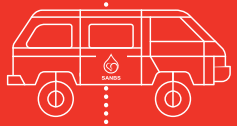
Zone Donor Committee
Each zone has a Zone Donor Committee with two members who are elected from each branch. Members are blood donors, and their main role is to assist zone management in advancing the aims of blood donation and assisting with operational activities, when called on to do so.

Branch Donor Committee
There are 31 Branch Donor Committees within the seven SANBS zones. These Branch Donor Committees play an important role in recruitment and retention strategies for donors in their communities, and are supported by the local donor operational staff. They elect and appoint members to the Zone Donor Committees.

Journey of Blood

A unit of blood is drawn from a volunteer donor.

Blood is collected into a sterile bag and labelled.



Units are transported to the nearest SANBS testing and processing lab.

In the processing laboratory, blood is spun down in a centrifuge and then separated into its different components.

Plasma
Contains proteins and clotting factors used to treat patients with massive bleeding or clotting factor deficiencies.

Red blood cells
Contain haemoglobin, a protein that carries oxygen throughout the body. Used to treat patients with anaemia or blood loss due to trauma or surgery.

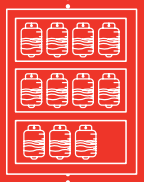
Platelets
Crucial in helping blood clots. Patients with low platelet levels often suffer from bruising and bleeding.

Blood is tested to ensure that it is safe for transfusion.

Local hospitals place orders with SANBS for blood products based on their needs.

Blood products are stored prior to transfusion. The shelf life of blood is limited.

Platelets expire in 5 days. Red blood cells expire in 42 days. Plasma has a 1 year shelf life from the day of collection.



Blood is transfused to patient in need. Just one blood donation has the potential to save three lives.

SANBS
South African National Blood Service

Your blood saves lives.

Lions Rugby Activation

The SANBS joined forces with the Emirates Golden Lions to promote blood donation. With the support of one of the hottest domestic teams in the world, the SANBS wanted to touch spectators at the iconic Emirates Airline Park, where the Springboks famously won the 1995 Rugby World Cup.

The SANBS assembled 30 under-10 rugby players and gave them the opportunity to play on the hallowed Ellis Park turf as a curtain-raiser to the Super Rugby Clash between the Argentinian Jaguares and the Emirates Golden Lions.

The excitement was tangible as the 30 rugby stars lined up in their SANBS-branded jerseys, which represented the Jaguares and the Lions respectively.

When they took to the field they instantly tugged at the heartstrings of the 20 000-strong crowd. Their game culminated in a spectacular try by the SANBS Lions Team.

The Emirates Lions were clearly inspired by their younger counterparts, and trounced the Jaguares 80 minutes later with a resounding 52-24 victory.

The message we conveyed was "Donate blood today and give tomorrow's rugby stars a future", because without blood donors the future of our youth may not be a reality.

BRAND Story

Every day, thousands of South Africans make donations to the South African National Blood Service. These donors don't just give us their blood. These remarkable human beings give so much more.

Selflessly, without praise or compensation, they donate experiences, opportunities and potential. They donate blank pages onto which others can now write new chapters.

Thanks to our donors, an old woman has the chance to knit a jersey for her grandchild, a young man gets to marry his childhood sweetheart, and a little girl has the opportunity to win first prize at her school science fair.

These stories are at the heart of everything SANBS does. It's the reason we get up every morning and never look at a blood bag as just a pint of blood. Instead, we see a lifeline which extends from one human to another, and continues on to form the lines of the pages on which new stories can be told.

A blood donation seems like such a small act and yet it has incredible significance. It allows stories like these to live.

BECAUSE AT THE END OF THE DAY, IT'S NOT BLOOD. IT'S LIFE.

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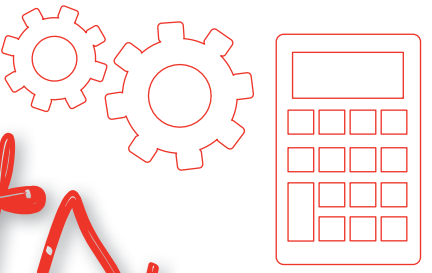
Each unit of blood measures a little less than half a litre, and is processed to produce various blood products.

Every unit of blood is estimated to benefit three individuals.

SANBS facts and figures



Voluntary, unpaid donations account for 100% of this life-giving supply. South Africa is one of only 62 countries globally that is able to meet its blood needs entirely through unpaid, voluntary donation.

The SANBS collects more than **800 000** units of blood a year.

Donors come from all walks of life. Some are more active than others, and most are repeat donors. In order to ensure they're able to continue donating for many years, donors are only permitted to donate once every 56 days.

Each unit of blood measures a little less than half a litre, and is processed to produce various blood products. Every unit of blood is estimated to benefit three individuals.

Blood is critically needed for a wide range of medical procedures. Besides its well-known use in emergency medical care, blood is essential during many forms of surgery, when mothers haemorrhage during childbirth, and in order to replenish the blood of people battling leukaemia, other cancers and other blood disorders.

The SANBS operates in all provinces, except the Western Cape, and has 87 fixed donor centres where donors can schedule donations at their convenience. The SANBS also has about 100 mobile blood drives a day at institutions, workplaces, shopping malls and other places frequented by large numbers of people. Collectively, they strive to collect 3 000 units of blood a day.

