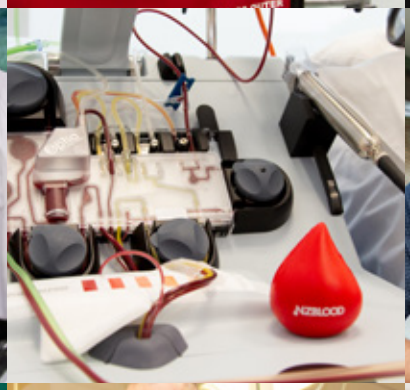
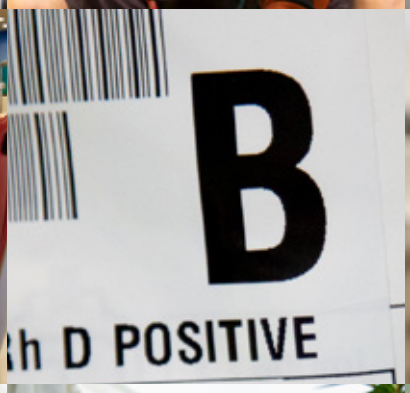
CELEBRATE


TRANSFUSION
MUST GO
NZBLOOD
BLOOD FOR
TRANSFUSION
MUST GO


NZBLOOD


FFP 3/5
Cryo 3/5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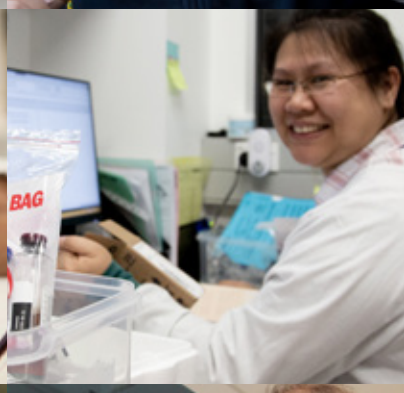
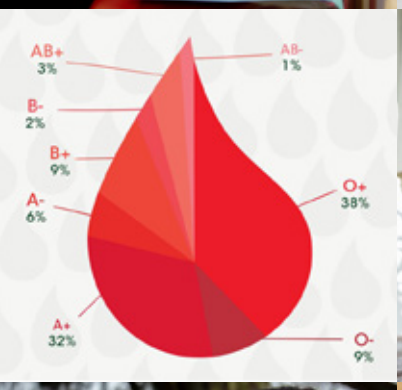
SAVE LIVES
GIVE BLOOD


BAG


AB+
3%
AB-
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B-
2%
B+
9%
A-
6%
O+
38%
A+
32%
O-
9%


B
A
Rh D POSITIVE

ANTHONY GETS HIS LIFE BACK

MANY PEOPLE THINK THAT BLOOD DONATIONS ARE JUST USED FOR ACCIDENTS OR SURGERIES BUT ACTUALLY, MOST BLOOD AND BLOOD PRODUCTS GO TO PEOPLE WITH CANCER AND OTHER MEDICAL CONDITIONS.

People like father-of-two, Anthony McQuoid, who is the only person in the whole country with the blood disorder Hb Volga, which he has had since he was born.

Hb Volga is a condition which affects Anthony's red blood cells and means that they don't transport oxygen efficiently around his body. Every four weeks for the past two years, Anthony has had a procedure called a Red Cell Exchange at Auckland Hospital.

This involves two needles, one in each arm – no mean feat for someone with a severe needle phobia. Blood is drawn from one arm into an apheresis machine and spun in a centrifuge, which separates out the blood components (red cells, plasma and platelets). It separates his red cells out (though they're actually a very dark red, almost black because of the lack of oxygen in them) and transfuses him with a fresh healthy bag of donated red cells along with his plasma and platelets back into the other arm.

The process takes a couple of hours and Anthony normally receives around six units each time. That's six people's donations every month, keeping Anthony alive and well. In his lifetime, he has been the recipient of hundreds of donations and is incredibly grateful for it.

"Thank you to everyone who donates blood. I don't know what situation I'd be in if no-one did," he says.

Before starting the regular red cell exchanges, Anthony was incredibly lethargic and slept for most of the day because he simply didn't have enough oxygen in his blood to keep him going. This had a huge impact on his life as he was unable to work and unable to keep up with his two young daughters. When his doctor suggested trying a Red Cell Exchange (which is used more prominently in countries like the UK who have a large number of people with sickle cell disease), he was keen to see whether it could give him his life back and it did.

When Anthony receives the new, healthy red cells, you can actually see him getting better as the colour returns to his skin and he gains more energy. He says that during the procedure, he feels a bit 'fizzy' and more energised but that it actually takes a day or two to properly kick in. After that, Anthony has around three weeks of feeling great before he starts to notice a drop in his energy levels again so it's time for another procedure.

It's not putting it lightly when we say that regularly receiving blood products has given Anthony his life back. He is able to work for a few hours each week, and relishes spending quality time with his wife and kids.

"It's hard to explain how much of a difference this has made to our family, but we are so grateful to every single person who donates blood. You have given our girls their father back" says Anthony's wife, Meredith.

NGĀ KAI OROTO

CONTENTS

Presented to the House of Representatives pursuant to section 150 of the Crown Entities Act 2004

TIROHANGA WHAKAMURI

THE YEAR IN REVIEW

Blood donors across New Zealand donated their blood 175,367 times this year, improving over 28,260 lives.

It has been another notable year for the New Zealand Blood Service (NZBS). In July 2018, we celebrated our twentieth year as the appointed entity for all blood in New Zealand. In addition to celebrating on site with our donors, we were also invited to hold an event at Parliament, hosted by the Minister of Health, Hon Dr David Clark. We invited local donors, recipients and Team Red groups in addition to our peers in the local health service. It was a wonderful opportunity to connect our work with the wider healthcare industry and highlight the wonderful contributions that our donors make to the lives of their fellow New Zealanders.

Absolutely every member of staff, past and present, have directly or indirectly saved people's lives and their ongoing commitment is one of the reasons why it is such an honour for us to run this organisation.

Celebrating this milestone also provided a fantastic opportunity for us to look back at the history of the blood service and how many advances have been made in the past twenty years across both the organisation and the healthcare sector. Since the Health Amendment Act was passed by Parliament on 1 July 1998, over half a million lives have been saved or enhanced by blood and blood products. In addition to the invaluable contributions made by donors across the country during this time, it's important to acknowledge every single person who worked for NZBS in that time and those who continue to do so. Absolutely every member of staff, past and present, have directly or indirectly saved people's lives and their ongoing commitment is one of the reasons why it is such an honour for us to lead this organisation.

We welcomed three new members to the NZBS Board in October 2018, Dr Jackie Blue, Dr Paula Martin and Ray Lind. These new appointments follow the departure of three long-time board members, Dr Peter Browett whose appointment commenced October 2009, Ian Ward whose appointment commenced August 2011 and Victoria Kingi who was first appointed in February 2014. We would like to thank them for their long years of service and exceptional work.

The importance of the work we do at NZBS was brought to the forefront in March 2019 during the tragic events in Christchurch. 30 units of platelets, 376 units of red cells, 59 units of cryoprecipitate and 155 units of Fresh Frozen Plasma (FFP) were transfused. We carefully monitor our blood stock levels around the country at all times so we are as prepared as we can be for any emergency situation. Thanks to the support of our wonderful donors, we had enough blood to support the Christchurch hospital during and after the attacks. We had an overwhelming response from people who wanted to help and in the weeks following the attacks, over 600 people signed up to become donors.

As always, thank you to our wonderful staff, to the dedicated hospital teams and to our amazing donors – truly the lifeblood of our organisation, for contributing to another fabulous year for NZBS.

David Chamberlain
Board Chairman

Sam Cliffe
Chief Executive

TE HURITAU RUA TEKAU TAU

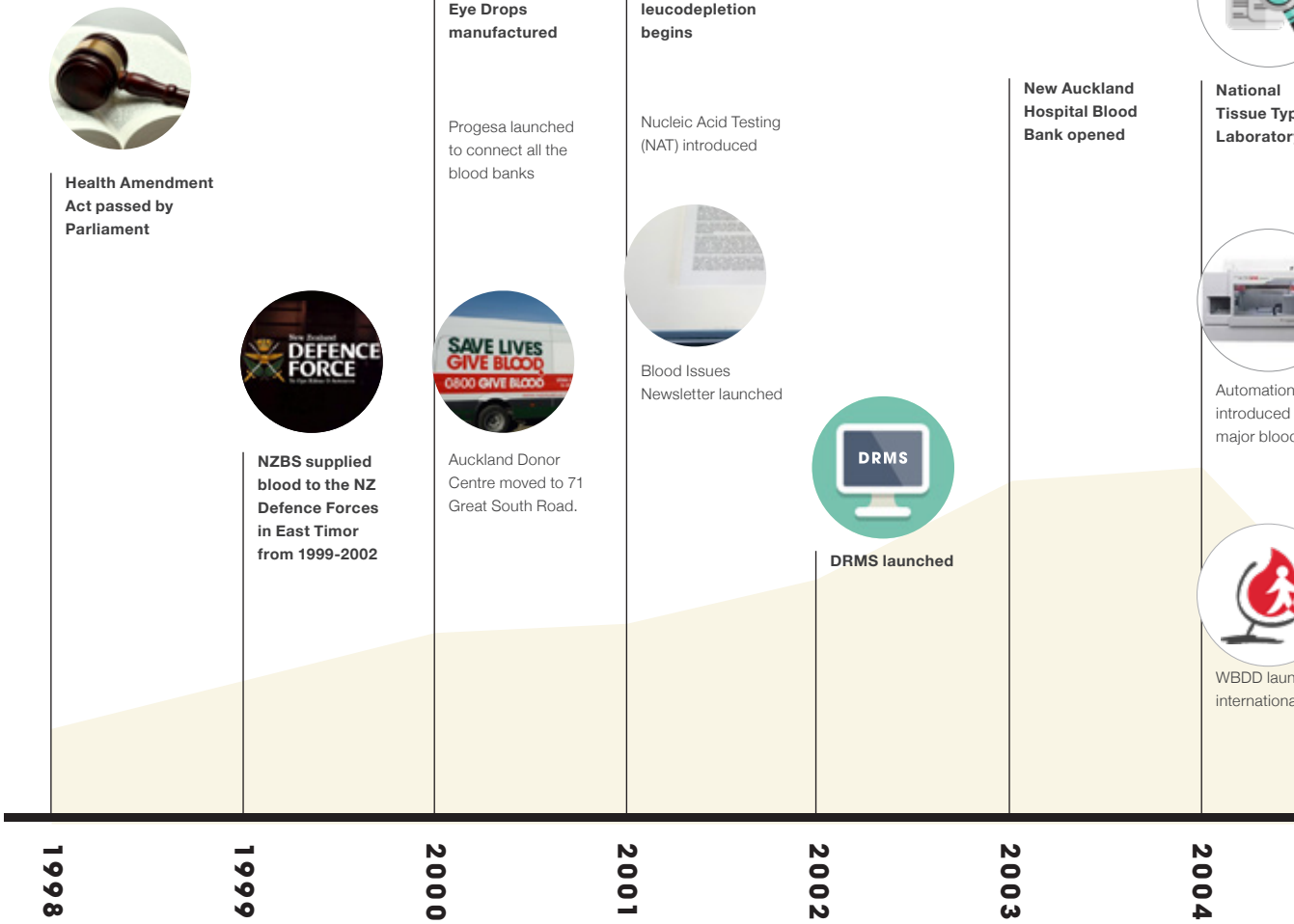
IN THE LAST 20 YEARS...

OVER
500,000 LIVES
HAVE BEEN SAVED OR ENHANCED BY BLOOD AND BLOOD PRODUCTS

WE'VE HAD AROUND
600,000 DONORS

THERE HAVE BEEN 13,000 DONORS ON BONE MARROW DONOR DATABASE

59
NZBS STAFF HAVE WORKED HERE SINCE 1998



CEO	ROBIN PRATT	LESTER LEVY	G
MINISTER OF HEALTH	BILL ENGLISH	BILL ENGLISH/ WYATT CREECH	ANNETTE KING

WE'VE HELPED AROUND
735,735
PATIENTS

1,855,906
DONORS FROM 1998-2018

88,376
AVERAGE NUMBER OF DONORS PER YEAR

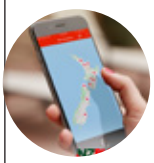
2,792,10
WHOLE BLOOD DONATIONS

ping
y formed

into NZBS
d banks

ched
lly.

DRM launched to manage our donor database.

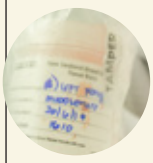


NZ Blood App launched

Blood Shippers and Temperature Control introduced

Histotrac Molecular Automation in Tissue Typing

Triple NAT (HIV, HCV and Hep B)

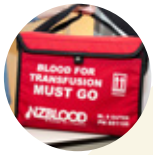


Introduced femoral head banking, standardised throughout NZBS

10th Anniversary

Blood Resource website launched to aid clinicians

NZBS sent blood to Joint Defence Force Action off shore from Fiji



Mass Transfusion Protocol (MTP) developed

Christchurch Earthquake

eProgesa

DAPS launc

National Off
move to 11
South Road

2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012

GRAEME BENNY | FIONA RITSMA

PETE HODGSON | DAVID CUNLIFFE | TONY RYALL

OVER
380,000
BAGS OF PLASMA
ISSUED SINCE 1998

OVER 2 MILLION
PLASMA PRODUCTS
ISSUED/TRANSFUSED

OVER 860,000
PEOPLE RECEIVED PLASMA IN
THE LAST 20 YEARS

470,762
PLASMA DONATIONS

87,316
PLATELET DONATIONS

3,350,183
TOTAL NUMBER OF DONATIONS

INCREASE OF PLASMA DEMAND
Based on plasmapheresis data from 2000

Red Cell Genotyping implemented

First TRIMA machines used for triple plateletpheresis

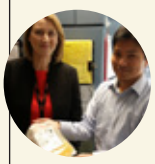
Started using plasma nomogram

Napier and Nelson Donor Centres are closed

Auckland Rescue Helicopter Trust start carrying O- blood on board.

Christchurch Donor Centre opens

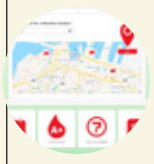
Platelet shelf life extended to 7 days



We implemented 100% bacterial (BacT) testing on our platelet components (aerobic & anaerobic testing) – the 1st step towards 7 day shelf life.

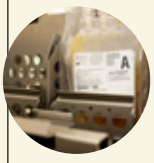
North Shore Donor Centre starts plasma collections.

HPA typing moved from in-house PCR-SSP to LinkSeq - halving the turnaround time of testing



Web portal for appointment bookings launched

eTraceline launched allowing clinicians to access patient files digitally nationwide



Fresh Frozen Plasma (FFP) viable for 5 days when thawed

Implementation of Next Generation Sequencing (NGS) for Tissue Typing

Dunedin Donor Centre opened

Team Red relaunched

Executive Team restructure

20th Anniversary

Cryopreserved platelets implemented

We installed Smart Fridges at Mercy Ascot

2013 2014 2015 2016 2017 2018

SAM CLIFFE

JONATHAN COLEMAN | DAVID CLARK

NZBS IN NUMBERS

586
STAFF IN TOTAL

108,588
ACTIVE DONORS
AS AT 30 JUNE 2019

OUR YOUNGEST DONOR WAS BORN IN 2003, OUR OLDEST IN 1943

FOUNDED IN
1998

300
MOBILE BLOOD DRIVES IN 2018/19

9
DONOR CENTRES IN NEW ZEALAND

2,250
AVERAGE NUMBER OF DONATIONS PER WEEK

THE ONLY BLOOD SERVICE IN NEW ZEALAND
collecting all of the blood donations Kiwis use in hospitals each year.

60,359
PLASMA UNITS
2,647
PLATELET UNITS

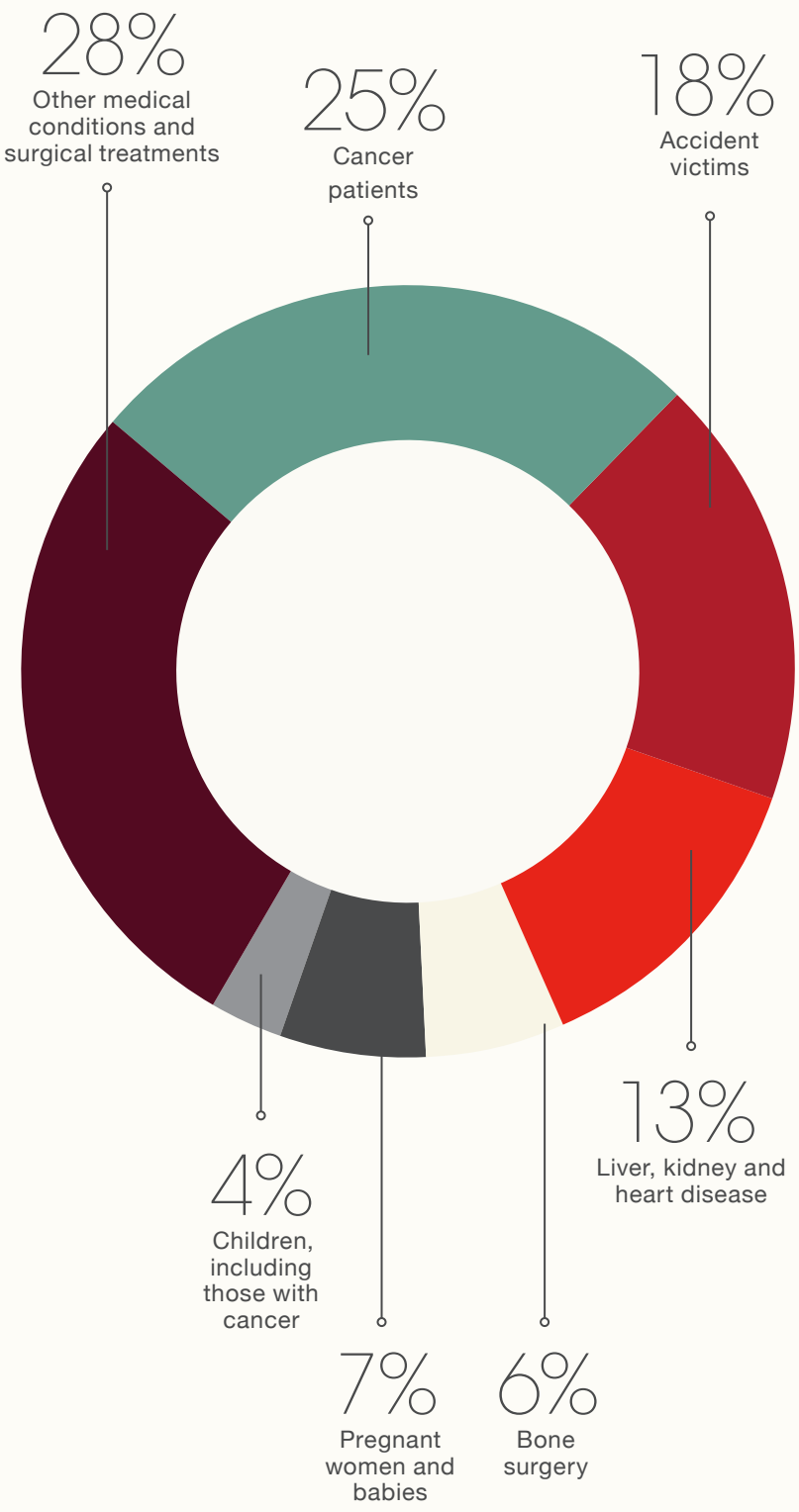
112,341
WHOLE BLOOD UNITS COLLECTED IN 2018/19

4
PROCESSING SITES

KO WAI E HIAHIA TŌKU TOTO?

