Life.

GIVE BLOOD. GIVE LIFE.
YOU’VE EARNT IT, NOW SHARE IT.

The best biscuit you’ll ever eat is the one you get after saving three lives.

Share your experience to encourage family and friends to see for themselves that giving blood feels good.

@redcrossbloodau
#save3lives
Plasma recipient: Brodie has an immune deficiency and has received weekly infusions of immunoglobulin made from donated plasma since eight weeks old. He will continue for the rest of his life or until a match is found for a bone marrow transplant.

Demand for plasma products is outstripping supply across the world. The world is essentially experiencing a plasma boom.

You might have heard us mention, once or twice, that the demand for plasma is on the rise. Here’s what you probably already know about plasma.

We know, you know, that plasma saves lives. If you’ve donated before, you’ve heard plasma donations take a little longer and involve a slightly different process. We hope you know plasma is the gold part of your blood — that’s why we call it liquid gold.

There’s a good chance that someone has mentioned plasma donation can be used to make 18 different products. (If you’re thinking, “It’s 17!” you were right, but doctors recently discovered one more.)

But here’s what you might not know. Plasma is the most versatile component of your blood. It carries your red blood cells, white blood cells and platelets around your body. The average adult has approximately five litres of blood in their body, of which about three litres is plasma. It has really important proteins, nutrients and clotting factors that help prevent or stop bleeding.

So why does Australia need so much of it?

As we mentioned, it’s already used to make 18 different products. Once you donate plasma, the Blood Service tests it, processes it and sends it away to be made into these lifesaving products. It’s then used to treat people with bleeding disorders, immune deficiency disorders and burns victims, to name a few. It is also the only blood product used for preventative medicine — to make vaccinations for tetanus, chicken pox and hepatitis B.

That’s a lot of plasma just there and the demand keeps getting bigger.

The number of plasma donations in Australia is growing by an average of 14 per cent per year. This year alone, Australia’s patients will need more than 500,000 plasma donations. Clinicians are continuing to find more uses for plasma and, with an aging population, more and more people are needing plasma treatments.

In fact, it’s not just in Australia that we need more plasma. Demand for plasma products is outstripping supply across the world. The world is essentially experiencing a plasma boom.

So what does that mean for the Blood Service? Well that’s where our wonderful donors come in.

We’re asking more and more donors to give plasma donations to help us meet this increased demand. Normal blood donations, or as we call them ‘whole blood’ donations, do contain plasma, but we can collect twice as much plasma in a plasma-only collection.

We call this process apheresis.

An apheresis plasma donation takes an extra half an hour. During this time a separating machine collects your blood, keeps your plasma and returns your other blood components (red cells, white cells and platelets) to you.

Becoming a plasma donor is pretty simple: if you’ve given a whole blood donation in the past two years, you’re aged between 18 and 65 (men) and 20 and 65 (women) and you weigh more than 50kg, there’s a good chance you’re already eligible.

If you’re in the three percent of the population that has an AB blood type, your plasma is even more valuable than the rest of your blood. While it’s common knowledge that O negative is the universal blood type, when it comes to plasma both AB negative and AB positive can be given to any patient in need.

As a plasma donor you can donate as often as every two weeks. This means you can save even more lives because you can give up to 25 blood donations a year. It also means you can visit your donor centre more often to get your hands on Australia’s “best biscuit”.

So next time you see a nurse eyeing off your veins, don’t be alarmed. Take it as a compliment; they’re probably thinking what a great plasma donor you’d make.
Blood supplies have started flying high across New South Wales, with several emergency aeromedical services introducing vital blood supplies on board.

Emergency intensive care treatment and blood transfusion is critical for people in remote areas, particularly in circumstances of severe bleeding from incidents such as car crashes, farming accidents or complications during childbirth.

Blood donors are playing a role in these rescue missions, with out-of-hospital emergency care being delivered directly to those in trouble.

O negative blood supplies were introduced on board the Westpac Life Saver Rescue Helicopter in June and are already saving lives, including that of northern New South Wales shark-attack victim Mathew Lee.

Mathew was attacked by a great white shark in the water off Lighthouse Beach in Ballina in early June, sustaining significant blood loss and suffering cardiac arrest.