Despite South Africa's very high prevalence of HIV, the SANBS has an outstanding safety record. Ten years ago, the service adopted a super-sensitive blood-screening system known as nucleic acid testing.

The SANBS is striving to develop a blood donor base that matches the diverse nature of our population. This means growing the number of young donors and black donors. In recent years, the number of black donors has been increasing steadily, and currently four out of 10 blood donors are black.

Although the SANBS has been able to meet its recent targets for the total amount of blood donated, our population is growing and, along with it, the demand for blood products. The service is using innovative ways to reduce wastage of blood by health institutions.

The long-term answer to meeting increasing demand lies in the hearts and veins of present and future donors. More frequent donations by occasional donors would make South Africa blood-secure in the medium term, but new donors who are committed to making at least four donations a year, are the key to the future.

Blood donation is a time-honoured South African tradition epitomised by 89-year-old Maurice Creswick, who began donating at the age of 16 and has 407 donations to his name. He holds the Guinness World Record as the individual who has sustained donations over the longest period of time.

WOMEN

THE BEDROCK OF THE BLOOD SERVICE

The SANBS collects about 800 000 units of blood each year, of which about 57% is donated by women.

Despite being more prone to deferrals from donating blood due to pregnancy, menstruation and conditions like anaemia, these women still commit to donating blood every 56 days.

One such woman is 75-year-old Eleanor Joubert, who has kept 252 donation appointments since 1959.

Because of women like Eleanor, the SANBS is able to meet its daily target to collect about 3 000 units to meet the demand for this life-saving resource. "Women are the backbone and bedrock of our nation. That's why, at the SANBS, we appreciate their contribution to ensuring that we can maintain an adequate, safe blood supply for all South Africans," says SANBS spokesperson Vanessa Raju.

Each unit of blood collected is estimated to benefit about three people with varying medical needs. Over the years, Eleanor's donations are likely to have improved the quality of life of 750 individuals, including cancer patients, mothers who haemorrhaged at birth, and accident victims.

The mother of four is delighted to be honoured by the SANBS for reaching this milestone, but what means even more to her is the ability to consistently impact the lives of hundreds of people and their families.

"I started donating after someone came to the office and educated us about blood donation. After the talk, I felt inspired to donate. From the first time I was hooked, and I am proud that I have helped so many people," says Eleanor.

SANBS

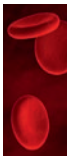
South African National Blood Service

It's official

We're now on

Instagram

follow @thesanbs



SANBS Advertising Awards

The SANBS and DDB South Africa win in 2016.

Every time people sit down to donate blood, it leads to lives being saved. In fact, three lives can be saved with one donation.

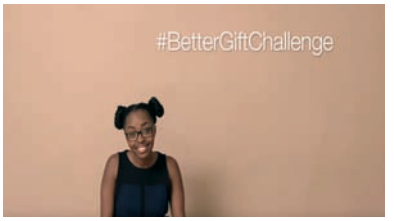
The idea "Sit down and save lives" has not only helped save lives, but has also won several creative awards for 2016.

The activation won a Silver Loerie in the Communication Design: Poster and Billboard category, while at the African Cristal Festival, we won Silver for Outdoor and Gold for Promo and Direct Marketing.

In the end, however, this campaign helped save the lives of hundreds of people, and that's the biggest achievement for the SANBS.

The SANBS and their advertising agency, DDB South Africa, also won Bronze at the prestigious 2016 APEX awards in the Change category for their entry titled #BetterGiftChallenge, as well as a special award for Most Ingenious Response to Limited Advertising and Research Funds.

We all receive "bad gifts" at some point over the Festive Season. Sometimes, we may even be the guilty party ourselves. Using this insight and topical reality, DDB created "The Better Gift Challenge", a Facebook-driven campaign in which the target audience was asked to challenge those people guilty of giving them a bad gift, to rather become a blood donor this Christmas – and give the gift of life. The challenge came to life via five short videos, hosted online and promoted through Facebook.



Our new look

When you donate blood, you don't just save a life, you give someone an entire lifetime in which to live out their hopes and dreams. Our silver Loerie-winning design talks directly to this, with a campaign that was applied to a wide range of mediums, from corporate identity through to brand collateral.
Using a simple red line to represent the lifeline of blood, it demonstrates how blood connects us all. It is this powerful graphic device that becomes the central theme for the campaign.

Blood types

Blood Type	**Donate** blood to	**Receive** blood from
A+	A+ AB+	A+ O+ A- O-
O+	A+ O+ B+ AB+	O+ O-
B+	B+ AB+	O+ B+ O- B-
AB+	AB+	Everyone
A-	A+ A- AB+ AB-	A- O-
O-	Everyone	O-
B-	B+ AB+ B- AB-	O- B-
AB-	AB+ AB-	A- O- B- AB-

Season's Greetings

SANBS
South African National Blood Service

May your holidays be happy days filled with love and laughter.

Thank you for all your support.

All the best for 2017!

It's not just blood.
It's saving a nation.

Donate blood. Your blood saves lives.

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DDB SA 45386