WHO NEEDS MY BLOOD?

Whether you give whole blood, plasma or platelets, your donation saves and improves the lives of people across New Zealand.



CAN I DONATE?

If you are 16-65 years old, in good health, and weigh over 50kg, you may be able to give blood.

Before booking your appointment, take a look at some of the most common reasons why you might not be able to donate:

You have a cold, flu, sore throat, cold sore, stomach bug or any other infection.

You have had a tattoo or body piercing in the last 4 months.

You have recently visited the dentist.

Your lifestyle or behaviour puts you at an increased risk of coming into contact with major blood borne infections such as HIV or hepatitis C infection.

You lived in the United Kingdom, France or the Republic of Ireland for a total of 6 months or more between 1980 and 1996, or received a blood transfusion in ANY of these countries since 1980.

ELIGIBILITY CRITERIA ARE SUBJECT TO CHANGE. FOR ADDITIONAL ELIGIBILITY CRITERIA, VISIT OUR WEBSITE: NZBLOOD.CO.NZ

MAHERE HEI KAIORA TANGATA

HOW TO SAVE A LIFE

Donors make an appointment online at **www.nzblood.co.nz**, through our NZ Blood app or by calling 0800 448 325

Whole blood donors donate at a ***mobile blood drive or at one of our nine donor centres***. Plasma and platelet donations require special machines, so these donors donate at one of our donor centres.

In our laboratories, the whole blood is spun in centrifuges to separate the red blood cells, platelets and plasma. Our scientists test every donation for infectious diseases and identify the blood type.

Plasma can be made into two fresh blood components – Fresh Frozen Plasma or Cryoprecipitate. Plasma can also be made into blood products. Plasma is sent to CSL Behring in Australia, where it is processed and separated out to make up to 12 different lifesaving blood products, which are then sent back to New Zealand.

Blood and blood products are stored until they are needed. The shelf life and temperature requirement is different for each blood component.

- ***Red blood cells*** are stored in refrigerators at 6*C for up to 35 days. They are used to treat people with chronic anaemia caused by problems such as kidney failure and cancer, and for acute blood loss as a result of trauma or surgery.
- ***Platelets*** are stored at room temperature for up to seven days. They are used to control bleeding following cardiac surgery and trauma, and to treat some blood diseases and cancer.
- ***In New Zealand we have 12 different plasma products***. Find out more about the products made from plasma on pages 16-17.

ME WHAKANUI A TĀTOU KAITUKU

CELEBRATING OUR DONORS

WORLD BLOOD DONOR DAY 2019

Every year on 14 June, nations around the world celebrate and thank their fantastic donors. This year, we matched people who regularly receive plasma, with some of New Zealand's longest-serving whole blood and plasma donors.

- Peter Sarah, aged 67, has made 267 donations over the last 20 years during which he has saved the lives of around 800 people.
- Joshua, early-20s, has received a plasma product every week for the last 20 years and will continue doing so for the rest of his life. He is now living a relatively normal and healthy life thanks to generous donors like Peter.
- Annette Roberts (pictured below), aged 68, is New Zealand's most generous female donor with a total of 405 donations to date – she has saved over 1,200 lives with her donations.
- Zani (pictured below) is only a few months old, but she has already broken records as she has become the youngest New Zealander to use Evogam, a plasma derived blood product that boosts the immune system – one that is only available thanks to the generosity of blood donors.

In addition to these amazing stories from recipients and donors alike, the campaign was supported by Daniel Faitaua and Jacqueline Nairn, who encouraged all eligible donors throughout the country to join them by becoming blood donors and signing up to the donor registry.

PETER'S DONOR STORY

With both his sisters, mother and father professionally linked to the health care sector, civil engineer Peter felt like the odd one out, so he became a blood donor to bridge the gap. It has since been five decades of committed donations that have turned him into the milestone donor he is today.

"There's always somebody worse off than ourselves and that motivates me too. I've been extremely lucky at now 68 years of age, to have enjoyed such good health. I'm just paying it forward to help those who need it".

As all blood donors do, Peter started off as a whole blood donor – a type of donation that has the potential to save up to three lives every time and can be repeated up to four times a year. After about 100 whole blood donations and potentially saving about 300 lives, a nurse suggested that Peter move on to plasma, which is the liquid portion of the blood in which red and white blood cells and platelets are suspended – a longer procedure but one that can be repeated every two weeks. Happy to help, he became a plasma donor and was soon racking up his donations on a bi-weekly basis.

It has been 15 years since Peter has dedicated his time to plasma donations exclusively, until the end of 2018 that is, when yet again upon a nurse's suggestion, Peter donated granulocytes, which are used for treating patients with very weak immune systems, for example people who have received bone marrow transplants.

"All I needed to hear was that it would go towards someone in need...the procedure was quite different from whole blood or plasma donations and I could only do this once, but I was happy to do it."

ONEBLOOD AND THE SEARCH FOR RARE BLOOD

In January 2019, OneBlood put out an appeal for help finding a match for a young girl living in Florida with an extremely rare blood type. The girl, Zainab, was missing a common antigen that most people carry on their red blood cells, known as the Indian B antigen (Inb). Statistically, the only people who were likely to be a match for Zainab were of Pakistani, Indian or Iranian descent and of these populations, less than 4% are missing the Indian B antigen.

Although at the time it was not an international appeal, we began to look at our donor database for any potential matches. In early April 2019, we began contacting some of our existing donors and a number of potential donors who had seen the appeal on social media and were keen to be tested. We took samples from twelve donors and sent these to the Australian Red Cross Blood Service for testing.

In late April 2019, we heard the wonderful news that Zainab was out of hospital and on the road to recovery after receiving her second bone marrow transplant. Though not out of the woods yet, doctors are optimistic about her prognosis and should she need further blood transfusions, there are only five compatible donors at the time of printing (two from the United States, two from the United Kingdom and one from Australia) who will be able to help.

In New Zealand, we tested 12 donors but sadly their blood was not a match for Zainab. However, we hope that these people will continue to donate blood every time they are eligible, to help us further diversify the donor pool.

You can find more about OneBlood here: www.oneblood.org

WAI ĀWHEO

LIQUID GOLD

Plasma is used to treat people who have lost a lot of blood from accidents or other trauma, and patients who have severe bleeding during surgery.

It is also used to create up to 12 lifesaving blood products that help to:

- boost the immune system of people who have low levels of antibodies
- control some autoimmune disorders where the patient's immune system is attacking their own tissues
- provide special clotting factor concentrates for some people with haemophilia and other bleeding disorders.

As it is being used to treat a growing number of life-threatening conditions, the demand for plasma increases every year so we really need more people to become plasma donors.

Plasma donations require donors to meet some additional criteria and to book specific appointments. If you are keen to learn more about whether you can donate plasma, please ask about it next time you donate.

Call 0800 448 325 or visit www.nzblood.co.nz/give-blood/heart-of-gold for more information.

If you've tried to donate whole blood after being overseas, you've probably discovered that the two activities are not always compatible. Stand-down periods are needed for travel to certain countries due to some blood-borne diseases being present, and the risk they could be passed on. However, even if you can't donate whole blood after travel, you might be able to donate just the plasma portion of your blood. This is because plasma processed into protein concentrates receives special treatments that can clear most infections.

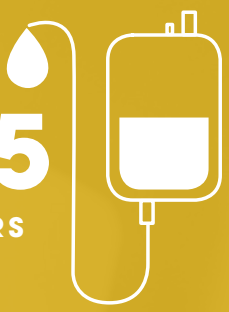
PLASMA

ALSO KNOWN AS 'LIQUID GOLD', PLASMA IS THE LIQUID PART OF BLOOD THAT CARRIES BLOOD CELLS AROUND THE BODY

YOU CAN GIVE PLASMA EVERY

2–3
WEEKS

10,195
PLASMA DONORS IN 2018/19



60,399
UNITS OF PLASMA COLLECTED IN 2018/19

9 DONOR CENTRES
IN NEW ZEALAND WHERE YOU CAN DONATE PLASMA

MINUTES
TOTAL APPOINTMENT TIME TO GIVE PLASMA (APPROX.)

Plasma

The liquid part of blood which contains all of the clotting, immune and other proteins. It is a very versatile source of blood proteins for manufacture of specialised blood components and products.

Fresh Frozen Plasma (FFP)

Plasma that has been frozen and carefully thawed before use. It is used to replace clotting factors when a patient is bleeding after major surgery or a serious accident.

Cryoprecipitate

Plasma that has been specially treated to produce a concentrated dose of clotting factors. It is mostly used for treatment of trauma patients and during cardiac and transplant surgery.

WHAKAORANGIA TĀNGATA

HOW PLASMA SAVES LIVES

Plasma contains many important proteins which include blood clotting factors, immunoglobulins (antibodies), albumin and fibrinogen. It is a very versatile source of important blood proteins for the manufacture of...

FRESH FROZEN PLASMA

Plasma is stored frozen to preserve clotting factors. It is carefully thawed before transfusion. Plasma is used to replace clotting factors after major surgery or a serious accident. Thawed plasma can now be stored for up to 5 days, if not needed immediately.

CRYOPRECIPITATE

Cryoprecipitate is plasma that has been specially treated to produce a concentrated dose of the clotting factor fibrinogen. Fibrinogen is needed to make the meshwork of fibres called fibrin that holds blood clots together. It is mostly used for treatment of trauma patients and during cardiac and some transplant surgery.

PLASMA PRODUCTS

In New Zealand, our plasma is also used to create 12 lifesaving products. These are manufactured by CSL Behring at its plasma fractionation plant in Melbourne, Australia. Where necessary, these may be supplemented by imported commercial plasma products to provide products that are rarely needed or where the amount needed is unusually large.

ALBUMEX®4

Used to provide the albumin for people who lose this protein from severe burns or have very low albumin levels for other reasons. It is essential for plasma exchange treatments to replace plasma, and may be used to treat shock due to blood loss.

ALBUMEX®20

Given to critically ill patients who have a very low level of albumin in their blood. Examples include, for resuscitation in shock due to acute loss of blood or plasma, extensive burns, occasionally in haemodialysis (blood purification) and during plasma exchange.

RH(D) IMMUNOGLOBULIN -VF (ANTI-D)

Given to women after childbirth or during pregnancy where the mother has the blood group RhD negative. Anti-D helps prevent the mother making her own anti-D as this could cause complications in her baby, and in future babies. These complications vary from jaundice to serious anaemia or even death.

BIOSTATE® (FACTOR VIII AND VON WILLEBRAND FACTOR)

Contains blood clotting factor VIII and von Willebrand factor, two proteins that are essential for normal clotting. It is used to replace factor VIII in some people with haemophilia A, and to provide von Willebrand factor for some people who have very low function of this factor. The treatment is used to prevent bleeding during surgery or after injury.

PROTHROMBINEX™-VF (FACTORS II, IX & X)

Used to reverse the action of the anti-coagulant medicine to prevent bleeding during urgent surgery and to treat acute bleeding in patients taking this treatment.

HYPERIMMUNE GLOBULINS

Provide temporary protection against a specific infection, such as chickenpox, tetanus or hepatitis B.

INTRAGAM® P, EVOGAM®, AND PRIVIGEN®

Used to treat some immune deficiencies by replacing antibodies that provide protection against many infections. These products are also used to treat patients with overactive immune systems causing some autoimmune disorders. They are often used when other treatments are not effective.

NORMAL IMMUNOGLOBULIN

Provides antibodies to help protect people against hepatitis A, measles and other viruses, for example, when travelling overseas to high risk areas, or if active immunisation is not possible or not appropriate.

THROMBOTROL

Used before surgery or during pregnancy and childbirth in patients with an inherited deficiency of antithrombin III who might be at risk of blood clots.

WHAT'S HAPPENING IN TECHNICAL SERVICES?

NEXT GENERATION SEQUENCING FOR HUMAN LEUCOCYTE ANTIGEN TYPING

Tissue typing refers to the characterisation of the Human Leucocyte Antigen (HLA) genes and proteins and is an essential component of compatibility assessment and donor selection for transplantation, for both solid organ transplants as well as for stem cell transplantation. These HLA proteins are a core part of the immune system and play a critical role in transplant outcomes.

In addition to providing a service for all New Zealand transplant patients, the National Tissue Typing Laboratory carries out testing for:

- the New Zealand Bone Marrow Donor Registry (NZBMDR);
- for Human Leucocyte Antigen (HLA) linked disease association markers;
- for HLA genes associated with hyper-sensitive drug reactions;
- for identification of antibodies against platelet antigens;
- for typing of donors for the provision of compatible or matched platelets and
- for investigations of antibodies implicated in transfusion-related reactions.

Next Generation Sequencing (NGS) is well suited to the needs of tissue typing for transplantation, where multiple genes and thousands of variants of those genes need to be resolved.

After the implementation of NGS in July 2017, the National Tissue Typing Laboratory department introduced a second NGS instrument and post-PCR pipetting robotics in April 2018. The introduction of the additional instrumentation has further reduced the turnaround time of results.

CRYOPRESERVED PLATELETS

Platelets are cells in the blood which help form blood clots to slow or stop bleeding and to help wounds heal.

They normally have a short (7-day) shelf life and stock levels are constantly monitored to ensure we meet the National demand. The availability of frozen (cryopreserved) platelets helps manage these issues and ensures that we can supply products where it may be difficult to maintain local supplies, such as in battlefield situations.

NZBS began producing cryopreserved platelets in May 2018. We developed a new method in house that minimises post-thaw processing and reduces thawing times. This new method allows the frozen component to be thawed prior to issue in the blood bank, allowing rapid access to the platelets in a post-surgical bleeding situation.

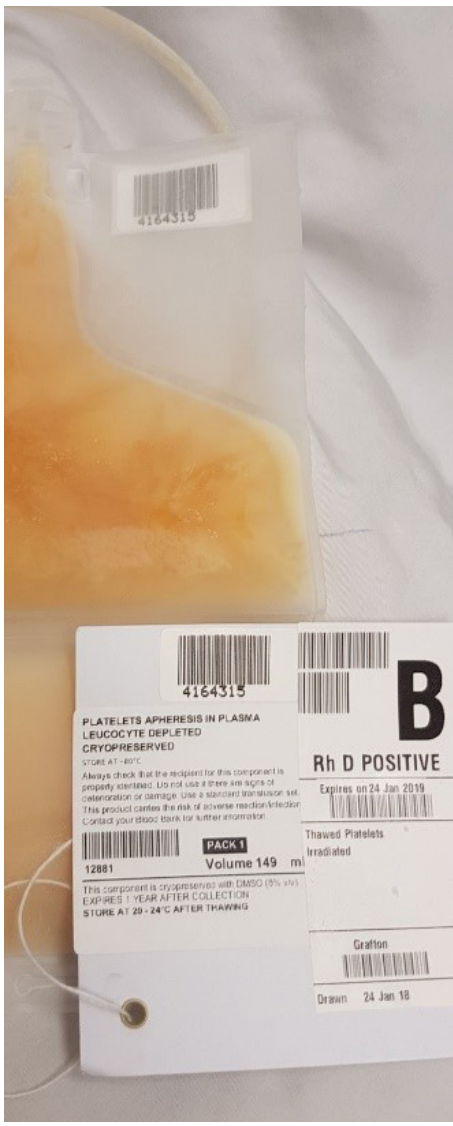
Cryopreserved platelets were originally developed for use by the military in the 1970s, and have been successfully used for the treatment of trauma in battlefield situations in Iraq, Bosnia and Afghanistan.

When platelets are frozen they become partially activated due to changes that occur during the freeze / thaw cycle. This results in enhanced haemostatic activity in vivo and makes them superior to standard platelets in reducing blood loss due to faster clot formation.

NZBS is participating in a Cryopreserved versus Liquid Platelets for surgical bleeding (CLIP) trial being run by the Australian Defence Force at Auckland City Hospital (ACH). The aim is to provide evidence that cryopreserved platelets reduce bleeding in cardiac surgery patients - these patients often require platelet transfusion and are able to give informed consent prior to the surgery.

Other possible benefits of cryopreserved platelets include:

- improved availability in remote treatment locations such as military operations and rural medical facilities;
- bridging inventory shortages due to weekends, holidays, weather and unexpectedly high platelet demands;
- building a phenotyped platelet inventory to treat difficult to match, refractory patients.



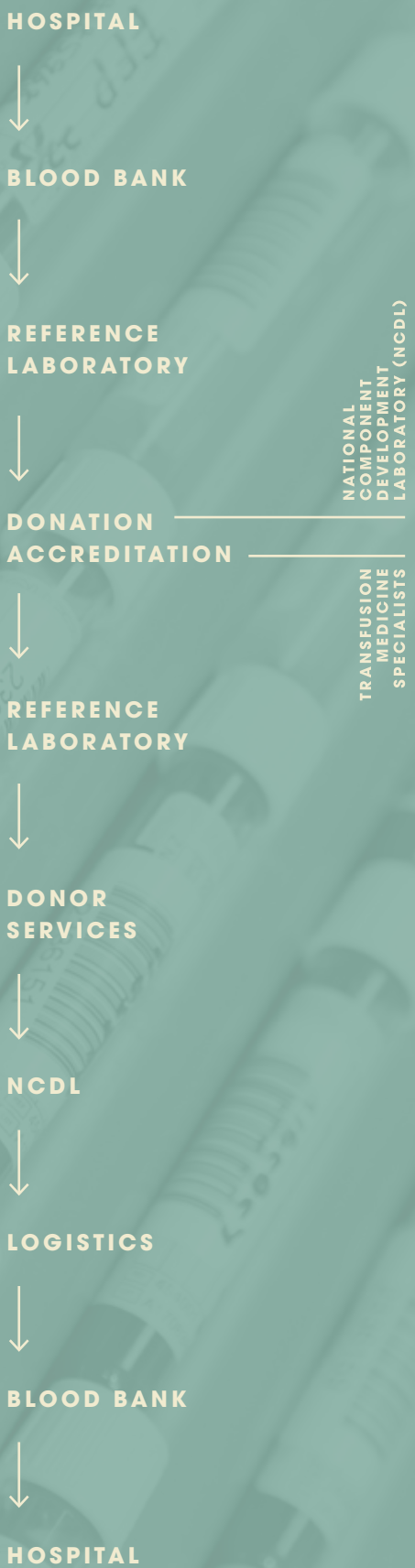
AUCKLAND BLOOD BANK REFURBISHMENT

By 2013, workload at the Auckland Blood Bank measured by pre-transfusion testing had increased by 56% on 2003 figures and the number of blood components and fractionated products issued overall had increased by 12.5%.

NZBS, supported by external audits and health and safety assessments determined that the current available space was inadequate for the Blood Bank operations and provided no ability to cope with the increasing workload and service demands. In mid-2018, the new extension to Auckland Blood Bank, constructed by ADHB was handed over to NZBS to complete fit-out.

The extension is located between the current blood bank and the LabPlus building at Auckland City Hospital. The extension is linked to the current blood bank by an enclosed corridor and houses staff facilities houses staff facilities – staff room, rest rooms, offices for the medical team, along with a group confirming and inwards goods bay.

After a three-stage refurbishment project that included two temporary relocations of blood bank operations, the project was successfully completed in December 2018.



E MAHI NGĀTAHI ANA

WORKING TOGETHER TO SAVE LIVES

Patients with transfusion-dependent conditions require lifelong supportive care with regular blood transfusions, typically given every 2 to 5 weeks to mitigate anaemia and prolong their survival. This becomes a lot more challenging when the patients have rare or very rare blood types.

A transfusion-dependent patient presented at Auckland City Hospital with a very rare antibody – anti-Lub. Approximately 0.15% of the Caucasian population are negative for the Lub antigen and would therefore, be compatible.