His friends pulled him from the water and used leg ropes to stop the bleeding, while a resident who was walking on the beach called triple zero.

At the scene paramedics were able to administer two units of blood that were stored on board the helicopter, which saved Mathew’s life.

It took paramedics and ambulance officers an hour and a half to stabilise Mathew enough for him to be airlifted to the Gold Coast University Hospital by helicopter, where he received further blood transfusions.

In a twist of fate, the Westpac Life Saver Rescue Helicopter had only started carrying emergency blood supplies days earlier, following work with the Ambulance Service of NSW to have emergency blood supplies carried on each flight.

The 32-year-old body boarder is now on the road to recovery.

The emergency blood type O negative is stored in a special box (much like an esky with enhanced features) at about minus 25 degrees.

The blood box technology, otherwise known as a Credo box, came out of the US military’s involvement in the Afghanistan war and it was this system that enabled the medical team to administer blood to Mathew.

The Royal Flying Doctor Service (RFDS) has also started carrying blood on board planes. Flight nurses and retrieval doctors can perform blood transfusions on patients suffering persistent life-threatening bleeding, all whilst in the air.

RFDS doctor, Peter Brendt, says it’s great news for remote communities as there have been many occasions in the past where patients have had to wait until they arrive at a hospital for a potentially life-saving transfusion.

“It was really badly needed because if you think about trauma care you try to give blood as early as possible, if necessary,” he said.

“Our 24/7 aeromedical emergency services are critical for bringing first-class health services to people in the bush so we were very happy to be part of this project.”

Among the equipment needed are facilities to keep blood cool, but also to warm it up prior to a transfusion. Blood eskies and blood warmers have helped make this new service possible.

The blood products are monitored daily and rotated regularly with blood stores in local hospitals. O negative is in demand for this service, as it is the universal blood type given in emergency situations.

To find out more about supporting these services, visit rescuehelicopter.com.au or flyingdoctor.org.au
Woolworths Queensland staff members from the Head Office in Acacia Ridge and throughout the state are uniting in a fresh effort to save lives.

They’re being encouraged to join Red25, the Blood Service’s unique giving program which rallies groups and organisations around the country to achieve 25 percent of all blood donations.

Australia needs 1.3 million blood donations each year and currently 16 per cent of those come from group donations — which makes 25 per cent an ambitious goal. However, Woolworths Queensland General Manager of Store Operations, Michael Batycki, believes his team is up to the task.

“It was the staff members’ idea to join Red25 and donate blood together as part of our organisation’s social responsibility program.”

“We know that thousands of people need blood every day and we want to raise awareness in the community about the importance of saving lives through blood donation,” he said.

After giving blood at the mobile donor centre at Acacia Ridge, Woolworths Calamvale store manager, Lyndall Morris, said she had donated blood many years ago and was happy to restart her life-saving efforts.

“I have family and friends who have needed donated blood and it’s great to know that I can contribute to such a worthwhile cause. Giving blood is something so simple that can have a massive effect on other people’s lives,” she said.

Any business or group can create a Red 25 group and track their donations online to see how many lives they’ve saved.
Given their already outstanding contribution to the nation, it is wonderful to see our defence personnel find the time to donate blood," said Joshua.

“Every donation helps to save three lives, including the lives of cancer patients, people with blood disorders, unborn babies, mothers during childbirth, trauma victims and even ADF military members.”

Mr Crouch used National Blood Donor Week to make a private member’s statement about the need for blood donations, and encouraged his fellow members and his constituents in the seat of Terrigal, to “give a pint”.

“I am about to make my fiftieth plasma and platelet donation this month and I am told by the Red Cross that over the time I have been donating blood my donations will have saved approximately 150 lives, which is incredibly humbling”, Mr Crouch said.

“Donating blood takes only one hour and by giving that time donors make an extraordinary impact on the lives of those who need blood and other lifesaving blood products.”

Australian Defence Force (ADF) personnel will bleed by example over the next three months in the nation’s largest blood challenge.

The annual event, now in its seventh year, challenges Navy, Army, Air Force and Defence force personnel to compete between 1 September and 8 December to make the greatest number of blood donations. The challenge is a key part of the Blood Service’s Red25 program.