At the time of presentation at the hospital, there were only 5 donors with the required antigen type in the NZBS database and this would not be sufficient to maintain the patient's transfusion requirement. To increase the Lub negative donor pool, a pilot study was conducted in the NZBS Reference Laboratory, which involved screening 620 donors for the Lub antigen; 2 new Lub donors were identified. The decision was then made to mass screen using the automated NEO™ analysers. We screened donors with the blood group O so that all future patients who required Lub negative blood could receive transfusions.

The Donation Accreditation (DA) team screened 13,828 donors from Northland, Auckland, Waikato, Tauranga and Gisborne over a 3-month period. The screening test was the first step in identifying potential donors and we found 151 donors. Next, the Reference Laboratory team confirmed 22 Lub negative donations by serology, equating to 17 potential donors. These donors were contacted by the NZBS Transfusion Medicine Specialists and invited to come in and donate. At this stage, the Reference Laboratory worked closely with their peers in Donor Services to collect, process and test the blood. Once this was complete, the blood was sent to the National Component Development Laboratory (NCDL) to prepare the units for transfusion either as fresh red cells or for freezing for future use. After this, the Logistics team dispatched the red cells to the Auckland Blood Bank and they cross-matched the units for transfusion to the patient.

With the success of the screening project in Auckland, a decision was made to also screen donors from the Central North Island and South Island regions in our Christchurch facility. This began in early May 2019.

By working together, NZBS has been able to grow the rare donor panels and ensure that we can meet the transfusion requirements for these patients with rare blood.

KIA KAHA CHRISTCHURCH

IN MARCH 2019, THE PEOPLE OF CHRISTCHURCH SHOWED GREAT STRENGTH IN THE FACE OF ADVERSITY ONCE MORE WHEN A GUNMAN OPENED FIRE AT THE AL NOOR MOSQUE AND THE LINWOOD ISLAMIC CENTRE IN CHRISTCHURCH.

At NZBS, we have an emergency planning structure in place, which is initiated when there's an incident that requires management at a local or national level. This can range from events such as a site losing electricity for a period of time, all the way up to catastrophic events like earthquakes or the Christchurch shooting.

We follow an incident management structure called New Zealand Coordinated Incident Management System (CIMS) which is designed and managed by Civil Defence and used by most government agencies including the DHBs, fire and emergency, the police, Ministry of Health and so on.

As part of the CIMS structure, we formed a national team and were responsible for ensuring that the Christchurch Blood Bank had enough O stock, plus cryoprecipitate and Fresh Frozen Plasma (FFP), which are vital in high blood loss situations. Where necessary, we moved stock around the country and were able to do so without going into any deficits.

We decided early on to run a group O blood bank and treat the patients with the universal blood type.

Normally, we might have one to two Mass Transfusion Protocols (MTP) in a week but during this incident, we had 9 MTPs, 6 of which were at the same time. We assigned one staff member to each MTP to ensure that the surgical teams didn't need to worry about having enough blood to treat their seriously injured patients.

During the events in Christchurch, there were a number of variables that lead to a fast delivery of patients to the hospital, including the proximity to the hospital and an incredibly fast response time from the emergency services. They managed to transport 50 patients to the hospital within an hour, more shooting victims than they'd usually have in a whole year. This really stretched the services and gives an idea of the challenges faced by the hospital and blood bank during this time.

Number of products transfused to the patients in Christchurch:

- 30 units of platelets
- 276 units of red blood cells
- 59 units of cryoprecipitate
- 155 units of Fresh Frozen Plasma

This was only possible because of the generosity of donors in New Zealand. Thank you.

BEING A GOOD EMPLOYER

ELEMENTS OF NZBS ACTIVITY IN 2018/2019

By being a Good Employer, New Zealand Blood Service (NZBS) is not only committed to fulfilling its legal obligations as an employer, but also aspires to best employment practice by providing its people with a healthy and safe place to work; establishing engaged, high-performing teams; creating a values driven culture; and providing meaning for people at work. NZBS aspires to being an employer of choice in a highly-competitive labour market.

Being a Good Employer ensures that we recruit and retain a workforce that helps us provide patients across New Zealand with safe, effective, reliable, high quality blood, blood products, tissue and specialist services.

Within the context of our overarching People Strategy over the past 12 months there are a range of key people centric activities.

Growing Leadership, Capability and Skill

- During the last 12 months we have been rolling out a programme of developing leadership competency across the business, with:
  - A workshop delivered nationwide to rollout the SSC Leadership success profile to all leaders, along with a self-assessment tool.
  - Delivery of 'Quality Conversations' one-day workshop for leaders covering how to have performance and behaviourally-based conversations with their team.
  - Completed a Learning Needs Analysis for the leadership development needs for first and second-tier managers.
- Building internal Project Management expertise:
  - We sent a selection of senior leaders and team to a two-day Project Management course at Auckland University
  - Developed and trialled our own in-house one-day Project Management course for team members and leaders likely to be involved in projects
  - The in-house course has been positively received. It will be refined based on feedback and delivered to other teams at NZBS over the next 12 months.
- Established a People Development Forum – chaired by the CEO with Director level membership from Technical Services; Donor Services; Planning and Supply Chain and HR. This group provides a directed focus to Organisational Development and Learning and Development activity.
- Planning and launch of the July 2019 organisation-wide workforce culture and engagement survey.

Proud Ambassadors

- In 2018 we launched the refreshed NZBS Induction and on-boarding framework, comprising:
  - Four new online learning modules
  - An intranet page hosting all information and resources for on boarding, for both the new hire and the hiring manager
  - Step-by-step guides for the new employee and hiring manager
  - A one-day tour focused on helping new staff get to know the business, called Vein-to-Vein
- Vein-to-Vein is run in Auckland, Hamilton, Wellington and Christchurch, 4-6 times per annum as needed to match demand. Initial feedback is very positive, with 95% of participants rating it extremely or very valuable.
- Our 'Vital' employee appreciation programme, continues to be a great success. Features include benefits, awards, educational opportunities, health and wellbeing, supported by site champions called 'Vitalisers', an interactive extensive web portal and regular articles, posters, campaigns and educational sessions and a calendar of events is developed annually.

Improving How We Work

- We introduced a productivitiy model in Donor Services, which combines real-time analytics to assist predicting of staff resource needs, locations for collections and matching donors to blood production. This system is now being developed for the Technical Services function.
- We have completed the implementation of HumanForce – time and attendance rostering and management system. This is providing us with a more transparent system to support work and shift allocation, compliance with regard to Employment Agreements and the Holiday's Act 2013 (identifying relevant daily pay) and provides us with the opportunity to drive organisational consistency. Moving to an electronic system is also helping us release resources within payroll to support wider HR activities.
- Currently HR uses a myriad of systems and spreadsheets to support employee processes. The major overarching issues are that processes are highly manual with no or limited integration between the systems, leading to duplication of effort and a degree of frustration. We are currently reviewing improvement options – identifying opportunities to leverage the best we can out of existing systems or moving to a new system where existing systems show limited opportunities for development. We have established an HR Digital Evolution Project Group, which will work with the organisation's overarching digital governance group.
- NZBS is part of the joint DHB sector and Union working party looking at Holiday's Act compliance and remediation and this will continue into the upcoming year.

Supporting a Strong Safety Culture

- Governance and oversight of the H&S programme is provided by a National Health and Safety (H&S) Steering Committee – with Director-level membership and four employee representatives from each of the NZBS regions. Each region has a local H&S committee made up of employee H&S representatives from every department and site. During 2018-2019 we have been working with the committee members to improve their H&S knowledge, skills and capability to perform in their role as H&S representatives and as emerging leaders within NZBS.
- Our 'Donating Kindness' programme has been rolled out. The framework was co-created with staff with a focus on preventing and managing inappropriate behaviour; bullying and harassment; building on our culture and values; and taking into account WorkSafe Guidelines. The staged rollout included:
  1. A one day workshop for leaders
  2. A suite of guides and brochures
  3. A dedicated intranet page with resources
  4. A series of local team-briefing sessions
  5. Investigation skills training provided to HR staff and senior leaders
  6. Deep-dive questions added to our annual engagement and culture survey.
- Health and Safety (H&S) initiatives include:
  - Regular internal audits, supported by our elected staff representatives.
  - Key projects during 2018/19:
    - Implementation of a visitor and contractor management system in our four hub centres (Auckland, Hamilton, Wellington and Christchurch). This system also provides our contractors with an easy-to-access electronic induction module.

  - Development and implementation of a set of tools and training for our managers to better assist them with identifying and managing the H&S hazards of a contractor's work, thereby ensuring the safety of all our sites.
  - Updated the NZBS Emergency Management toolkit
  - Updated safety data sheets for hazardous substances used in our laboratories to ensure safe handling, storage and disposal of all chemicals used in our processes and to ensure compliance with the new H&S at Work Regulations (Hazardous Substances)
  - Development of H&S Key Performance Indices that is included in the Executive Dashboard
  - Health and Safety support to the project team overseeing the redevelopment work for our Auckland Donor Centre.
- Continued Health and Safety training throughout the year has included:
  - A range of health and safety mandatory training, relevant to risks and hazards associated with specific work places and practises, ensuring staff understand potential risks and are safe.
  - Training provided to all staff with specific Health & Safety responsibilities. This includes H&S Representatives, Fire Wardens, Workplace First Aiders and H&S Workplace Trainers.
  - Managers 'Foundations for Safety Leadership' training.
  - Advanced Driver Training of all Safety Critical Drivers, now refreshed every 3 years.

- Wellbeing activities are a feature of our core good employer programme with activities including:
  - Three nationwide team-based staff challenges were completed. The challenges focused on physical fitness, good diet, adequate sleep and mental and financial wellbeing.
  - Annual free influenza vaccination programme for all staff. In early 2019, 65% of our staff took up a free flu jab, protecting themselves, their families and their community.
  - Hepatitis B screening and immunisation programme.
  - Session on financial wellbeing where staff were able to gain an understanding of financial principles like budgeting flow and options to create financial security.
  - NZBS provides a confidential Employee Assistance Programme (EAP) available 24 hours a day to all staff.
  - Further Mental Health Foundation awareness training provided to managers so that they were better equipped to recognise, relate and respond to staff who need support for their mental health and wellbeing.
  - Return-to-work plans that support an employee's safe return to work as soon as they are medically able, thereby keeping staff engaged and financially secure.

Building our Workforce

- As part of our core delivery, we provide staff with on-the-job training, which includes one-to-one support from frontline workforce trainers, eLearning, journals, education sessions, workshops and conferences. We also support a number of staff with external tertiary education and development.
- Three staff scholarships were awarded, two funded by CSL and the Sir John Staveley scholarship. Recipients use the award funding to visit and study in international blood services and laboratories and to attend conferences.
- We have established a 'Learning Community' – a professional network of our scientists, nurses and specialists who have been moved into roles where they create and manage our in-house training. The Learning Community provides an opportunity for professional development and provides us with a network for rolling out toolkits, templates and software.

Coming up in 2019/20

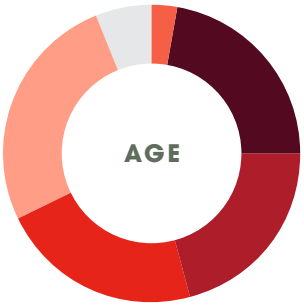
- Holiday's Act implementation
- Pay Equity Impact/Gender Pay Gap review
- Engagement and culture survey rollout - using the results to plan improvements, from organisation-wide down to individual team level.
- Continued support to the project team overseeing the redevelopment construction works at our Auckland Donor Centre.
- Continue our HR digital evolution.
- Review of Health and Safety strategy and organisational reporting needs
- Supporting leadership and management capability, with a refresh and implementation of the Managers Toolbox aligned to NZBS priorities to ensure all managers have the foundational skills to manage and lead well, including core NZBS business tools.

We look forward to reporting back on these and many other activities in next year's report.

NGĀ AHO O TE TAURA

OUR PEOPLE

FULL TIME	65%
PART TIME	28%
TEMPORARY FULL TIME	4%
CASUAL	2%
TEMPORARY PART TIME	1%



UNDER 25 YEARS	3%
25-34 YEARS	22%
35-44 YEARS	21%
45-54 YEARS	22%
55-64 YEARS	26%
65 YEARS AND OVER	6%

1 TO 2 YEARS	29%
3 TO 5 YEARS	16%
6 TO 15 YEARS	32%
15 TO 20 YEARS	15%
21 TO 30 YEARS	4%
31 OR MORE	4%

GENDER

MALE	25%
FEMALE	75%

DISABILITY

WITHOUT DISABILITY	89%
NOT STATED	8%
WITH DISABILITY	3%

ETHNICITY

MIDDLE EASTERN 1%
FIJIAN 1%
AFRICAN (OR OF AFRICAN ORIGIN) 2%
SAMOAN/OTHER PACIFIC PEOPLE 2%
SOUTHEAST ASIAN 2%
MĀORI 4%
INDIAN 5%
CHINESE 7%
OTHER EUROPEAN 10%
OTHER/UNKNOWN 10%
OTHER ASIAN 11%
NEW ZEALAND EUROPEAN 45%

HE PŪRONGO HOU TŌ TE RŌPŪ HAUORA

AN UPDATE FROM THE CLINICAL TEAM

NZBS is an organisation focused on the needs of patients and donors and the Clinical Team plays a key role in ensuring that we continue to deliver the best possible therapies and care.

We are a team of doctors, nurses and scientists with specific expertise in blood transfusion, transfusion and transplantation science and the care of donors.

Our Transfusion Medicine Specialists and Medical Officers are senior doctors who provide an around the clock service to hospital teams and blood banks to support the safe and timely use of blood and blood products. We also provided medical support for more than 6,000 specialist therapeutic procedures for patients, including stem cell collections, plasma exchange and therapeutic venesection this year. These specialist therapies are vital for patients with cancer, neurological problems and blood diseases. Our clinicians also work alongside the scientists in the team to promote the development of our services and to ensure the quality of the products we provide. This year we welcomed two new specialists to the team (Dr Gavin Cho and Dr Dixon Grant) and also a new Chief Medical Officer (Dr Sarah Morley).

The members of the Transfusion Nurse Specialist team are based in hospitals and blood banks across the country, supporting local delivery of transfusion services and providing training to hospital staff. Our nurses also help us to maintain patient safety by providing audits of how transfusion care is delivered. This year they have investigated how we respond to patients who require 'massive transfusion' because of severe bleeding (often due to trauma, surgery or childbirth) and this will allow us to improve our guidance for clinical teams. They have also developed new tools to help hospitals teams to recognise and care for patients who are having adverse reactions to blood transfusions.

Our scientific expert in tissue typing, Heather Dunckley, has been recognised internationally by becoming a board member of ASHI (American Society for Histocompatibility and Immunogenetics). Heather's day to day work supports patients requiring organ and stem cell transplants, as well as those requiring transfusion, and she is regularly involved in quality improvement for tissue typing laboratories internationally.

We are looking forward to a busy year, working with hospital teams to save lives and improve the outcomes of our patients.

HE KAIWHAKAORA A JAROM

JAROM IS A LIFESAVER

Jarom had only donated blood twice before he learned that he was a bone marrow match for someone in need. It was a rare chance to directly save someone's life – an opportunity he didn't turn down.

"It was something I didn't know a lot about to be honest. The nurses explained how hard it is for some patients to find a specific match, particularly those of Māori and Pacific Island descent."

Ethnic background plays a key role in bone marrow donation. The donor and patient must have matching tissue types and the closer the match, the better the chances of a successful transplant. Those with a largely European background have access to over 15 million worldwide registrants to find a match from, while those with Māori and Pasifika backgrounds only have about 10,000 to choose from on the New Zealand Bone Marrow Donor Registry (NZBMDR).

"I never realised how specific the matching process is, but once the nurses explained it to me, it just clicked. If there was a chance I could personally and directly help someone, how could I say no?"

After taking some tests, the nurses confirmed that Jarom was a suitable match and he was soon booked in for his bone marrow donation.

A bone marrow donation involves the collection of blood stem cells which grow inside the bone. The stem cells are collected by a procedure called leukapheresis, a needle is inserted into the vein of the donor's arm, and a small amount of blood is passed into the cell separator machine which separates and removes the stem cells and the rest of the blood is then returned to the donor.

"I think if more people knew how easy the whole donation process is, they would be encouraged to join the registry", says Jarom.

"Most of us are looking for ways to give back and make a positive contribution to the world and this is one way we can do that; whether it's blood or a bone marrow donation, all it takes is a few hours out of your day".

Jarom is grateful for the opportunity to have helped a fellow Kiwi and he strongly encourages New Zealanders with Māori and Pasifika backgrounds to consider donating. "Whether it's blood or bone marrow," says Jarom, "it all goes towards changing someone's life for the better."

If you meet the blood donor eligibility criteria, you can join the NZBMDR while you give blood, simply by filling in a form and having two small additional tubes of blood taken. You could be the only match, the only hope for someone in dire need.

Find out more here: www.bonemarrow.org.nz

NEW ZEALAND BONE MARROW DONOR REGISTRY

“Most of us are looking for ways to give back and make a positive contribution to the world and this is one way we can do that.”

THE BOARD MEMBERS

DAVID CHAMBERLAIN - BOARD CHAIR

David is a Principal and Actuary at Melville Jessup Weaver Limited (MJW), a leading firm of consulting actuaries in New Zealand. David has over 30 years' commercial experience in the financial services sector and has advised a wide variety of clients over that time on a broad range of topics. David is also Chairman of the Board of Trustees of the Medical Research Institute of New Zealand.

DR JACKIE BLUE – DEPUTY CHAIR

Jackie is a former medical practitioner who pioneered the role of Breast Physicians in the late 1990's. In 2005, she was elected as a List Member of Parliament and was in this role until June 2013 when she joined the Human Rights Commission. On completing her term at the Human Rights Commission, Jackie was appointed as Deputy Chair for NZBS.

DR BART BAKER

Bart is a Consultant Haematologist and Clinical Director of the Regional Cancer Treatment Service at Palmerston North Hospital. He chairs the Medical and Scientific Committee of Leukaemia and Blood Cancer New Zealand and is a member of the Haematology Society of Australia and New Zealand and of the American Society of Haematology.

CATHRYN LANCASTER

Cathryn, through Lancaster Consulting, helps her clients develop business cases for large infrastructure and IT developments, including the Anchor Projects for the Christchurch City Rebuild. She has worked in consulting and GM roles for many large multinationals including EY, GE, IBM and DHL across many markets. Cathryn was previously a Director of New Zealand Health IT and is currently a Trustee of both Rangi Ruru Girls School and the Life Education Trust. Cathryn holds a BCom, is a member of the Chartered Institute of Management Accountants and a Chartered Member of the Institute of Directors.

FIONA PIMM

Fiona originally trained as an MRT and worked in hospital settings for 12 years before moving in to Health Management. After many years in various Executive Management roles Fiona has now moved onto her third career in the governance and consulting fields. Fiona's governance roles include organisations involved in health service delivery, workforce development, education research and iwi development.

DR PAULA MARTIN

Paula has over 25 years' experience in public policy, strategy and research as a senior manager, consultant and advisor. She is currently an adjunct senior research fellow with the Health Services Research Centre at the Victoria University of Wellington. Paula is also a member of the Institute of Directors and holds a BA (Hons) in Psychology, an MA (Applied) in Social Science Research and a PhD in Public Policy from Victoria University).

RAY LIND

Ray has many years' experience in corporate management within the health sector and a proven track record in results-driven leadership. His most recent role was CEO for Careerforce, an Industry Training Organisation (ITO) for the health, mental health, youth work, disability, social services and cleaning sectors. Prior to this, Ray was COO for one of New Zealand's largest providers of home care, mental health and addictions and residential disability support services and COO for Hawke's Bay DHB.

Find out more about our Board Members on our website: www.nzblood.co.nz/about-nzbs/nzbs-board-members

THE EXECUTIVE MANAGEMENT

SAM CLIFFE
Chief Executive Officer

As the Chief Executive Officer (CEO), Sam leads the Executive Team and is accountable to the NZBS Board. She has overall responsibility for organisational performance including delivery of both its Annual and Strategic Plans.

DR SARAH MORLEY
Chief Medical Officer (started June 2019)

Sarah leads the NZBS Clinical Services team which plays a key role in ensuring that clinically appropriate blood and blood products are provided to patients in need, wherever and whenever they are required.

DR PETER FLANAGAN
National Medical Director to June 2019

Peter continues to work for NZBS as a Transfusion Medicine Specialist in Wellington.

JOHN HARRISON
Director Finance and Corporate Services

John leads and is accountable for the Finance and Corporate Services function to deliver effective financial management, financial strategy, policy development and operational analysis. Additionally, John drives business improvement and enhanced performance through the use of analytics and business intelligence practices.

SUE JENSEN
Director Human Resources and Organisational Development

Sue is responsible for providing strategic human resource leadership ensuring policies, programs and HR services support a high performing culture supportive of the enduring outcome, vision and values of NZBS.

RAY SCOTT
Consultant Director

Ray supports and guides transition of technical activities and systems by providing expert technical knowledge, advice and mentoring to support the future sustainability of NZBS and development of talent and capability.

MEREDITH SMITH
Director Quality and Regulatory Affairs

Meredith is responsible for developing, maintaining, managing and leading effective and co-ordinated quality and regulatory compliance processes. The Quality team also support continuous business improvement activity NZBS.

DR MANDY SUDDES
Director Technical Services

Mandy is accountable for operational service delivery of technical and laboratory services within NZBS, ensuring that the clinical demand for products and services and performance are met in line with clinical requirements.

JUSTIN SCOTT
Director Planning and Supply Chain

Justin leads the Planning and Supply Chain team in ensuring that blood and blood products are always available nationally where and when they are needed, and our consumables inventory is stored and managed effectively across all sites. He is also responsible for leading our procurement processes to deliver value for money, and ensuring alignment with the NZ Government Rules of Sourcing.

CHRISTINE VAN TILBURG
Director Business Improvement and Partnerships

Christine develops capability across the organisation in effective project management and business improvement practices. Christine also leads the development of partnerships with external organisations to create value for both the NZBS and the wider health sector.

DELAINE WILSON
Director Donor Services

Delaine leads and is accountable for the Donor Services function from strategy development through to operational service delivery to ensure that collection targets are achieved to ensure clinical demand for products and services are met.

STATEMENT OF TRENDS – ACTUAL OUTCOMES AND FORWARD OUTLOOK COMMENCING 1 JULY 2014 THROUGH TO 30 JUNE 2022

	Actual Outcomes					Forward Outlook		
Key Indicators	**Year 2014/15**	**Year 2015/16**	**Year 2016/17**	**Year 2017/18**	**Year 2018/19**	**Year 2019/20**	**Year 2020/21**	**Year 2021/22**
Collections & Production Volumes								
Donor Population								
Active Donors at 30 June each year	109,158	110,746	109,751	107,210	108,588	108,500	109,000	110,500
New Zealand population – stated in 000s	4,591.71	4,690.51	4,789.45	4,882.21	4,966.66	4,997.62	5,055.09	5,108.17
Active donors as a % of the total population	2.38%	2.36%	2.29%	2.20%	2.19%	2.17%	2.16%	2.16%
Collection Volumes								
Donation collection volumes	164,973	175,138	167,079	172,666	175,347	178,660	179,665	182,115
Donor to donation ratio – average donation frequency per donor	1.51	1.58	1.52	1.61	1.61	1.65	1.65	1.65
Production Volumes								
Red cells – units	111,750	111,365	105,293	105,209	106,418	103,437	102,970	102,732
Platelets adult – doses	18,625	17,917	17,686	18,998	19,370	18,537	18,677	18,850
Cryoprecipitate – units	5,123	5,572	5,252	5,750	7,169	6,941	6,971	6,974
Plasma – units	16,367	16,521	15,682	15,582	16,001	17,142	17,208	17,196
Source plasma Issued for fractionation manufacturing – kgs	59,333	67,152	66,785	68,868	71,273	73,727	74,701	76,520
Key Product & Service Demand Volumes								
Key Blood Product Volumes – as issued								
Fresh Products								
Total red cells – units	107,992	106,389	101,228	101,837	102,179	100,120	99,893	99,659
Total platelets – adult doses	13,996	14,408	15,018	15,374	15,882	15,798	15,901	16,051
Cryoprecipitate – units	4,996	5,358	5,048	5,589	6,725	6,615	6,625	6,650
Total clinical FFP – plasma units	16,673	15,720	14,790	14,488	17,192	16,255	16,345	16,420
Total Fresh Product units issued per 1000 head of population	31.29	30.25	28.41	28.12	28.59	27.77	27.45	27.17
Fractionated Product								
Immunoglobulin – intragam – grams	300,219	295,134	272,871	301,914	328,683	332,829	349,227	353,169
Immunoglobulin – evogam – grams	33,255	25,095	41,860	44,630	50,016	50,646	53,180	55,706
Immunoglobulin – privigen – grams	1,540	36,698	40,643	45,250	52,815	54,695	56,575	71,910
Immunoglobulin – hizentra – grams	288	384	392	900	1,348	1,660	1,660	1,680
Total Immunoglobulin product issues – g	**335,302**	**357,311**	**355,766**	**392,694**	**432,862**	**439,830**	**460,642**	**482,465**
Total Immunoglobulin product issued per 1000 head of population – grams	73.02	76.18	74.28	80.43	87.15	88.01	91.12	94.45
Albumin issues – grams	530,360	491,570	485,212	544,488	576,654	562,790	564,410	565,930
Biostate (Factor VIII) – 500iu equivalent vials	8,567	8,227	7,065	7,393	6,658	7,000	7,000	7,000
Key Service Volumes – as supplied								
Patient antibody screens	142,972	143,030	146,060	150,427	149,888	146,700	146,750	146,850
Patient blood groupings	147,375	147,791	151,831	156,353	155,688	152,500	152,550	152,600
Patient compatability testing	111,857	111,469	111,923	111,787	114,942	113,500	113,525	113,550
Tissue Typing NGS testing for Solid Organ & Bone Marrow Transplants	-	-	-	2,224	2,807	3,200	3,325	3,450
Taxpayer Value - Cost of NZBS for a family of 4								
Total NZBS Operating Cost net of unrealised exchange movements ($000's)	105,178	115,807	115,121	123,656	132,527	138,898	145,514	151,427
Annual operating cost of NZBS per Head of Population	22.91	24.69	24.04	25.33	26.68	27.79	28.79	29.64
Cost of the New Zealand Blood Service for a family of 4	91.64	98.76	96.16	101.32	106.72	111.16	115.16	118.56

STATEMENT OF TRENDS – ACTUAL OUTCOMES AND FORWARD OUTLOOK COMMENCING 1 JULY 2014 THROUGH TO 30 JUNE 2022

	Actual Outcomes					Forward Outlook		
Key Indicators	**Year 2014/15**	**Year 2015/16**	**Year 2016/17**	**Year 2017/18**	**Year 2018/19**	**Year 2019/20**	**Year 2020/21**	**Year 2021/22**
Earnings Performance								
Total blood product revenue ($000s)	**89,946**	**92,065**	**90,285**	**96,087**	**105,674**	**109,671**	**115,937**	**121,663**
Total services revenue ($000s)	21,155	21,918	22,772	23,995	25,834	27,586	29,087	30,112
Overseas revenue ($000s)	675	1,052	966	1,115	1,261	1,013	994	1,086
Other revenue (including interest earned) ($000s)	779	558	404	427	306	289	301	308
Total revenues - pre DHB price rebates ($000s)	112,555	115,592	114,427	121,624	133,075	138,559	146,319	153,169
Revenue growth %	6.19%	2.70%	(1.01%)	6.29%	9.42%	4.12%	5.60%	4.68%
Full time equivalent employees with vacancy allowance - FTEs	508.64	514.20	512.36	533.16	533.45	559.48	559.48	570.48
Revenue per full time equivalent employee ($000s)	221.29	224.80	223.33	228.12	249.46	247.66	261.53	268.49
Reported surplus / (deficit) before DHB price rebates ($000s)	8,256	(2,345)	(73)	(567)	(593)	(1,103)	(442)	439
Price rebates to DHBs ($000s)	3,550	-	-	-	-	-	-	-
Reported surplus / (deficit) after DHB price rebates ($000s)	4,706	(2,345)	(73)	(567)	(593)	(1,103)	(442)	439
Financial Position ($000S)								
Total equity	41,817	39,472	39,399	38,832	38,239	36,034	35,592	36,031
Total non-current borrowings	4,069	7,075	8,280	7,847	10,071	14,234	8,459	9,760
Total assets	68,506	72,330	73,961	76,533	82,363	90,093	94,082	95,425
Working capital	36,992	35,243	32,302	30,920	32,444	25,543	25,552	26,967
Inventory stock turn (times per annum)	4.09	3.32	2.97	3.23	3.46	4.07	4.58	4.61
Receivables - days sales outstanding (days)	35.83	35.18	34.61	33.23	40.62	28.11	28.11	28.11
Debt / Equity Gearing								
Equity ratio %	91.13%	84.80%	82.63%	83.19%	78.21%	64.18%	60.69%	60.45%
Debt ratio %	8.87%	15.20%	17.37%	16.81%	21.79%	35.82%	39.31%	39.55%
Cash Flows ($000S)								
Cash flow derived from operating activities	5,803	(968)	3,870	5,835	4,317	4,199	7,418	5,182
Investing activities - investments & capital expenditure	(2,943)	(5,285)	(3,492)	(5,313)	(4,981)	(13,378)	(9,286)	(6,248)
Financing related activities - borrowing & debt repayment	(276)	(426)	(364)	(494)	1,848	7,279	2,939	523
Cash movement in the financial year - (xxx) = cash reduction	2,584	(6,679)	13	29	1,184	(1,900)	1,071	(543)
Cash position at balance date ($000s)	10,598	3,919	3,932	3,961	5,145	3,932	3,002	2,458
Banking Covenant Compliance								
Adjusted total tangible assets (TTA) ($000s)	63,902	65,612	64,836	66,787	74,094	82,430	86,858	87,142
Calculated bank equity - (TTA minus total liabilities) ($000s)	37,213	32,754	30,275	29,086	32,953	28,370	28,367	27,748
Bank equity ratio % - requirement of a minimum 30% of adjusted TTA	58.23%	49.92%	46.69%	43.55%	44.47%	34.42%	32.66%	32.81%
Surplus before interest, depreciation & DHB price rebates (EBITDA) - ($000s)	12,116	8,686	6,452	4,707	7,487	6,669	9,149	10,481
Interest cover ratio - minimum 1 times cover of EBITDA	41.79	7.89	7.82	5.58	10.93	5.25	6.20	6.26

STRUCTURE & GOVERNANCE

NZBS IS A CROWN ENTITY ESTABLISHED IN 1998 UNDER THE NEW ZEALAND PUBLIC HEALTH AND DISABILITY ACT 2000.

Its legislated primary purpose and core activity is the safe, timely, high quality and efficient provision of blood, blood products and services to clinicians for the people of New Zealand. In addition to this, NZBS provides services for matching of patients and donors prior to organ/tissue transplantation, tissue banking (skin and bone) and stem cell services. These activities, which are provided to all people of New Zealand, contribute to achievement of the organisation's single Enduring Outcome:

Health needs of people in New Zealand are supported by the availability of safe and appropriate blood and tissue products and related services.

NZBS is required under the Crown Entities Act 2004 (the Act) to give effect to Government policy as directed by the responsible Minister, the Minister of Health. The NZBS Board is appointed by and responsible to the Minister of Health and performs strategic and governance functions for the organisation in accordance with the Act. The collective duties of the Board under the Act include ensuring that NZBS acts consistently with its objectives, functions, Statement of Intent and Annual Statement of Performance Expectations; performs its functions efficiently, effectively and consistently with the spirit of service to the public; and operates in a financially responsible manner.

Board members who have a range of appropriate and complementary skills and experience to govern this complex collections, manufacturing and distribution organisation also have individual duties to: comply with the Act (including with respect to disclosure of information); act with honesty and integrity; act in good faith and not at the expense of NZBS's interests; and act with reasonable care, diligence and skill. The NZBS Board appoints the Chief Executive Officer (CEO) who reports directly to them. An Executive Management Team (see page 29) supports the CEO.

The NZBS Board ensured that the organisational activities supported NZBS to achieve the following seven Strategic Goals for the 2018/19 year:

1/ NZBS builds on core capabilities to provide a range of products and services which are appropriate to New Zealand health needs and priorities.

2/ NZBS achieves the highest possible Safety and Quality standards in all that it does.

3/ NZBS manages a sustainable donor population capable of supporting ongoing product demand in New Zealand.

4/ NZBS's relationships with other health sector entities are mutually supportive and productive.

5/ NZBS has a sustainable, competent and engaged workforce.

6/ NZBS uses international best practices and internal Research & Development capabilities to improve and develop products and services for the New Zealand health and disability sector.

7/ NZBS is a financially sustainable organisation operating effectively and efficiently.

STATUTORY DISCLOSURES
FOR THE YEAR ENDED 30 JUNE 2019

Your Board Members take pleasure in presenting their Annual Report including the Financial Statements of New Zealand Blood Service for the year ended 30 June 2019. The presented Annual Report is also published on the New Zealand Blood Service website - www.nzblood.co.nz

PRINCIPAL ACTIVITY

The New Zealand Blood Service (NZBS) was established in 1998 to ensure the supply of safe blood and blood products to the New Zealand health sector and has responsibility for all aspects of the transfusion process in New Zealand; from the collection of blood from volunteer donors to the transfusion of blood components and products to recipients; a 'vein to vein' transfusion service.

FINANCIAL PERFORMANCE

The Board of the New Zealand Blood Service sets financial targets for the entity at the beginning of the 2018/19 financial year and continuously monitors actual performance against these targets during the course of the year. The 2018/19 year again witnessed an overall growth in volumes of 5.3% compared with last year's growth of 4.2%. Volume growth ocurred for all main blood products after prior years of decline for some. In addition immunoglobulin product saw continued strong volume growth of 10.14% compared with last year's 10.25% volume growth for this major product category. NZBS is reporting a deficit of **-$593k** for the 2018/19 financial year compared with a budgeted deficit of -$1.43m and last year's deficit of **-$567k**. At the operational level the result was pleasingly strong with an operational surplus of $1.38m, a consequence of the strong growth environment for both blood products and services evident throughout the financial year. The reported result however continues to be buffeted by the balance date 'mark to market' for unrealised foreign exchange movements, as required under International Financial Reporting Standards. In the 2018/19 financial year this represented an unfavourable movement of **-$1.14m** effectively masking the solid operational result and delivering the reported deficit. The Board confirms NZBS complied at all times with its banking covenants in the 2018/19 financial year.

Key financial performance metrics for the 2018/19 financial year are set out below.

	2018/19	2018/19	2017/18
Financial Performance Indicators	**Actual**	**Budget**	**Last Year**
Total Revenue pre DHB Price Rebates ($000s)	133,075	127,397	121,624
Operational Earnings ($000's)	1,377	(796)	(1,248)
Declared Price Rebate to District Health Boards ($000s)	-	-	-
Total Expenses ($000s)	133,668	128,823	122,191
Reported Surplus / (Deficit) ($000s)	(593)	(1,426)	(567)
Capital charge (6% on equity) paid to the Crown ($000s)	2,368	2,277	2,434
Total Assets ($000s)	82,363	80,509	76,533
Cash generated from Operating Activities ($000s)	4,317	3,098	5,835
Capital investment excluding capitalised finance leases ($000's)	5,154	5,612	5,569
Equity plus current and non-current Borrowings ($000s)	48,893	49,959	47,162
Equity Ratio %	78.21%	74.52%	82.34%
Debt Ratio % (based on non-current external borrowings)	21.79%	25.48%	17.66%
Banking Ratio - times EBITDA (minimum 1 times)	10.93	6.71	5.58
Banking Ratio - Bank defined Equity to Total Tangible Assets (minimum 30%)	44.47%	43.73%	47.18%

AUDITOR

Audit New Zealand on behalf of the Auditor-General is appointed in accordance with Sections 14 and 15 of the Public Audit Act 2001 and Section 156 of the Crown Entities Act 2004. Remuneration of the auditor was as follows:

Description	Audit Year	30 June 2019	30 June 2018
Audit fees for financial statement audit	2019	114,554	
Audit fees for financial statement audit	2018	-	111,443

STATUTORY DISCLOSURES FOR THE YEAR ENDED 30 JUNE 2019

BOARD MEMBERS

All Board Members are appointed by the Crown.

REMUNERATION OF BOARD MEMBERS

The following Board Members held office during the period under review and were paid fees accordingly:

Board Members' Remuneration	Date of Original Appointment	30 June 2019	30 June 2018
Mr David Chamberlain (Chairman)	Appointed 1 October 2009	32,000	32,000
Dr Jackie Blue (Deputy Chair)	Appointed 19 October 2018	14,032	-
Ms Cathryn Lancaster	Appointed 15 June 2016	16,000	16,000
Ms Fiona Pimm	Appointed 15 June 2016	16,000	16,000
Dr Bart Baker	Appointed 15 June 2016	16,000	16,000
Mr Raymond Lind	Appointed 19 October 2018	11,226	-
Dr Paula Martin	Appointed 19 October 2018	11,226	-
Mr Ian Ward (Deputy Chair)	Retired 18 October 2018	5,968	20,000
Professor Peter Browett	Retired 18 October 2018	4,774	16,000
Mrs Victoria Kingi	Resigned 31 August 2018	2,667	16,000
Total Board Members' remuneration		**129,893**	**132,000**

BOARD MEMBERS' INTERESTS – RELATED PARTY TRANSACTIONS

NZBS operates an Interest Register under a continuous disclosure regime with the Register reviewed at every Board meeting. NZBS has one Board Member with a relationship to organisations that NZBS transacts business with. The Board has assessed these potential related party transactions under the International Public Sector Accounting Standards (IPSAS) and concluded the transactions do not satisfy the 'control' requirement as defined in those Standards, consequently disclosure is not required.

BOARD MEMBERS' INTERESTS

During the financial year Board member Dr Paula Martin was paid $4,800 for the preparation of a briefing paper for Board discusssion on the establishment of a national agency for organ donation and transplant services. No other payments were made to Board members other than total remuneration received or due and receivable by Board Members shown in Remuneration of Board Members.

STATEMENT OF USE OF ENTITY INFORMATION

There were no notices from Board Members of the entity requesting to use entity information received in their capacity as Board Members which would not otherwise have been available to them.

DIRECTIONS ISSUED BY MINISTERS

New Zealand Blood Service received no ministerial directives under s107 of the Crown Entities Act 2004 in the 2018/19 financial year. NZBS continues to operate under two ministerial directives namely; (1) mandatory compliance with Procurement rules of sourcing (2015) and (2) the public sector implementation of the New Zealand business number (2016).

DONATIONS

Donations were made by the entity during the year ended 30 June 2019 totalling $6,182 (2018: $1,104).

DISCLOSURE OF 'ULTRA VIRES' TRANSACTIONS

NZBS confirms in accordance with Secion 151 (1) of the Crown Entities Act 2004 that no 'ultra vires' transactions occured in the 2018/19 financial year.

INSURANCE

New Zealand Blood Service carries insurance cover to protect Board Members and its employees from legal liability arising from the carrying out of their duties. NZBS has provided Board Members with a Deed of Indemnity when acting in pursuance of the functions of the organisation. The issuing of Deeds of Indemnity has been recorded in each Board Member's Interests Register.