Last year, Defence force personnel gave more than 5,400 blood donations, enough to potentially save 16,200 lives. This year, they are hoping to save the lives of more than 18,000 Australians through their blood donations.

Blood Service National Community Relations Manager, Joshua McNally, said the Defence Blood Challenge was saving more lives each year.

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SAM GIVES BACK

For Sam Hayward, a Year 12 student from All Saints Catholic Senior College at Casula in New South Wales, giving back is just something you do.

Sam says he was inspired to become a Red25 Youth Ambassador “to give back to the wonderful community of people who have given so much to me over the course of my life.”

Sam has gone above and beyond as a Red25 Youth Ambassador - promoting school blood drives, organising community events and even generating media exposure via interviews on major Sydney radio stations - all in the name of saving lives by raising awareness of the vital importance of blood donation.

“Getting into the habit of giving to others is one of the most satisfying things you could ever do,” says Sam. “Every now and then you’ll realise that your actions have had a deeply positive impact on someone’s life, and that’s a feeling that compares to nothing else.”

Sam is not alone, he is one of the almost 750 students from over 200 schools participating in the Red25 Youth Ambassador Program.

Sam’s efforts have seen great rewards, with over eighty Red25 donations already registered to All Saints this year.

“I’ve enjoyed the sense of fulfillment that comes with achieving our ambitions, as well as the pleasure of collaborating with the other ambassadors at my school who continue to achieve remarkable things while they study for their HSC,” said Sam.

GIVING BLOOD FEELS GOOD

There’s nothing we could ever give back to our donors in return for their life-saving contributions, so instead, we’re offering a simple biscuit as a symbol of how personally rewarding it is to donate. It only takes an hour and every donation saves three lives. Some of Australia’s best-known chefs – Gabriel Gaté, Donna Hay, Kylie Kwong, Matt Moran, Neil Perry and Adriano Zumbo - all agree that the biscuit you get after donating blood is the best biscuit you’ll ever taste. Even the Cookie Monster agrees! We’re sure you will too.

So, who wants a biscuit?
Milestone donor: Beryl Millman (centre), with Senator Fiona Nash and Donor Services Manager Maureen Bower, has donated blood for more than 50 years.

Beryl is one of only 15 donors to have reached 200 whole-blood only donations in the last 12 months. It was seeing her mother in hospital that made 10-year-old Beryl decide she would donate blood when she grew up. “My mother was very ill,” Beryl recalled. “She was in the old Prince Henry Hospital, and she had many operations, and as a kid I suppose it really stayed with me. I remember her getting many blood transfusions and that was when I decided, when I grew up, I’d give blood.”

“Times have changed greatly since Beryl made her first donation in 1958. ‘There weren’t any appointments back then. If you were lucky you’d get in and if you weren’t, you’d just have to sit around for ages.’ Beryl’s early donations went into glass bottles, held by nurse aids. ‘poor souls, used to sit holding the glass bottle beside you the whole time!’

Continuing to donate came easily for Beryl, who during the 1970s was teaching children with special needs. “They couldn’t go to school because of illnesses – it was conditions like leukaemia, cancer and haemophilia – and they all used blood regularly. Seeing that every day spurred me on to continue my donations.”

“I had no idea! I just thought the blood went from me, to a hospital and then into someone. I had no idea that such a process happened to it. It’s just fascinating!”

So too did a midnight call from the Blood Service one year, requesting Beryl come into the then Flinders Street Donor Centre to make an urgent donation. “They’d organised for a taxi to come and get me and then take me home. It was a very powerful moment. I’d never had an emergency like that happen before, it was frightening and yet very satisfying knowing I was helping someone.”

More recently, Beryl was part of a special donor panel to support patients with difficult-to-match blood types. “About four or five years ago I was contacted by a couple of ladies who look after special donations at the Blood Service – and for about a year or more they would phone me a few days before my donation just to ensure I was well and keeping my appointment – I believe it was because my blood was a special match for a patient. They even sent me a Christmas card that year!”

Following her recognition during National Blood Donor Week, Beryl was invited to meet the Assistant Minister for Health, Fiona Nash, and take a behind-the-scenes tour of the Melbourne Processing Centre. Despite nearly six decades of blood donation, Beryl was surprised to learn the extensive journey each of her donations had gone on. “I had no idea! I just thought the blood went from me, to a hospital and then into someone, I had no idea that such a process happened to it. It’s just fascinating!”