EMPLOYEE REMUNERATION RANGE

Employee Remuneration range	30 June 2019 No. Employees	30 June 2018 No. Employees
$100,000 - 109,999	20	18
$110,000 - 119,999	10	5
$120,000 - 129,999	4	1
$130,000 - 139,999	3	6
$140,000 - 149,999	3	4
$150,000 - 159,999	3	-
$160,000 - 169,999	2	4
$170,000 - 179,999	2	2
$180,000 - 189,999	3	-
$190,000 - 199,999	-	-
$200,000 - 209,999	-	2
$210,000 - 219,999	4	2
$220,000 - 229,999	2	2
$230,000 - 239,999	1	1
$240,000 - 249,999	1	-
$260,000 - 269,999	-	1
$270,000 - 279,999	1	2
$280,000 - 289,999	2	-
$300,000 - 309,999		1
$310,000 - 319,999	1	-
$350,000 - 359,999 *	1	2
$370,000 - 379,999 *	1	-
	64	53

* Chief Executive Officer

Employee renumeration includes the following elements; base salary, cash allowances, bonuses and incentive payments, non-monetary benefits, any Fringe Benefit tax paid on any element of the remuneration package and any termination, severance or end of contract payments.

TERMINATION PAYMENTS

During the year ended 30 June 2019 three termination payments were made totalling $94,650 (2018: six terminations totalling $141,576).

David Chamberlain
Board Chair
29 August 2019

Dr Jackie Blue
Deputy Board Chair
29 August 2019

PŪRONGO PŪTEA

FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2019

STATEMENT OF COMPREHENSIVE REVENUE AND EXPENSE FOR THE YEAR ENDED 30 JUNE 2019

	Note	Actual 2019	Budget 2019	Actual 2018
Revenue				
Revenue from supplying blood products		105,674,193	101,860,219	96,087,755
Revenue from supplying services		25,833,777	24,270,381	23,994,629
Revenue from overseas sales	2	1,260,274	951,993	1,114,764
Interest revenue		288,833	308,050	304,410
Other revenue	2	17,557	6,500	122,548
Total revenue		**133,074,634**	**127,397,143**	**121,624,106**
Expenditure				
Cost of consumables and changes in inventory	3	49,558,859	46,487,309	45,506,424
Employee benefit expense	4	48,008,051	49,812,818	45,599,185
Depreciation and amortisation	13 & 14	3,988,057	4,244,483	3,832,399
Other expenses	5	30,404,590	27,703,539	28,126,566
Finance costs	6	567,294	630,590	591,447
Revaluation of derivative financial instruments	7	1,141,037	(55,696)	(1,464,943)
Total expenses		**133,667,888**	**128,823,043**	**122,191,078**
Surplus / (deficit) for the period		**(593,254)**	**(1,425,900)**	**(566,972)**
Other comprehensive revenue and expense		-	-	-
Total other comprehensive revenue and expense		-	-	-
Total comprehensive revenue and expense for the period		**(593,254)**	**(1,425,900)**	**(566,972)**

Explanations of significant variances against budget are detailed in Note 35.

New Zealand Blood Service has initially adopted PBE IFRS 9 Financial Instruments at 1 July 2018. Under the transition method chosen, comparative information is not restated.

The accompanying notes form part of these financial statements.

STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2019

	Note	Actual 2019	Budget 2019	Actual 2018
Assets				
Current assets				
Cash and cash equivalents	8	5,145,101	1,915,659	3,961,045
Trade and other receivables	9	14,808,246	13,594,975	12,738,598
Investments	10	7,000,000	7,000,000	7,000,000
Inventories	11	31,293,472	29,902,739	29,815,866
Derivative financial instruments	12	4,002	226,845	417,037
Total current assets		**58,250,821**	**52,640,218**	**53,932,546**
Non-current assets				
Derivative financial instruments	12	42,295	-	122,397
Property, plant and equipment	13	15,800,852	18,968,049	12,732,099
Intangible assets	14	8,268,843	8,901,097	9,746,231
Total non-current assets		**24,111,990**	**27,869,146**	**22,600,727**
Total assets		**82,362,811**	**80,509,364**	**76,533,273**
Liabilities				
Current liabilities				
Trade and other payables	15	16,696,150	16,350,697	15,471,344
Premises reinstatement provision	16	95,124	-	76,549
Employee benefit entitlements	17	7,774,923	7,053,545	6,956,212
Derivative financial instruments	12	631,380	-	-
Lease incentive liability	19	25,955	25,956	25,955
Borrowings	20	583,400	800,478	482,156
Total current liabilities		**25,806,932**	**24,230,676**	**23,012,216**
Non-current liabilities				
Derivative financial instruments	12	16,520	-	-
Premises reinstatement provision	16	2,805,718	2,400,887	2,336,949
Employee benefit entitlements	17	2,211,851	1,763,090	1,826,924
Rent accrued	18	2,982,454	2,982,459	2,422,342
Lease incentive liability	19	229,273	229,271	255,228
Borrowings	20	10,070,905	11,672,498	7,847,202
Total non-current liabilities		**18,316,721**	**19,048,205**	**14,688,645**
Total liabilities		**44,123,653**	**43,278,881**	**37,700,861**
Net assets		**38,239,158**	**37,230,483**	**38,832,412**
Equity	**21**			
Crown equity		15,716,696	15,716,696	15,716,696
Accumulated comprehensive revenue and expense		18,522,462	17,513,787	19,115,716
Adverse fractionation event reserve		4,000,000	4,000,000	4,000,000
Total equity		**38,239,158**	**37,230,483**	**38,832,412**

For and on behalf of the Board Members of New Zealand Blood Service.

New Zealand Blood Service has initially adopted PBE IFRS 9 Financial Instruments at 1 July 2018. Under the transition method chosen, comparative information is not restated.

David Chamberlain
Board Chair
29 August 2019

Dr Jackie Blue
Board Deputy Chair
29 August 2019

The accompanying notes form part of these financial statements.

STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 30 JUNE 2019

	Note	Actual 2019	Budget 2019	Actual 2018
Opening balance		**38,832,412**	**38,656,383**	**39,399,384**
Transfer from accumulated comprehensive reserve and expense to adverse fractionation event reserve		-	-	-
Total comprehensive revenue and expense for the year		(593,254)	(1,425,900)	(566,972)
Adverse fractionation event reserve		-	-	-
Contribution from owners		-	-	-
Closing balance	**21**	**38,239,158**	**37,230,483**	**38,832,412**

New Zealand Blood Service has initially adopted PBE IFRS 9 Financial Instruments at 1 July 2018. Under the transition method chosen, comparative information is not restated.

The accompanying notes form part of these financial statements.

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2019

	Note	Actual 2019	Budget 2019	Actual 2018
Cash flows from operating activities				
Receipts from blood products and services revenue		130,975,450	125,618,013	120,439,736
Interest received		61,799	69,998	57,359
Receipts from other revenue		68,230	763,216	117,125
Payments to employees		(46,598,979)	(49,150,793)	(44,602,621)
Payments to suppliers		(77,346,289)	(71,223,141)	(67,192,814)
Distribution of price rebate to District Health Boards		-	-	-
Interest paid		(559,771)	(582,586)	(592,225)
Capital charge payments		(2,368,020)	(2,276,605)	(2,433,930)
Net GST received from/(paid to) IRD		84,793	(120,273)	42,796
Net cash from operating activities	**22**	**4,317,213**	**3,097,829**	**5,835,426**
Cash flows from investing activities				
Interest received		223,130	236,652	255,924
Acquistion of adverse fractionation event reserve - term deposits		-	-	-
Acquistion of investments - term deposits		(18,000,000)	(9,000,000)	(9,000,000)
Receipts from maturity of investments - term deposits		18,000,000	9,000,000	9,000,000
Proceeds from sale of property, plant and equipment		15,534	-	43
Receipts from Landlord for contribution to fitout of premises		-	-	-
Purchase of intangible assets		(146,058)	(832,000)	(2,232,626)
Purchase of property, plant and equipment		(5,074,029)	(8,472,488)	(3,336,081)
Net cash from investing activities		**(4,981,423)**	**(9,067,836)**	**(5,312,740)**
Cash flows from financing activities				
Proceeds from borrowings - term credit facility		2,350,000	-	-
Proceeds from borrowings - finance lease		476,681	4,835,988	-
Repayment of borrowings - finance lease		(978,415)	(676,973)	(493,924)
Repayment of equity		-	-	-
Net cash from financing activities		**1,848,266**	**4,159,015**	**(493,924)**
Net (decrease) / increase in cash, cash equivalents and bank overdraft		**1,184,056**	**(1,810,992)**	**28,762**
Cash, cash equivalents and bank overdraft at the beginning of the year		3,961,045	3,726,651	3,932,283
Cash, cash equivalents and bank overdraft at the end of the year	**8**	**5,145,101**	**1,915,659**	**3,961,045**

The GST (net) component of operating activities reflects the net GST paid to and received from the Inland Revenue Department.

The GST (net) component has been presented on a net basis, as the gross amounts do not provide meaningful information for financial statement purposes and to be consistent with the presentation basis of the other primary financial statements.

The accompanying notes form part of these financial statements.

1 Statement Of Accounting Policies

(1) REPORTING ENTITY

New Zealand Blood Service (NZBS) is an appointed entity pursuant to section 63 of the Human Tissue Act 2008, primarily responsible for the performance of functions in relation to blood and controlled human substances in New Zealand.

NZBS is a Crown entity under the New Zealand Public Health and Disability Act 2000, and, more specifically, a Statutory Entity under the Crown Entities Act 2004. NZBS's ultimate parent is the New Zealand Crown.

NZBS is a public benefit entity as its primary objective is to support the New Zealand healthcare community through managing the collection, processing and supply of blood, controlled human substances and related services. Accordingly, NZBS has designated itself as a public benefit entity (PBE) for the purposes of applying the Public Benefit Entities Accounting Standards (PBE Standards), issued by the External Reporting Board (XRB).

The financial statements for NZBS are for the year ended 30 June 2019, and were approved by the Board on 29 August 2019.

(2) BASIS OF PREPARATION

The financial statements of NZBS have been prepared in accordance with the requirements of the Crown Entities Act 2004 and the New Zealand Public Health and Disability Act 2000.

These financial statements have been prepared in accordance with New Zealand generally accepted accounting practice (NZ GAAP), in accordance with Tier 1 PBE Standards. They comply with PBE Standards, as appropriate for PBEs. This is the first set of financial statements that PBE IFRS 9 have been applied and changes to significant accounting policies are described in Note 4.

The accounting policies set out below have been applied consistently to all periods presented in these financial statements apart from the changes noted in Note 4.

The financial statements have been prepared on an historical cost basis, with the exception of certain items identified in specific accounting policies.

The financial statements are presented in New Zealand dollars. The functional currency of NZBS is New Zealand dollars.

(3) STANDARDS AND INTERPRETATIONS ISSUED AND NOT YET ADOPTED

There were no new standards and amendments, issued but not yet effective that have been early adopted, and which are relevant to NZBS.

(4) SIGNIFICANT ACCOUNTING POLICIES

Early adoption of PBE IFRS 9

In January 2017, the External Reporting Board issued PBE IFRS 9 Financial Instruments. This replaces PBE IPSAS 29 Financial Instruments: Recognition and Measurement. PBE IFRS 9 is effective for annual periods beginning on or after 1 January 2021, with early application permitted. NZBS has elected to early adopt PBE IFRS 9 Financial Instruments (2014) ("IFRS 9") from 1 July 2018 without restatement, in accordance with the transition requirements and guidance from Treasury. The date of initial application is 1 July 2018. This standard sets out the new requirements for the classification and measurement of financial assets, impairment provisioning and hedge accounting for financial instruments.

The following table and accompanying notes below explain the original measurement categories under PBE IPSAS 29 and the new measurement categories under PBE IFRS 9 for each class of financial assets as at 1 July 2018.

Transition Statement

Financial Assets	Note	Original classification under IPSAS 29	New classification under PBE IFRS 9	Original carrying amount	New classification under PBE IFRS 9
Cash & Cash equivalents	8	Loans and receivables	Amortised cost	3,961,045	3,961,045
Trade and other receivables	9	Loans and receivables	Amortised cost	12,738,598	12,738,598
Investments	10	Held till maturity	Amortised cost	7,000,000	7,000,000
Derivative financial instruments	12	Fair value through surplus and deficit	Fair value through surplus and deficit	417,037	417,037
Net financial assets				**24,116,680**	**24,116,680**

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

1 Statement Of Accounting Policies (continued)

The following changes to accounting policies due to the application of PBE IFRS 9 have been applied to these financial statements.

Classification and measurement of financial liabilities

The adoption of PBE IFRS 9 has not had a significant effect on the accounting policies related to financial liabilities and derivative financial instruments. Financial liabilities continue to be measured at either amortised cost and derivative financial instruments continue to be measured at fair value through profit and loss.

Classification and measurement of financial assets

NZBS classifies its financial assets as subsequently measured at either amortised cost or fair value depending on NZBS's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

On adoption of PBE IFRS 9, investments previously classified as loans and receivables are now classified as financial assets at amortised cost. However there is no material impact as these are still measured at amortised cost.

Changes to the impairment of financial assets

The PBE IFRS 9 impairment provision requirements are based on an expected credit loss model, replacing the incurred loss methodology under PBE IPSAS 29. NZBS applies the simplified approach for trade and other receivables, which requires the lifetime expected credit losses to be applied when measuring the loss allowance. The impact of adopting PBE IFRS 9 has not had a material impact on the loss allowance.

Revenue
Revenue is measured at the fair value of consideration received or receivable.

The specific accounting policies for significant revenue items are explained below:

Sale of products
Revenue from the sale of products is recognised at the time the risk and effective ownership transfers to the customer.

Provision of services
Revenue from the rendering of services is recognised as the services are provided.

Price rebate to District Health Boards
NZBS also considers annually in accordance with its financial guidelines policy, price rebates to District Health Boards which, if elected by the Board to be paid, are recognised at the point of decision and deducted from the amount of revenue received or receivable.

Interest income
Interest income is recognised using the effective interest method.

Capital charge
The capital charge is recognised as an expense in the financial year to which the charge relates.

Leases
Finance leases
A finance lease is a lease that transfers to the lessee substantially all the risks and rewards incidental to ownership of an asset, whether or not title is eventually transferred.

At the commencement of the lease term, NZBS recognises finance leases as assets and liabilities in the statement of financial position at the lower of the fair value of the leased item or the present value of the minimum lease payments.

The amount recognised as an asset is depreciated over its useful life. If there is no certainty as to whether NZBS will obtain ownership at the end of the lease term, the asset is fully depreciated over the shorter of the lease term or its useful life.

Operating leases
An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership

1 Statement Of Accounting Policies (continued)

of an asset. Lease payments under an operating lease are recognised as an expense on a straight-line basis over the lease term.

Cash and cash equivalents
Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Cash and cash equivalents are classified and measured at amortised cost in the statement of financial position. These financial instruments are short term in nature and the carrying amount is considered to be a reasonable approximation of fair value.

Bank overdrafts are shown within borrowings in current liabilities in the statement of financial position. Bank overdrafts are classified and measured at amortised cost. As these are short term in nature the carrying amount is considered to be a reasonable approximation of fair value.

Trade and other receivables
Trade and other receivables are initially measured at fair value and subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade and other receivables are short term in nature and the carrying amounts are considered to be a reasonable approximation of fair values.

A provision for impairment of receivables is established when there is objective evidence that NZBS will not be able to collect all amounts due according to the original terms of receivables. NZBS has applied the simplified approach to measure the loss allowance for trade and other receivables. Under this approach the loss allowance is the lifetime expected credit loss. Trade receivables which are significant on an individual basis are evaluated on a line by line basis. For those that are not determined to be significant individually, the loss allowance is assessed on a portfolio basis, taking into account days past due and historical loss experience in portfolios with shared characteristics. Historical loss rates are adjusted for forward-looking indicators and relevant macro-economic factors.

Inventories
Inventories are measured at cost upon initial recognition. To the extent that inventory was received through non-exchange transactions (i.e. donated goods) for no cost or for a nominal cost, the cost of the inventory is its fair value at the date of acquisition.

However, as NZBS is not legally permitted to purchase blood from the public, the fair value for accounting purposes of blood from donors is considered to be nil. Therefore the cost of inventories comprise all costs of collection, costs of conversion, and any other costs incurred in bringing the inventories to their present location and condition.

After initial recognition, inventory is measured at the lower of cost and net realisable value. The cost of inventory is determined using the FIFO or weighted average methods. The valuation includes allowance for slow moving items. Obsolete inventories are written off.

The write-down from cost to net realisable value is recognised in the surplus or deficit except for fractionated derived products manufactured from New Zealand sourced plasma (refer below).

Inventories are recognised as an expense when deployed for utilisation or consumption in the ordinary course of NZBS's operation.

Fractionated derived products manufactured from a principal plasma pool

Fractionated derived products are manufactured into finished blood products by a third party manufacturer on a "toll" manufacturing basis using NZBS provided source plasma. Fractionated derived products in the 2019 financial year onwards in the main are manufactured from plasma pools ranging in size from a minimum 10.4 tonne pool through to a maximum 13.0 tonne plasma pool. The NZBS rolling manufacturing programme generally allows for 6 production pools in a financial year. The driver product group within the manufacturing process is the immunoglobulin product represented by Intragam P and Evogam product.

The principal pool work in progress (WIP) is included at full standard cost, as the final output that the manufacturer must produce is locked in via the agreed production plan for a pool and contract yields per the toll manufacturing agreement. This high level of certainty enables the WIP to be viewed in the same light as finished fractionation product for the purposes of inventory valuation.

Valuation of fractionated derived products from these plasma pools, both finished goods and WIP, is based on

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

1 Statement Of Accounting Policies (continued)

allocating the actual input cost of manufacturing a plasma pool (NZBS source plasma input plus third party toll fractionation manufacturing fee) to prorated finished/WIP product output using actual product plasma yield, as reported by the manufacturer.

Post this product cost allocation, if there are any products where cost exceeds the net realisable value, then that cost excess is reallocated to the driver immunoglobulin product group.

Financial assets
NZBS classifies its financial assets within the scope of PBE IFRS 9 Financial Instruments into the following three categories: (1) Financial assets at fair value through surplus or deficit, (2) Financial assets at amortised cost, and (3) Financial assets at fair value through other comprehensive revenue or expense.

Financial assets are initially measured at fair value plus transaction costs unless they are carried at fair value through surplus or deficit in which case they are initially measured at fair value and the transaction costs are recognised in the surplus or deficit.

Purchases and sales of investments are recognised on trade date, the date on which NZBS commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and NZBS has transferred substantially all the risks and rewards of ownership.

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance date. The quoted market price used is the current bid price.

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. NZBS uses a variety of methods and makes assumptions that are based on market conditions existing at each balance date. Quoted market prices or dealer quotes for similar instruments are used for long-term debt instruments held. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments.

The subsequent measurement of financial assets depends on their classification. NZBS classifies financial assets into three categories depending on their contractual cash flow characteristics and NZBS's business model for managing financial assets. The categories of financial assets are:

Category (1) Financial assets at fair value through surplus or deficit
This category has two sub-categories: financial assets held for trading, and those designated at fair value through surplus or deficit at inception. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by management to eliminate or significantly reduce an accounting mismatch.

Derivatives are also categorised as held for trading unless they are designated as hedges. Assets in this category are classified as current assets if they are either held for trading or are expected to be realised within 12 months of the balance date.

After initial recognition they are measured at their fair values. Gains or losses on re-measurement are recognised in the surplus or deficit.

Category (2) Financial assets at amortised cost
A financial asset is measured at amortised cost only if both of the following conditions are met:

- It is held within a business model with an objective to hold assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest.

After initial recognition they are measured at amortised cost using the effective interest method, less impairment. Gains and losses when the asset is impaired or derecognised are recognised in the surplus or deficit.

Category (3) Financial assets at fair value through other comprehensive revenue or expense
A financial asset is measured at fair value through other comprehensive revenue or expense if both the following conditions are met:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

1 Statement Of Accounting Policies (continued)

Impairment of financial assets
At each balance date NZBS assesses whether there is any objective evidence that a financial asset or group of financial assets is impaired. Any impairment losses are recognised in the surplus or deficit. The loss allowance is measured based on expected credit losses, taking into account external factors and forward looking indicators. NZBS has recognised a loss allowance in relation to trade and other receivables measured at amortised cost. The methodology applied is described in more detail in the 'Trade and other receivables' section.

Financial liabilities
NZBS classifies its financial liabilities within the scope of PBE IFRS 9 Financial instruments: as either financial liabilities at fair value through surplus or deficit or financial liabilities at amortised cost. The classification of financial liabilities are determined on initial recognition. NZBS may choose at initial recognition to designate a financial liability as at fair value through surplus or deficit if doing so eliminates or significantly reduces an accounting mismatch.

All financial liabilities of NZBS are measured at amortised cost except derivative financial instruments which are measured at fair value. Gains or losses on re-measurement are recognised in the surplus or deficit.

All financial liabilities are recognised initially at fair value, and in the case of loans and borrowings, plus directly attributable transaction costs.

NZBS's financial liabilities include trade and other payables, loans and borrowings.

Foreign currency translation
Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Transactions denominated in foreign currency are reported at the reporting date by applying the exchange rate on that date. Foreign exchange gains and losses resulting from the settlement of such transactions are recognised in the surplus or deficit.

Accounting for derivative financial instruments and hedging activities
NZBS uses derivative financial instruments to manage exposure to foreign exchange risks arising from operational activities. In accordance with its treasury management policy, NZBS does not hold or issue derivative financial instruments for trading purposes. NZBS has not adopted hedge accounting.

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value at each balance date. The resulting gain or loss is recognised in the surplus or deficit.

Property, plant and equipment
Property, plant and equipment consists of operational assets which include plant and equipment, computer hardware, motor vehicles, furniture and fittings / office equipment and leasehold improvements.

Property, plant and equipment is shown at cost less accumulated depreciation and impairment losses.

Additions
The cost of an item of property, plant and equipment is recognised as an asset if, and only if, it is probable that future economic benefits or service potential associated with the item will flow to NZBS and the cost of the item can be measured reliably.

Property, plant and equipment is initially recognised at cost. Where an asset is acquired at no cost, or for a nominal cost, it is recognised at fair value as at the date of acquisition.

Work in progress is recognised at cost less impairment and is not depreciated.

Disposals
Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of the asset. Gains and losses on disposals are included in the surplus or deficit.

Subsequent costs
The cost of replacing or improving part of an item of property, plant and equipment is recognised in the carrying amount of an item. The costs of day-to-day servicing of property, plant and equipment are recognised as incurred in the surplus or deficit.

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

1 Statement Of Accounting Policies (continued)

Depreciation
Depreciation is provided on a straight-line basis on all property, plant and equipment, at rates that will write off the cost of the assets to their estimated residual values over their useful lives.

The useful lives of major classes of assets have been estimated as follows:

Computer equipment	3 to 6 years
Furniture and fittings	5 to 10 years
Motor vehicles	3 to 4 years
Plant and equipment	5 to 10 years
Leasehold improvements	Shorter of term of lease or useful life

The residual value and useful life of an asset is reviewed, and adjusted if applicable, at each financial year end.

Intangible Assets
Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

Costs associated with maintaining computer software are recognised as an expense when incurred.

Amortisation
The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life. Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The amortisation charge for each period is recognised in the surplus or deficit.

The useful lives of major classes of intangible assets have been estimated as follows:

Computer software	3 years
Computer software - blood management system (eProgesa)	10 years
Computer software - blood bank system (eTraceline)	10 years

Changes in the expected useful life or the expected pattern of consumption are treated as changes in accounting estimates.

Intangible assets with a finite useful life are assessed for impairment whenever there is an indication that the asset may be impaired.

Impairment of non-financial assets
NZBS does not hold any cash-generating assets. Assets are considered cash-generating where their primary objective is to generate a commercial return.

Non-cash-generating assets
Property, plant, and equipment and intangible assets held at cost that have a finite useful life are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable service amount. The recoverable service amount is the higher of an asset's fair value less costs to sell and value in use.

Value in use is determined using an approach based on either a depreciated replacement cost approach, restoration cost approach, or a service units approach. The most appropriate approach used to measure value in use depends on the nature of the impairment and availability of information.

If an asset's carrying amount exceeds its recoverable service amount, the asset is regarded as impaired and the carrying amount is written-down to the recoverable amount. The total impairment loss is recognised in the surplus or deficit.

The reversal of an impairment loss is recognised in the surplus or deficit.

Creditors and other payables
Creditors and other payables are classified as financial liabilities measured at amortised cost. As these are short term in nature the carrying amount is considered to be a reasonable approximation of fair value.

1 Statement Of Accounting Policies (continued)

Employee benefits
Short-term benefits
Employee benefits that NZBS expects to be settled within 12 months of balance date are measured at nominal values based on accrued entitlements at current rates of pay. These include salaries and wages accrued up to balance date, annual leave earned to, but not yet taken at balance date, retiring and long service leave entitlements expected to be settled within 12 months, and sick leave.

NZBS recognises a liability for sick leave to the extent that absences in the coming year are expected to be greater than the sick leave entitlements earned in the coming year. The amount is calculated based on the unused sick leave entitlement that can be carried forward at balance date, to the extent that NZBS anticipates it will be used by staff to cover those future absences.

NZBS recognises a liability and an expense for bonuses where contractually obliged or where there is a past practice that has created a constructive obligation.

Long-term benefits
Long service leave and retirement leave
Entitlements that are payable beyond 12 months, such as long service leave and retirement gratuities, have been calculated on an actuarial basis. The calculations are based on:

- likely future entitlements accruing to staff, based on years of service years to entitlement, the likelihood that staff will reach the point of entitlement and contractual entitlements information; and
- the present value of the estimated future cash flows. The discount rate is based on the weighted average of Government interest rates for stock with terms to maturity similar to those of the relevant liabilities. The inflation factor is based on the expected long-term increase in remuneration for employees.

Superannuation schemes
Defined contribution schemes
Obligations for contributions to defined contribution superannuation schemes are recognised as an expense in the surplus or deficit.

Defined benefit schemes
NZBS belongs to the Defined Benefit Plan Contributors Scheme (the scheme), which is managed by the Board of Trustees of the National Provident Fund. The scheme is a multi-employer defined benefit scheme.

Insufficient information is available to use defined benefit accounting, as it is not possible to determine from the terms of the scheme, the extent to which the surplus/deficit will affect future contributions by individual employers, as there is no prescribed basis for allocation. The scheme is therefore accounted for as a defined contribution scheme. Further information on this scheme is disclosed in note 24 - Contingencies.

Provisions
NZBS recognises a provision for future expenditure of uncertain amount or timing when there is a present obligation (either legal or constructive) as a result of a past event, it is probable that expenditures will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are not recognised for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax discount rate that reflects current market assessments of the time, value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense.

Borrowings
Borrowings are initially recognised at their fair value. After initial recognition, all borrowings are measured at amortised cost using the effective interest method.

Borrowings are classified as current liabilities unless NZBS has an unconditional right to defer settlement of the liability for at least 12 months after balance date.

Adverse fractionation event reserve and matching investment fund
NZBS collects source plasma and contracts a third party to manufacture that source plasma, via a complex series of processes known as fractionation, to produce a range of derived fractionation products for use within

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

1 Statement Of Accounting Policies (continued)

the New Zealand health sector. The manufacturing contract clearly defines the party's respective risks and responsibilities inclusive of financial risk attribution should certain of those risks inherent in the manufacturing process actually occur. NZBS attributed financial risks have, based on historical performance, been classified as being of low frequency but with a potentially high financial impact if an event did occur.

Accordingly NZBS has elected to mitigate this manufacturing financial risk with the establishment of the adverse fractionation event policy that mandates the establishment of an adverse fractionation event reserve within the equity section of the statement of financial position that is complemented by a matching term deposit fund to ensure access to liquidity in the event of an adverse fractionation related event occurring.

Under this policy NZBS is required to assess, on an annual basis, the upper level of potential financial risk, the current level of the reserve and whether further funds should be transferred to the reserve with matching liquidity also required to then be set aside.

Equity
Equity is the Crown's interest in NZBS.

The components of equity are:

- Crown equity - Crown equity is the net asset and liability position at the time NZBS was established plus any subsequent equity injections.
- Accumulated comprehensive revenue and expense - is the accumulated surplus/deficit since NZBS establishment.
- Adverse fractionation event reserve - is the transfer from accumulated comprehensive revenue and expense commencing financial year ending 30 June 2015. The reserve has been established to mitigate the financial manufacturing risk associated with the production of fractionated derived products.

Goods and services tax (GST)
All items in the financial statements are stated exclusive of GST, except for receivables and payables, which are stated on a GST inclusive basis. Where GST is not recoverable as input tax then it is recognised as part of the related asset or expense.

The net amount of GST recoverable from, or payable to, the Inland Revenue Department (IRD) is included as part of receivables or payables in the statement of financial position. The net GST paid to, or received from the IRD, including the GST relating to investing and financing activities, is classified as an operating cash flow in the statement of cash flows.

Commitments and contingencies are disclosed exclusive of GST.

Taxation
NZBS is a statutory entity (pursuant to the New Zealand Public Health & Disability Act 2000 and schedule 1 of the Crown Entities Act 2004) and is exempt from income tax under Section CW38 of the Income Tax Act 2007.

Budget figures
The budget figures are those approved by the Board of NZBS at the beginning of the year as presented in the Annual Statement of Performance Expectations. The budget figures have been prepared in accordance with NZ GAAP and comply with NZ GAAP, using accounting policies that are consistent with those adopted by the Board for the preparation of the financial statements.

Critical accounting estimates and assumptions
In preparing these financial statements NZBS has made estimates and assumptions concerning the future. These estimates and assumptions may differ from the subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations or future events that are believed to be reasonable under the circumstances. Where this is the case the basis of those assumptions are detailed in the relevant accounting policy.

Critical judgements in applying the NZBS accounting policies
In preparing these financial statements NZBS management has made judgements in applying the NZBS accounting policies. These judgements have been applied consistently to all periods presented in these financial statements, except for new judgements and key sources of estimation uncertainty related to the application of PBE IFRS 9. There are no material judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities that need disclosing.

2 Revenue from overseas sales and other revenue	30 June 2019	30 June 2018
Revenue from overseas sales - exchange revenue	1,251,150	1,099,341
Revenue from overseas sales - non-exchange revenue	9,124	15,423
Total revenue from overseas sales	**1,260,274**	**1,114,764**

The non-exchange revenue from overseas sales relates to sponsorship of conferences by overseas domiciled suppliers.

Other revenue - exchange revenue	6,901	71,352
Other revenue - non-exchange revenue	10,656	51,196
Total other revenue	**17,557**	**122,548**

The non-exchange 'Other revenue' relates mainly to donated products and services covering conference / course fees.

3 Cost of consumables and changes in inventory	30 June 2019	30 June 2018
Consumables *	21,874,306	21,221,942
Changes in inventory **	24,900,619	21,888,075
Expired product ***	2,783,934	2,396,407
Total cost of consumables and changes in inventory	**49,558,859**	**45,506,424**

* Consumables - the cost of consumables for the period ending 30 June 2019 at $21,874,306 was $652,364 higher than the June 2018 cost of $21,221,942. This was mainly due to higher source plasma collection costs driven by higher collection volumes needed to meet increased fractionated product demand, higher Tissue Typing costs due to higher testing demand, and stronger demand for Therapeutic procedures, in particular Plasma Exchanges, driving higher consumable consumption.

** Changes in inventory - is an aggregated reporting figure comprising 'cost of goods sold, production recoveries and inventory valuation adjustments' consistent with the application of manufacturing standard costing methodologies and generally accepted inventory valuation principles. Changes in inventory for the period ending 30 June 2019 at $24,900,619 was $3,012,544 higher than the June 2018 cost of $21,888,075 and was primarily due to a combination of higher fractionated product demand, in particular immunoglobun (IVIg) product sales being 10.14% higher plus a higher cost of production for fractionated products overall. The higher cost of production for fractionated products was driven by a combination of increase in ""toll"" manufacturing fee charged by the third party manufacturer, higher volume of source plasma used in manufacture and the mix of finished fractionated products derived from the production pools.

* Expired product - to guarantee the supply of product for any situation NZBS must maintain levels of stocks in excess of normal usage. Though NZBS carefully manages its inventory of products to minimise expiry, due to the short life of the fresh products in particular, there will be a certain amount of product that will expire before it can be utilised. The higher cost of expiry in the 2019 year was mainly due to higher expiry of fresh products, in particular red cells and platelets.

4 Employee benefit expenses	30 June 2019	30 June 2018
Salaries and wages	45,644,064	43,546,773
Defined contribution plan employer contibutions	1,160,349	1,099,446
Increase/(Decrease) in employee benefit liabilities	1,203,638	952,966
Total employee benefit expenses	**48,008,051**	**45,599,185**

Employee benefit expenses at 30 June 2019 totalled $48,008,051 and was $2,408,866 higher compared to the June 2018 year of $45,599,185. The main reasons for the increase in employee benefits are as follows;

(1) Salary and Wages $2,097,291 higher due to a combination of the following; (a) year on year salary increases driving from a combination of automatic increment increases per collective agreements, staff mix changes and settlement of Individual Employment agreements and (b) higher spend on Call Centre costs relating to booking appointments for Donors to donate at collection sites.

(2) Increase in employee benefit liabilities movement of $250,672 due to the following; (a) higher accrued salary and wages at 30 June 2019 (timing on the fortnightly payment cycles at year-end), (b) an increase in Long Service Leave and Gratuity Leave liabilities mainly due to movement in discount rates and inflation factor used by the external actuary to calculate the estimated liability at balance date and (c) increase in sick leave and annual leave entitlements.

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

5 Other expenses	30 June 2019	30 June 2018
Fees to principal auditor:		
Audit fees for financial statement audit 2019	114,554	-
Audit fees for financial statement audit 2018	-	111,443
Audit fees for other services	-	-
Capital charge *	2,368,020	2,433,930
Board members' fees	129,893	132,000
Net foreign exchange losses / (gains) **	31,877	339,361
(Gains) / losses on disposal of property, plant and equipment	35,606	1,368
Additions/Releases to premises reinstatement provision (note 16)	-	(10,896)
Changes in premises reinstatement provision (note 16)	433,150	154,739
Changes in impairment of receivables (note 9)	-	-
Impairment of intangible assets (note 14)	-	-
Minimum lease payments under operating leases ***	5,891,385	5,158,450
Other operating expenses:		
Distribution	2,421,439	2,177,974
General administration including insurance costs	1,570,015	1,518,039
IT systems and telecommunication	5,665,241	5,771,305
Marketing	2,579,387	2,154,643
Repairs and maintenance	2,285,531	2,147,660
All other operating expenses	6,878,492	6,036,550
Total other operating expenses	21,400,105	19,806,171
Total other expenses	**30,404,590**	**28,126,566**

* New Zealand Blood Service pays a capital charge to the Crown twice a year. The first payment is based on its actual closing equity from the prior June financial year and the second payment is based on the actual closing equity from the current year December six monthly result. The capital charge rate for the period ended 30 June 2019 was 6.0% (30 June 2018: 6.0%).

** Net foreign exchange losses / (gains) reflect foreign exchange losses / (gains) excluding the impact of the revaluation of derivative financial instruments (refer note 7).

*** Minimum lease payments in June 2019 totalling $5,891,385 were $732,935 higher when compared to the June 2018 spend of $5,158,450. This increase was mainly due to NZBS assuming 100% occupancy of its facility and site at 71 Great South Road Auckland from 28 October 2018.

6 Finance costs	30 June 2019	30 June 2018
Interest on bank borrowings	115,844	93,168
Interest on Dilworth Trust finance leases	40,700	47,966
Interest on Ngāi Tahu Property Limited finance lease	229,922	232,336
Interest on other property, plant and equipment finance leases	126,624	151,138
Provisions: discount unwind (note 16)	54,194	66,839
Interest other	10	-
Total finance costs	**567,294**	**591,447**

No borrowing costs were capitalised during the period (2018: nil).

7 Revaluation of derivative financial instruments	30 June 2019	30 June 2018
Foreign exchange forward selling contracts - (gain) / loss	1,141,037	(1,464,943)
Total revaluation of derivative financial instruments - (gain) / loss	**1,141,037**	**(1,464,943)**

The revaluation of derivative financial instruments gain/(loss) reflects the movement between the opening and closing balance date positions of derivative financial instruments as shown in the statement of financial position.

8 Cash and cash equivalents	30 June 2019	30 June 2018
Cash on hand	4,300	4,800
Cash at bank	5,140,801	3,956,245
Short term deposit	-	-
Total cash and cash equivalents for the purpose of the statement of cash flows	**5,145,101**	**3,961,045**

Cash at bank is deposited with counterparties with Standards & Poor's credit rating of AA- or better. The carrying value of cash at bank, cash on hand and short-term deposits with maturities less than three months from the date of acquisition approximates their fair value.

9 Trade and other receivables	30 June 2019	30 June 2018
Trade receivables	12,962,608	11,173,819
Sundry receivables	152,648	219,097
	13,115,256	11,392,916
Less: provision for impairment of receivables	-	-
Net receivables	**13,115,256**	**11,392,916**
Prepayments	1,633,535	1,290,132
Interest receivable accrued - term deposits	59,455	55,550
Total trade and other receivables	**14,808,246**	**12,738,598**

Trade and other receivables from non-exchange transactions relate to sponsorship of a NZBS annual conference.
The carrying value of receivables approximates their fair value.

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
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As at 30 June 2019 and 2018 all overdue receivables have been assessed for impairment and appropriate provisions applied, as detailed below:

Receivables aging	2019			2018		
	Gross	Impairment	Net	Gross	Impairment	Net
Current	12,819,139	-	12,819,139	11,268,654	-	11,268,654
Past due :						
31 - 60 days	239,633	-	239,633	86,162	-	86,162
61 - 90 days	19,670	-	19,670	37,472	-	37,472
> 90 days	36,814	-	36,814	628	-	628
Total receivables	**13,115,256**	**-**	**13,115,256**	**11,392,916**	**-**	**11,392,916**

All receivables greater than 30 days in age are considered to be past due.

Provision for impairment is calculated based on expected non-payment of long outstanding or disputed invoices. Expected losses are determined based on an analysis of NZBS's losses in previous periods, and review of specific debtors.

10 Investments	30 June 2019	30 June 2018
Current portion		
Term deposits	3,000,000	3,000,000
Adverse fractionation event reserve term deposits	4,000,000	4,000,000
Total current portion	**7,000,000**	**7,000,000**
Non-current portion		
Term deposits	-	-
Adverse fractionation event reserve term deposits	-	-
Total non-current portion	**-**	**-**
Total investments	**7,000,000**	**7,000,000**

Term deposits at 30 June 2019 have maturities ranging between six and seven months from acquisition date. Term deposits at 30 June 2018 had maturities between three and six months from acquisition date. The carrying amounts of term deposits with maturities less than 12 months approximate their fair value.

The adverse fractionation event term deposits is an investment portfolio established in the financial year ended 30 June 2015 to match the adverse fractionation event reserve balance (refer note 21).