When asked to sum up how she feels about blood donation, Beryl was humble as always. “It takes no effort, it’s something money can’t buy – you can’t walk into a shop and buy it. It’s a delight to give blood, it doesn’t hurt, it’s a wonderful thing, and it gives you a really great feeling after you’ve given it, because you know you’re going to help someone.”

“I’m just very fortunate.” The modest words are by blood donor Beryl Millman who was recognised during National Blood Donor Week celebrations for making 200 blood donations. While milestone donation numbers like 500, 550 or even 600 are becoming more common, what makes Beryl’s milestone extraordinary is her donations have all been whole blood which can be given only up to four times a year.

“In my youth I worked as a nurse and became interested in blood transfusion but I couldn’t think of a way to become involved. It was only when I was in the hospital looking after my mother that I thought ‘I’ll do that’.”

“I had to go to the hospital and had my blood taken but I felt I could help. I’ve been doing it ever since.”

“I’ve always had a good blood count and I’ve never had any problems that would stop me donating.”

I asked Beryl if she had ever had any uncomfortable experiences during her donations. “I’m afraid I have! The worst was when I had my elbow operated on. The doctor came up to me and asked if I would consider donating blood. I told him I had a bad elbow and he said ‘We just need the blood, you can’t weld with one elbow!’”

“I was due to go swimming with a friend but that day I was too busy and had to cancel. It’s been a great way to meet people too – I made a couple of friends who I still keep in touch with.”

Beryl Millman (centre), with Senator Fiona Nash and Donor Services Manager Maureen Bower, has donated blood for more than 50 years.
I think it is a remarkable object that combines science, design, function and tells a great story about collaboration in Australian health and medicine.

What is a storepedoette? A painted cardboard tube attached to a canvas parachute, a storepedoette looks like a second-hand prop from a war movie.

The “blood bomb” is currently featuring in a new exhibition at the Powerhouse Museum in Sydney about public health and medicine, Recollect: Health & Medicine.

Donated to the museum by the Blood Service, the historic storepedoette is the only object of its kind in the collection, according to curator Tilly Boleyn.

“I think it is a remarkable object that combines science, design, function and tells a great story about collaboration in Australian health and medicine,” said Tilly.

The story behind the unusual object has been investigated by the museum with the help of Blood Service staff Dr Alison Gould and librarian Janette Smith, and Australian Red Cross archivist Moira Drew and history aficionado James Thyer.

The storepedoette is so named because it’s a small version of large storepedos that were used to drop food and other supplies during World War II. The storepedo could carry up to 90kg of supplies but had to be dropped from a large aircraft. The storepedoette is much smaller, holding only two bottles of blood and a transfusion kit, and it could be dropped from any kind of aircraft.

“Storpedoettes were designed to be used during potential future wars, or when rail and road transport was impossible, such as in times of fire or flood,” said Tilly. “It is an excellent example of Australian research and development addressing health and medical needs in rural and regional areas.”

“It showcases Australian innovation and the collaboration of organisations, big and small, for the common good.”

The Australian Red Cross, Royal Australian Air Force (RAAF) and Royal Flying Doctor Service jointly held a public experiment at Moorabin Airport on 25 November 1950 to trial three methods of dropping medical supplies from a plane, one of which was the storepedoette. This test didn’t use real blood but containers of water. It may be that our storepedoette was one of those used in the experiment - its squashed nose certainly implies that it has seen action in the field!

“In 1953 the Red Cross organised the coordination of the police, Red Cross Blood Service, RAAF, Department of Civil Aviation, civil airlines and aer clubs to respond to the emergency need of blood delivery by this method in Australia,” said Tilly.

“If anyone has any memories of a storpedoette being used in their town, or what method was used to deliver blood after the storpedoette, I’d love to hear about it.”

Storpedoettes were also used in Australia’s biggest peacetime blood transfusion air drop when five, containing anti-malarial drugs and plasma, were dropped by the RAAF to islands in the Torres Strait in June 1952.

The storepedoette is continuing to save lives as it has now inspired Powerhouse staff to give blood as part of Red25, the Blood Service’s unique giving program which rallies groups and organisations around the country to achieve 25 percent of all blood donations.