The adverse fractionation event term deposits at 30 June 2019 have maturities ranging between five and seven months from the date of acquisition. The adverse fractionation event term deposits at 30 June 2018 had maturities ranging between three and eight months from acquisition date. The carrying amounts of term deposits with maturities less than 12 months approximate their fair value.

11 Inventories	30 June 2019	30 June 2018
Raw materials - fresh frozen plasma	3,773,087	4,969,611
Work in process - fractionated components	7,922,107	5,627,487
Fractionated components	15,065,026	15,045,176
Fresh components	2,073,077	2,039,029
Consumables	2,825,582	2,625,863
	31,658,879	**30,307,166**
Provision for expired inventory	(365,407)	(491,300)
	(365,407)	(491,300)
Total Inventories	**31,293,472**	**29,815,866**

No inventories are pledged as security for liabilities nor are any inventories subject to retention of title clauses.
No NZBS inventory is carried at fair value less cost to sell.

12 Derivative financial instruments	30 June 2019	30 June 2018
Forward foreign exchange contracts		
Current liabilities portion	631,380	-
Term liabilities portion	16,520	-
Total liability portion	647,900	-
Forward foreign exchange contracts		
Current assets portion	4,002	417,037
Term assets portion	42,295	122,397
Total assets portion	**46,297**	**539,434**

The fair values of forward foreign exchange contracts have been determined using a discounted cash flow valuation technique based on quoted market prices ruling at balance date. The inputs into the valuation model are from independently sourced market parameters such as currency rates. Most market parameters are implied from derivative financial instrument prices.

13 Property, plant and equipment

1 July 2017 Cost or valuation	Leasehold improvements	Plant and equipment	Computer equipment	Furniture and fittings	Motor vehicles	Office equipment	Total
Opening balance	13,275,649	22,213,214	4,471,998	1,675,212	246,173	150,661	42,032,907
Additions	875,842	1,909,059	229,049	34,103	-	3,498	3,051,551
Disposals	-	(437,180)	-	(3,270)	-	(2,786)	(443,236)
30 June 2018	**14,151,491**	**23,685,093**	**4,701,047**	**1,706,045**	**246,173**	**151,373**	**44,641,222**

1 July 2018 Cost or valuation	Leasehold improvements	Plant and equipment	Computer equipment	Furniture and fittings	Motor vehicles	Office equipment	Total
Opening balance	14,151,491	23,685,093	4,701,047	1,706,045	246,173	151,373	44,641,222
Additions	3,330,971	1,423,889	728,570	38,162	-	-	5,521,592
Disposals	(334,475)	(375,028)	(506,468)	-	-	(1,156)	(1,217,127)
30 June 2019	**17,147,987**	**24,733,954**	**4,923,149**	**1,744,207**	**246,173**	**150,217**	**48,945,687**

The leasehold improvements addition of $3,330,971 at 30 June 2019 includes $3,022,630 relating to the redevelopment of its facility and site at 71 Great South Road Auckland.

1 July 2017 Accumulated depreciation and impairment losses	Leasehold improvements	Plant and equipment	Computer equipment	Furniture and fittings	Motor vehicles	Office equipment	Total
Opening balance	8,620,033	16,283,022	3,407,349	1,331,321	112,057	128,845	29,882,627
Depreciation	548,566	1,303,948	433,268	143,784	25,719	13,035	2,468,320
Impairment losses	-	-	-	-	-	-	-
Disposals	-	(436,130)	-	(3,270)	-	(2,424)	(441,824)
30 June 2018	**9,168,599**	**17,150,840**	**3,840,617**	**1,471,835**	**137,776**	**139,456**	**31,909,123**

1 July 2018 Accumulated depreciation and impairment losses	Leasehold improvements	Plant and equipment	Computer equipment	Furniture and fittings	Motor vehicles	Office equipment	Total
Opening balance	9,168,599	17,150,840	3,840,617	1,471,835	137,776	139,456	31,909,123
Depreciation	557,373	1,387,273	391,516	74,457	21,880	4,198	2,436,697
Impairment losses	-	-	-	-	-	-	-
Disposals	(334,475)	(359,765)	(505,589)	-	-	(1,156)	(1,200,985)
30 June 2019	**9,391,497**	**18,178,348**	**3,726,544**	**1,546,292**	**159,656**	**142,498**	**33,144,835**

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
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	Leasehold improvements	Plant and equipment	Computer equipment	Furniture and fittings	Motor vehicles	Office equipment	Total
Carrying amounts							
At 30 June and 1 July 2018	4,982,892	6,534,253	860,430	234,210	108,397	11,917	12,732,099
At 30 June 2019	7,756,490	6,555,606	1,196,605	197,915	86,517	7,719	15,800,852
Capital work in progress included in property, plant and equipment additions							
At 30 June and 1 July 2018	730,918	682,718	107,985	-	-	-	1,521,621
At 30 June 2019	3,032,257	45,160	285,413	-	-	-	3,362,830

There are no restrictions or pledges over property, plant and equipment.

The net carrying amount of assets held under finance leases is $2,595,594 for leasehold improvements (2018: $2,789,591) and $1,664,687 for plant and equipment (2018: $1,590,863).

The Leasehold improvements capital work in progress amount of $3,032,257 at 30 June 2019 includes $3,022,630 relating to the redevelopment of the facility and site at 71 Great South Road Auckland (June 2018: Nil).

14 Intangible assets	30 June 2019	30 June 2018
Computer software cost		
Balance at beginning of year	18,091,588	16,105,543
Additions	108,972	1,986,045
Disposals	(35,000)	-
Balance at end of year	**18,165,560**	**18,091,588**
Accumulated amortisation expense and impairment losses		
Balance at beginning of year	8,345,357	6,981,278
Amortisation expense	1,551,360	1,364,079
Disposals	-	-
Balance at end of year	**9,896,717**	**8,345,357**
Carrying amounts		
At beginning of year	9,746,231	9,124,265
At year end	**8,268,843**	**9,746,231**

There are no restrictions over the title of the NZBS intangible assets, nor are any intangible assets pledged as security for liabilities.

The remaining amortisation period on computer software ranges from less than 1 year to 3 years with the exception of the blood management system (eProgesa) which is 3 years and the eTraceline blood bank software which is 8 years.

Intangible asset additions include $nil of capital work in progress projects at 30 June 2019 (2018: $540,390).

15 Trade and other payables	30 June 2019	30 June 2018
Trade payables	12,438,376	11,103,204
Accrued expenses	2,753,170	3,128,162
Capital charge accrued	-	-
Board members' fees payable	10,667	4,000
Taxes payable - PAYE and FBT	688,444	469,881
Taxes payable - GST	670,507	585,714
Other	134,986	180,383
Total trade and other payables	**16,696,150**	**15,471,344**

Trade and other payables are non-interest bearing and are normally settled on 30 day terms, therefore the carrying value of trade and other payables approximates their fair value.

16 Premises reinstatement provision	30 June 2019	30 June 2018
Balance as at 1 July	2,413,498	2,202,816
Additions/(Releases) (note 5)	-	(10,896)
Changes in provisions made during the year (note 5)	433,150	154,739
Discount unwind (note 6)	54,194	66,839
Total premises reinstatement provision	**2,900,842**	**2,413,498**
Comprising:		
Current	95,124	76,549
Non-current	2,805,718	2,336,949
Total premises reinstatement provision	**2,900,842**	**2,413,498**

The premises reinstatement provision represents the present value of management's best estimate of the future sacrifice of economic benefits that will be required to remove leasehold improvements from leasehold property and reinstate those properties on the expiry of the lease. The estimated cost (using the premises at 71 Great South Road, Newmarket, Auckland as the indicator) has been calculated on a cost per square metre rate for reinstatement based on the advice received from an independent registered valuer.

The increase in the change in provision over the year to 30 June 2019 of $433,150 is mainly due to the impact of the Waikato District Health Board issuing notice that the Waikato Blood Centre tenancy will not be renewed. The Waikato Blood Centre is situated at Gate 5, Waikato Hosipital, Corner Lorne Street and Ohaupo Road, Hamilton.

The unexpired term of the leases concerned ranges from 1 year to 50 years. New Zealand Blood Service leases premises from District Health Boards and commercial landlords. Leases which expire within 1 year for commercial tenancies are classified as current liabilities. District Health Board tenancies expiring within 1 year are classified as non-current on the basis that the leases will be renewed given the essential nature of the service performed within those locations.

17 Employee benefit entitlements	30 June 2019	30 June 2018
Accrued salaries and wages	2,032,055	1,461,836
Annual leave	5,078,101	4,661,242
Long service leave	1,143,649	1,246,104
Retirement gratuities	1,580,469	1,270,454
Sick leave	152,500	143,500
Total employee benefit entitlements	**9,986,774**	**8,783,136**
Comprising:		
Current	7,774,923	6,956,212
Non-current	2,211,851	1,826,924
Total employee benefit entitlements	**9,986,774**	**8,783,136**

Liabilities for retirement gratuities and long service leave at 30 June 2019 have been calculated by an external actuary resulting in an overall increase in the estimated liabilities existing at balance date, compared to the position reported at 30 June 2018.

The discount rates used by the external actuary to calculate the estimated liabilities existing at balance date are as follows; long service leave 1.46% (2018: 2.60%), retirement leave 1.74% (2018: 3.00%), and an inflation factor of 3.50% (2018: 3.50%).

Compliance with Holidays Act 2003

Many public and private sector entities, including NZBS, are continuing to investigate historic underpayment of the holiday entitlements. For employers in the public health sector such as NZBS, that have workforces that include differential occupational groups with complex entitlements, non-standard hours, allowances and/or overtime, the process of assessing compliance with the Act and determining the underpayment is time consuming and complicated.

NZBS are part of a health sector working group which has worked with key stakeholders to define a baseline interpretation document. This document provides the framework for each member of the working group to systematically assess their liability.

Using this framework NZBS has estimated its liability at 30 June 2019 to be $1.29 million (2018: $0.65 million). Based on the multiyear investigation timeline and number of staff involved the current accrual represents an average refund entitlement of $281.01 per FTE per year (based on the closing 30 June FTE position of each year).
The provision covers the period 1 May 2010 to 30 June 2019, and due to the complexity and time frame covered has been calculated by the NZBS third party payroll provider. The increase in provision at 30 June 2019 of $0.64 million compared to the June 2018 position, is due to a combination of providing an additional year's provision and applying the framework of the health sector working group base line interpretation document.
On-going work will continue to bring this matter as quickly as possible to resolution accepting the finalised actual liability will be different to that currently estimated.

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18 Rent accrued	30 June 2019	30 June 2018
Rent accrued	2,982,454	2,422,342
Total rent accrued	**2,982,454**	**2,422,342**

In December 2012, NZBS entered into an agreement to construct and lease from Ngāi Tahu Property Limited a new purpose-built facility at Lester Lane, Christchurch, to be occupied by NZBS upon completion by way of lease to accommodate all of the NZBS operations in Christchurch. 10 November 2014 was the operational date of this new facility.

NZBS has determined the lease of the new facility at Lester Lane, Christchurch to be predominately an operating lease. The specialist fit-out component relating to the facility has been classified in the 2016 financial year as a finance lease (refer note 20). Under the leasing arrangement, the initial fixed term of the lease is 30 years, with two further rights of renewal of 12 years each. The agreed lease payment per annum is adjusted every 3 years in line with the greater of the Consumer Price Index (CPI) or a minimum increase of 2.5% at compound rate. At the end of 15 years from the commencement of the lease, there is a market rent review undertaken.

The minimum annual increase of 2.5% compound has been included in the minimum operating lease payment expense recognised in the surplus or deficit. On a straight-line basis this has been determined to be $560,117 in the 2019 financial year. In the first 15 years of the lease the actual rent payable per annum will be less than the straight-lined amount of expense recognised in the surplus or deficit, creating an accrued rent liability. By year 15 the actual amount of rent payable per annum will exceed the straight-lined amount charged to the surplus or deficit, effectively reversing the accrued rent liability over the remaining 15 year period of the initial lease term.

Any additional increase in the CPI which exceeds the minimum amount of 2.5% increase will be charged to the surplus or deficit as contingent rent expense in the period incurred.

19 Lease incentive liability	30 June 2019	30 June 2018
Current	25,955	25,955
Non-current	229,273	255,228
Total lease incentive liability	**255,228**	**281,183**

In May 2017, NZBS opened its new donor centre at 170 Crawford Street, Dunedin. As part of the leasing arrangements the landlord contributed $311,465 towards the fitout of the premises and this receipt has been recognised as a lease incentive liability which is being released to the minimum operating lease payment expense on a straight-line basis over the initial 12 year term of the lease.

20 Borrowings	30 June 2019	30 June 2018
Current borrowings are represented by:		
Finance lease	583,400	482,156
Term credit facility	-	-
Total current portion	**583,400**	**482,156**
Non-current borrowings are represented by:		
Finance lease	4,420,905	4,547,202
Term credit facility	5,650,000	3,300,000
Total non-current portion	**10,070,905**	**7,847,202**
Total borrowings	**10,654,305**	**8,329,358**

	Carrying amount		Fair value	
	30 June 2019	30 June 2018	30 June 2019	30 June 2018
Total borrowings	**10,654,305**	**8,329,358**	**12,985,193**	**10,670,827**

Fair Value
Due to interest rates on debt resetting to the market rate every three months, the carrying amount of the term credit facility approximates the fair value.

The fair value of finance leases in 2019 has been determined using contractual cash flows discounted using a rate based on the NZBS market borrowing rate at balance date of 2.66% (2018: 2.87%).

Maturity analysis	30 June 2019	30 June 2018
The following is a maturity analysis of the NZBS finance lease component of borrowings:		
Total minimum lease payments payable		
Less than one year	964,979	875,459
Later than one year but not more than five years	3,192,116	3,311,462
Later than five years	5,147,271	5,419,267
Total minimum lease payments	9,304,366	9,606,188
Future finance charges	(4,300,061)	(4,576,830)
Present value of minimum lease payments	**5,004,305**	**5,029,358**
Present value of minimum lease payments payable		
Less than one year	583,400	482,156
Later than one year but not more than five years	1,822,508	1,884,072
Later than five years	2,598,397	2,663,130
Total present value of minimum lease payments	**5,004,305**	**5,029,358**
The following is a maturity analysis of the NZBS term credit facility:		
Less than one year	-	-
Later than one year but not more than five years	5,650,000	3,300,000
Later than five years	-	-
Total term credit facility	**5,650,000**	**3,300,000**
Total borrowings	**10,654,305**	**8,329,358**

Weighted average effective interest rate for the Westpac term credit facility is 2.76% (2018: 2.82%), the Dilworth Trust Board loan negotiated in the 2012/2013 financial year 7.5%, the Ngāi Tahu Property Limited loan relating to the specialist fit-out component recognised in 2019 financial year 8.375% (2018: 8.375%) and the finance leases relating to plant and equipment range from 2.91% to 9.40% (2018: range from 2.91% to 9.40%).

Finance leases are classified as current for the balance repayable within 12 months and non-current for the remaining balance for both the 2019 and 2018 years. In 2019 and 2018 the Westpac borrowing is classified as non-current liabilities as the facility maturity date is greater than 12 months.

The Westpac New Zealand Limited borrowing is unsecured and operates via a negative pledge undertaking. The maximum amount available under the MOCL is $14,000,000 all of which is a committed funding line, all on a term facility (2018: $8,300,000).

On 8 April 2019 NZBS received Ministerial approval under S160 (3) of the Crown Entities Act 2004 to increase the MOCL facility level to $14,000,000 to be returned to $8,300,000 by no later than 30 June 2021. The Notice of Approval given pursuant to Section 160 (3) of the Crown Entities Act 2004 was Gazetted 19 June 2019. This increase in MOCL borrowing capacity provides construction phase funding to the multi-year redevelopment of the Auckland site at 71 Great South Road, Auckland. On completion of each redevelopment construction stage, the cost will transfer from the MOCL to the long term Westpac Master Lease Agreement (MLA) that provides a 10 year funding and repayment facility with interest rates struck off the 10 year bond rate ruling at each stage's MLA execution. The first transaction under the MLA is planned to take place in September 2019 being the stage one fit out cost for the National Office.

The specific requirements of the negative pledge are stated below.

(a) New Zealand Blood Service must not grant a security interest over more than 5% of it's adjusted tangible assets (defined as total assets less intangible assets) to any third party without the prior consent of Westpac New Zealand Limited.

(b) New Zealand Blood Service will ensure that it maintains shareholder funds of not less than 30% of adjusted tangible assets (defined as total assets less intangible assets).

(c) New Zealand Blood Service adjusted surplus must not be less than the cost of funding.

The Westpac New Zealand Limited unsecured loan becomes repayable on demand in the event New Zealand Blood Service breaches any of the obligations under the negative pledge undertaking. New Zealand Blood Service has complied with all negative pledge undertakings and borrowing obligations during the financial year. Current facility arrangements operate to 30 September 2021 with a renewal offer through to 30 September 2022.

The liabilities of New Zealand Blood Service are not guaranteed in any way by the Government of New Zealand.

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21 Equity	30 June 2019	30 June 2018
Crown equity		
Total crown equity	**15,716,696**	**15,716,696**
Accumulated comprehensive revenue and expense		
As at 1 July	19,115,716	19,682,688
Surplus for the year	(593,254)	(566,972)
Transfer to adverse fractionation event reserve	-	-
Total accumulated comprehensive revenue and expense	**18,522,462**	**19,115,716**
Adverse fractionation event reserve		
As at 1 July	4,000,000	3,000,000
Additional funds received	-	1,000,000
Funds utilised - net of recoveries	-	-
Total adverse fractionation event reserve	**4,000,000**	**4,000,000**
Total equity as at 30 June	**38,239,158**	**38,832,412**

The adverse fractionation event reserve was established in the financial year ending 30 June 2015 to mitigate those NZBS attributed financial risks deriving from the service's fractionated product manufacturing contract. The level of the reserve is required to be reviewed annually with additions to the reserve balance of $4.0 million funded through accumulated comprehensive revenue and expense. In both the 2019 and 2018 financial years the board elected not to increase the reserve.

22 Reconciliation of net surplus / (deficit) to net cash from operating activities	30 June 2019	30 June 2018
Net surplus / (deficit) from the statement of comprehensive income	**(593,254)**	**(566,972)**
Add / (less) non-cash items:		
Depreciation and amortisation	3,988,057	3,832,399
Changes in premises reinstatement provision	487,344	210,682
Changes in lease incentive liability	(25,955)	(25,955)
Add / (less) items classified as investing or financing activities:		
Interest received on investments	-	-
Investment other	-	-
(Gains) / losses on disposal of property, plant and equipment	35,606	1,368
Impairment losses (note 14)	-	-
Interest received on investments - term deposits	(223,130)	(255,924)
Add / (less) movements in working capital items:		
Trade and other receivables	(2,069,648)	(673,477)
Inventories	(1,477,606)	(127,107)
Trade and other payables	1,851,123	3,952,389
Employee benefit liabilities	1,203,638	952,966
Revaluation of derivative financial instruments	1,141,037	(1,464,943)
Net cash from operating activities	**4,317,213**	**5,835,426**

Creditors and accruals for capital expenditure are excluded from the trade and other payables increase or decrease.

23 Capital commitments and non-cancellable operating leases	30 June 2019	30 June 2018
Capital commitments		
Leasehold improvements	4,284,632	749,450
Plant and equipment	563,684	394,656
Computer equipment	119,808	34,754
Furniture and fittings	30,622	3,150
Motor vehicles	-	-
Office equipment	-	-
Intangible assets	87,218	44,667
Capital expenditure contracted for at balance date but not yet incurred for property, plant and equipment plus intangibles	**5,085,964**	**1,226,677**

Leasehold improvements in 2019 include $4.10 million relating to the redevelopment of 71 Great South Road Auckland. In November 2018 NZBS commenced a redevelopment of its facility and site at 71 Great South Road Auckland. The commencement of redevelopment activity followed NZBS assuming 100% occupancy of the site from 28 October 2018. The redevelopment has a multi-year timeline and is expected to conclude in mid-2022. The NZBS capital budget for the redevelopment totals $16,875,000 excluding any associated capital works funded by the landlord.