“The storpedoette has been part of our internal push to encourage people to donate,” said Tilly. “There is a core group of us who are donating regularly and we are actively advocating our colleagues to get involved too.”

Visit Recollect: Health & Medicine at the Powerhouse Museum in Sydney, open until May 2016.

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Your blood type is more complicated than you think, with hundreds of possible variations apart from the commonly known ABO and Rhessus blood groups. Modern genetic techniques allow rare blood variants to be characterised with pinpoint accuracy, and researchers at the Blood Service have used them to solve the medical mystery of a Canadian baby who nearly died at birth.

In 1990 researchers at the Blood Service found a novel antigen on the red cells of a single, very dedicated blood donor named Sarah. The new antigen was named after her SARA. SARA didn’t fit into any of the known families of blood group antigens, and a visit of Sarah’s unusual blood was stored, frozen, in a blood type archive. Around 20 years later, the Blood Service received blood samples from collaborators at the Canadian Blood Service which came from a family whose baby had needed a massive blood transfusion at birth. The Canadians thought that this case could be related to the rare SARA antigen and sent samples to Australia for confirmation.

The mother’s plasma was tested against a panel of over 50 archived rare cell types, and reacted only with a sample of SARA red cells. Rhiannon McBean, a doctoral candidate in Research and Development at the Blood Service and the University of Sydney, explained the results: “The father was SARA-positive and the mother was SARA-negative. She had an antibody that reacted strongly with SARA-positive cells. The baby needed a double-volume exchange transfusion to recover.”

With the problem identified as SARA incompatibility, a Blood Service research team, led by Associate Professor Catherine Hyland, set out to identify the gene responsible. Blood and DNA samples were taken from both the Canadian and Australian families, including members from several generations of each family. To identify the gene, researchers first identified the family members who carried the antigen. The next step was to find a gene sequence shared only by these family members.

“We used whole exome sequencing, which reads the entire coding region of a person’s DNA. It’s a leading-edge technology that wasn’t widely available to the research world even five years ago,” said Rhiannon. The analysis found nearly 500,000 single nucleotide variations in the Australian family, so finding the one variation responsible for the SARA antigen was an incredibly detailed and painstaking task.

“It’s a leading-edge technology that wasn’t widely available to the research world even five years ago.”

“Because SARA is so rare, we were looking for something that hadn’t been discovered before [and] we also had to look for something which fit the inheritance pattern,” said Rhiannon. When the final analysis was complete, they discovered that in SARA-positive individuals a single nucleotide had changed in the DNA sequence which encodes glycoporphin A, one of the main proteins on the surface of the red blood cell. The SARA antigen has now been officially recognised by the International Society for Blood Transfusion as a new blood group, and, for the young SARA-positive males in the families, this discovery means that they and their families will be able to successfully manage future pregnancies where the SARA antigen may be inherited.

ACROSS
1. Connective tissue
2. Tired sigh
3. Brass instrument
4. Vocalise
5. Parentless child
6. Persuades
7. Common analgesic
8. Together, in...
9. Bent down
10. Gone away
11. Aton
12. Transmit
13. Puffin-like
14. Charged atoms
15. Chinese calculating devices
16. Distributed
17. Linear units
18. Jars
19. Excessive
20. Snow shelter

SUDOKU

1 7 6 4 9 4 9 6 1 4 7 3 8 6 1 4 5 9 2 4 3 8 5 6 2 1 4 1 4 8 3 7 1 3 5 7 8 2 1

METHOD

Fill the grid so that every column, every row and every 3x3 box contains the numbers 1 to 9.

SOLUTIONS

Thanks to Lovatts Crosswords & Puzzles for supplying these puzzles.
BRENDAN’S STORY

Brendan needed blood to survive after a car accident. He now regularly donates blood himself to say thank you.

I would like to say a big thank you to all involved with the Red Cross Blood Bank.

I was involved in a serious MVA back in ’06 and needed a fair bit of Blood as I was losing it internally and they could not find the location for some time.

I now try to regularly donate to help out but have trouble sometimes as my veins are not the best to find at times. I wish I started when I was younger.

Thank you for my life.

Brendan, Wollongong NSW