Leasehold improvements in 2018 include $0.6 million relating to the redevelopment and extension of the existing NZBS blood bank at the Auckland City Hospital to address long standing space constraints.

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
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Operating leases as lessee

NZBS leases property, plant and equipment in the normal course of its operations. The future aggregate minimum lease payments to be paid under non-cancellable operating leases are as follows:

Future minimum lease payments	30 June 2019	30 June 2018
Not later than one year	5,196,527	4,886,850
Later than one year and not later than five years	18,344,703	18,227,918
Later than five years	86,703,347	67,792,160
Total non-cancellable operating leases	**110,244,577**	**90,906,928**

The 30 June 2019 and 2018 operating lease cost component for premises include rental increases based on rental review dates per contracts and, dependent on the lease an assumed market or CPI increase at compound rate.

The 30 June 2019 and 2018 non-cancellable operating leases include the commitment to lease both level 1 and 2 of the Auckland facility at 71 Great South Road. At 30 June 2019 the estimated cost of this lease commitment is $39.6 million which covers the remaining fixed term period of the lease being 19 years. The estimated cost of this lease at 30 June 2018 was a commitment of $16.9 million and was based on the initial term of the lease which covered a 10 year period.

NZBS moved into the new Christchurch Blood Centre on 10 November 2014. NZBS has classified the lease of this new facility at Lester Lane, Christchurch as being predominately an operating lease. The specialist fit-out component relating to the facility has been classified in the 2016 financial year as a finance lease (refer note 20). Under the leasing arrangement, the initial fixed term of the lease is 30 years, with two further rights of renewal of 12 years each. The agreed lease payment per annum is adjusted every 3 years in line with the greater of the Consumer Price Index (CPI) or a minimum increase of 2.5% at compound rate. At the end of 15 years from the commencement of the lease, there is a further market rent review undertaken.

The minimum annual increase of 2.5% compound has been included in the minimum operating lease payment expense recognised in the surplus or deficit. On a straight-line basis this has been determined to be $682,975 per annum. Therefore, we expect in the first 15 years of the lease the actual rent payable per annum will be less than the straight-lined amount of expense recognised in the surplus or deficit, creating an accrued rent liability. However, by year 15 the actual amount of rent payable per annum will exceed the straight-lined amount charged to the surplus or deficit, effectively reversing the accrued rent liability over the balance of the initial 30 year term. Any additional increase in the CPI which exceeds the minimum amount of 2.5% increase will be charged to the surplus or deficit as contingent rent expense in the period incurred.

NZBS has not entered into any sublease arrangements as at 30 June 2019.

24 Contingencies

Contingent liabilities

NZBS is a participating employer in the Defined Benefit Plan Contributors Scheme ("the Scheme") which is a multi-employer defined benefit scheme. If the other participating employers ceased to participate in the Scheme, NZBS could be responsible for the entire deficit of the scheme. Similarly if a number of employers ceased to participate in the scheme, the employer could be responsible for an increased share of the deficit.

At 31 March 2019 the deficit was $1.8 million (1.9% of the liabilities) and at 31 March 2018, the deficit was $1.9million (1.6% of the liabilities). This amount is exclusive of employer superannuation contribution tax. This surplus was calculated using a discount rate equal to the expected return on the assets, but otherwise the assumptions and methodology were consistent with the requirements of PBE IPSAS25 for 31 March 2018 and 2019.

The Actuary to the scheme recommended previously that the employer contributions were suspended with effect from 1 April 2011. In December 2018 NZBS were notified that the employer contribution rate was to change from 'zero' to 1.0 times (100%) of the member (employee) contributions for the financial year commencing 1 April 2019. In the latest report, the Actuary recommended a stepped approach to changing the employer contribution rate, as follows:

- 1 April 2020 - 31 March 2021 Three times contributor contributions
- 1 April 2021 - 31 March 2022 Four times contributor contributions
- From 1 April 2022 Five times contributor contributions

Contingent assets

There are no contingent assets as at 30 June 2019 (2018: Nil).

25 Related party transactions and key management personnel

(a) Controlled entities
NZBS is controlled by the Crown and it does not control any other for-profit or public benefit entity.

(b) Key management personnnel
The key management personnel, as defined by PBE IPSAS 20 Related Party Disclosures, of NZBS are the members of the Board, and the members of the senior management group. The Board consists of members appointed by the Crown; the chief executive officer and the director finance and coporate services attend meetings of the Board but are not members of the Board.

The senior management group consists of NZBS's chief executive officer and the remaining 9 members (2018: 9) of the Executive team.

The aggregate remuneration and the number of members determined on a full-time equivalent basis receiving remuneration are:

	30 June 2019	30 June 2018
Board members		
Remuneration	$129,893	$132,000
Full-time equivalent members	0.41	0.42
Leadership team		
Remuneration	$2,541,821	$2,432,037
Full-time equivalent members	10.00	10.00
Total Board and Leadership		
Total key management personnel remuneration	**$2,671,714**	**$2,564,037**
Total full time equivalent personnel	**10.41**	**10.42**

(c) Related party transactions
Capital charge
During the period New Zealand Blood Service paid the Ministry of Health a capital charge of $2,368,020 (2018: $2,433,930). The amount outstanding at the end of the period was nil (2018: Nil).

Equity injection
During the period New Zealand Blood Service did not receive any equity injection from the Ministry of Health (2018: Nil).

(d) Other
During the reporting period, there were no loans advanced that are not widely available (and/or not widely known) to persons outside the key management personnel that were advanced.

During the reporting period ending 30 June 2019, board member Dr Paula Martin was paid $4,800 for the preparation of a briefing paper for Board discussion on the establishment of a national agency for organ donation and transplant service.

26 Board members' remuneration

	30 June 2019	30 June 2018
Mr David Chamberlain Appointed 1 October 2009, appointed Chairman 15 August 2011	32,000	32,000
Dr Jackie Blue Appointed 19 October 2018, appointed Deputy Chairman 19 October 2018	14,032	-
Cathryn Lancaster Appointed 15 June 2016	16,000	16,000
Fiona Pimm Appointed 15 June 2016	16,000	16,000
Dr Bart Baker Appointed 15 June 2016	16,000	16,000
Mr Raymond Lind Appointed 19 October 2018	11,226	-
Dr Paula Martin Appointed 19 October 2018	11,226	-
Mr Ian Ward Retired 18 October 2018, retired Deputy Chairman 18 October 2018	5,968	20,000
Mr Peter Browett Retired 18 October 2018	4,774	16,000
Mrs Victoria Kingi Resigned 31 August 2018	2,667	16,000
Total Board members' remuneration	**129,893**	**132,000**

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

27 Employee remuneration range	30 June 2019	30 June 2018
	No. Employees	No. Employees
$100,000 - 109,999	20	18
$110,000 - 119,999	10	5
$120,000 - 129,999	4	1
$130,000 - 139,999	3	6
$140,000 - 149,999	3	4
$150,000 - 159,999	3	-
$160,000 - 169,999	2	4
$170,000 - 179,999	2	2
$180,000 - 189,999	3	-
$190,000 - 199,999	-	-
$200,000 - 209,999	-	2
$210,000 - 219,999	4	2
$220,000 - 229,999	2	2
$230,000 - 239,999	1	1
$240,000 - 249,999	1	-
$250,000 - 259,999	-	-
$260,000 - 269,999	-	1
$270,000 - 279,999	1	2
$280,000 - 289,999	2	-
$300,000 - 309,999	-	1
$310,000 - 319,999	1	-
$350,000 - 359,999 *	1	2
$370,000 - 379,999 *	1	-
Total	**64**	**53**

* Chief Executive Officer

Employee remuneration includes the following elements; base salary, cash allowances, bonuses and incentive payments, non-monetary benefits, any Fringe Benefit Tax paid on any element of the remuneration package and any termination, severance or end of contract payments.

28 Termination payments

During the year ended 30 June 2019, three (2018: six) employees received compensation and other benefits in relation to cessation totalling $94,650 (2018: $141,576).

29 Events after the balance date

There were no significant events after balance date.

30 Segmental reporting

New Zealand Blood Service operates solely within New Zealand. This is considered to be one geographical segment for financial reporting purposes.

New Zealand Blood Service activities are vertically integrated. These activities include collection, processing, accreditation testing and supply of blood and they are considered to be an integrated segment for reporting purposes.

31 Financial instrument categories

The accounting policies for financial instruments have been applied to the line items below:

FINANCIAL ASSETS	30 June 2019	30 June 2018
Loans and receivables		
Cash and cash equivalents (note 8)	5,145,101	3,961,045
Trade and other receivables (note 9)	14,808,246	12,738,598
Investment - term deposits (note 10)	7,000,000	7,000,000
Total loans and receivables	**26,953,347**	**23,699,644**
Fair value through surplus or deficit		
Derivative financial instruments (note 12)	46,297	539,434
Total fair value through surplus or deficit	**46,297**	**539,434**

FINANCIAL LIABILITIES		
Financial liabilities measured at amortised cost		
Trade and other payables (note 15) - excluding GST payable to the Inland Revenue	16,025,643	14,885,630
Borrowings (note 20)	10,654,305	8,329,358
Total financial liabilities measured at amortised cost	**26,679,948**	**23,214,988**
Fair value through surplus or deficit		
Derivative financial instruments (note 12)	647,900	-
Total fair value through surplus or deficit	**647,900**	**-**

32 Fair value hierarchy disclosures

For those instruments recognised at fair value in the statement of financial position, fair values are determined according to the following hierarchy:

- Quoted market price (level 1) - Financial instruments with quoted prices for identical instruments in active markets.
- Valuation technique using observable inputs (level 2) - Financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.
- Valuation techniques with significant non-observable inputs (level 3) - Financial instruments valued using models where one or more significant inputs are not observable.

The following table analyses the basis of the valuation of classes of financial instruments measured at fair value in the statement of financial position.

30 June 2019	Total	Quoted market price	Observable inputs	Significant non-observable inputs
Financial assets				
Derivatives - forward foreign exchange contracts	46,297	-	46,297	-
Financial liabilities				
Derivatives - forward foreign exchange contracts	647,900	-	647,900	-
30 June 2018				
Financial assets				
Derivatives - forward foreign exchange contracts	539,434	-	539,434	-
Financial liabilities				
Derivatives - forward foreign exchange contracts	-	-	-	-

There were no transfers between the different levels of the fair value hierarchy.

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

33 Financial instruments risks

New Zealand Blood Service is party to financial instruments as part of its everyday operations. These include instruments such as bank balances, investments in the form of term deposits, accounts receivable, trade creditors and loans.

The entity has a series of policies providing risk management for interest rates and the concentration of credit. The entity is risk averse and seeks to minimise exposure from its treasury activities. NZBS policies do not permit any transactions which are speculative in nature.

Interest rate risk

Fair value interest rate risk
Fair value interest risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. Borrowings and investments issued at fixed rates of interest create exposure to fair value interest rate risk. NZBS manages its interest rate risk through the Treasury Management Committee that meets monthly and considers interest rate risk as part of its agenda.

Cash flow interest rate risk
It is estimated that a general increase or decrease in interest rates on borrowings of 1% would increase or decrease the NZBS surplus / deficit by approximately $106,540 at 30 June 2019 (2018: $83,290).

There are no interest rate options or interest rate swap agreements in place as at 30 June 2019 (2018: Nil).

Cash and cash equivalents include deposits at call which are at floating rates and short term deposits at fixed rates totalling $5,140,801 (2018: $3,956,245). A movement in interest rates of plus or minus 1% has an effect on interest income of $51,410 (2018: $39,560).

Currency risk

Trade payables include AUD$8.68 million of Australian dollar denominated payables (2018: AUD$7.93 million) in relation to inventory purchases. Currency risk has been mitigated on these payables as they are covered by Fixed Forward Foreign Exchange selling contracts.

The NZD equivalent of unhedged amounts owing in foreign currency at balance date is $24,457 (2018: $119,897). The NZD equivalent of unhedged amounts owing to NZBS in foreign currency at balance date is $130,243 (2018: $219,097).

Forward foreign exchange contracts	30 June 2019	30 June 2018
Total forward foreign exchange contracts (stated in NZD)	**29,370,882**	**30,522,950**

The foreign currency principal amounts were AUD$27,410,331 (2018: AUD$28,494,970).

The fair values of forward exchange contracts have been determined using a discounted cash flows valuation technique based on quoted market prices. The inputs into the valuation model are from independently sourced market parameters such as currency rates. Most market parameters are implied from forward foreign exchange contract prices.

Financial assets

At 30 June 2019 derivative financial assets consisted of forward foreign exchange contracts with a fair value totalling $46,297. At 30 June 2019, a movement in foreign exchange rates of plus 10% has an adverse impact of $0.48 million, and minus 10% has a favourable impact of $0.58 million, based on a derivative valuation model using hypothetical forward rates. At 30 June 2018 derivative financial assets consisted of forward foreign exchange contracts with a fair value totalling $539,434. At 30 June 2018, a movement in foreign exchange rates of plus 10% has an adverse impact of $2.82 million, and minus 10% has a favourable impact of $3.45 million, based on a derivative valuation model using hypothetical forward rates.

Financial liabilities

At 30 June 2019 derivative financial liabilities consisted of forward foreign exchange contracts with a fair value totalling $647,900. At 30 June 2019, a movement in foreign exchange rates of plus 10% has an adverse impact of $2.14 million, and minus 10% has a favourable impact of $2.61 million, based on a derivative valuation model using hypothetical forward rates. There were no derivative financial liabilities held for trading at 30 June 2018.

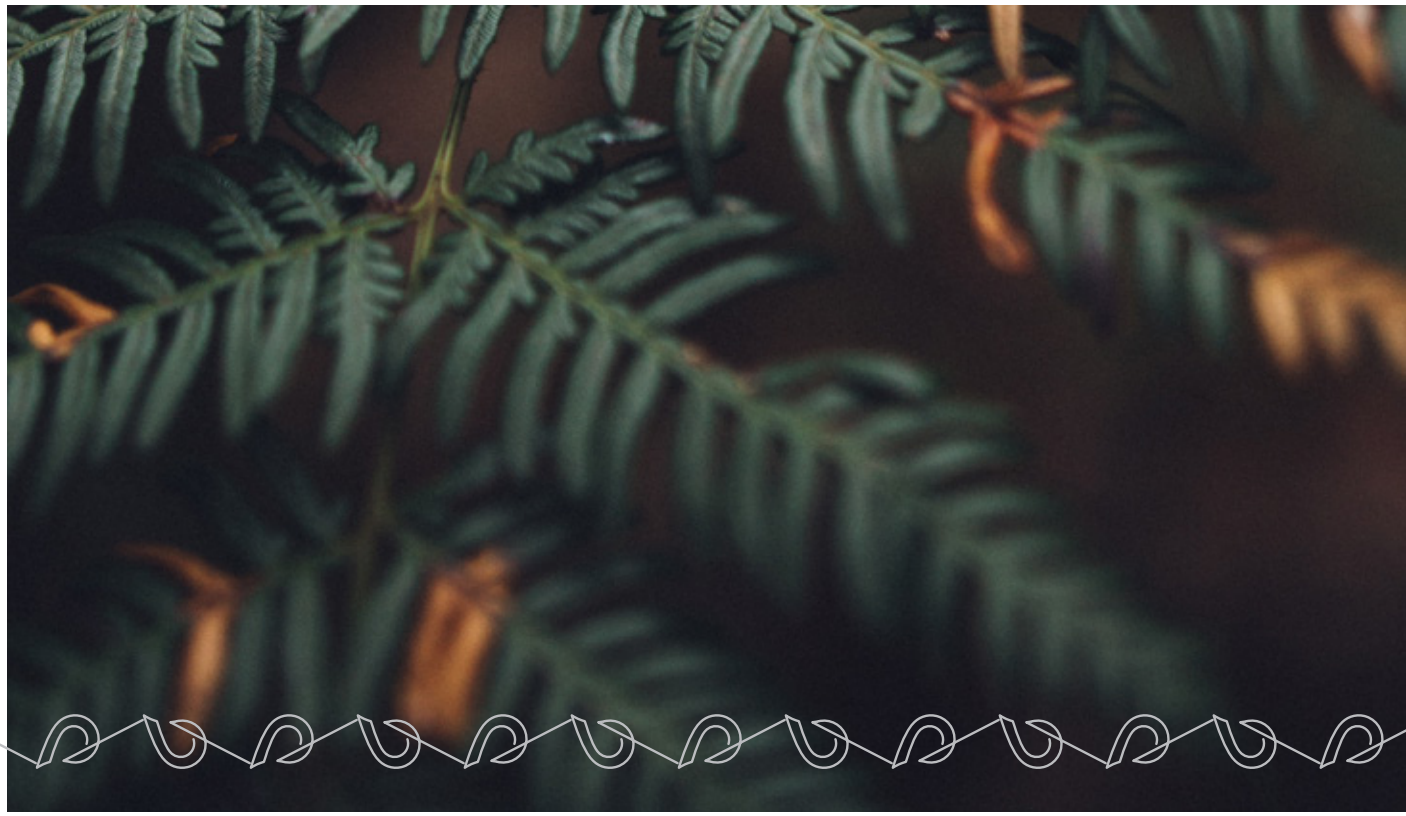
Credit Risk

Maximum exposure to credit risk at balance date are:	30 June 2019	30 June 2018
Cash on hand	4,300	4,800
Call deposits and short term deposits	5,140,801	3,956,245
Receivables	13,115,256	11,392,916
Investments - term deposits	7,000,000	7,000,000
Derivative financial instruments	46,297	539,434
Total credit risk	**25,306,654**	**22,893,395**

Credit quality of financial assets	30 June 2019	30 June 2018
COUNTERPARTIES WITH CREDIT RATINGS		
Total cash at bank and term deposits		
AA-	12,140,801	10,956,245
Derivative financial instrument assets		
AA-	46,297	539,434
COUNTERPARTIES WITHOUT CREDIT RATINGS		
Debtors and other receivables		
Existing counterparty with no defaults in the past	13,115,256	11,392,916
Existing counterparty with defaults in the past	-	-
Total debtors and other receivables	**13,115,256**	**11,392,916**

Concentration of credit risk

Concentrations of credit risk from accounts receivable are limited due to the majority of NZBS's revenue being from the 20 District Health Boards (DHBs). The DHBs make up approximately 89.0% (2018: 95.4%) of the total receivables outstanding at balance date. Collectively the DHBs are assessed to be low risk, high quality entities due to their nature, as government organisations responsible for providing the public health service to New Zealand.



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For The Year Ended 30 June 2019

33 Financial instruments risks (continued)

Liquidity risk

The maximum amount available to New Zealand Blood Service under existing banking arrangements is $14,000,000 (2018: $8,300,000) on term facilities of which $5,650,000 was drawn down at balance date (2018: $3,300,000). A negative pledge obligation exits with this facility – refer note 20.

30 June 2019	Liability carrying amount	Contractual cash flows	Less than 1 year	1-2 years	2-5 years	More than 5 years
Trade and other payables (note 15) - excluding GST	16,025,643	16,025,643	16,025,643	-	-	-
Borrowings - finance lease (note 20)	5,004,305	9,304,366	964,979	1,577,000	1,615,115	5,147,272
Borrowings - term credit facility (note 20)	5,650,000	6,279,356	292,243	5,987,113	-	-

30 June 2018	Liability carrying amount	Contractual cash flows	Less than 1 year	1-2 years	2-5 years	More than 5 years
Trade and other payables (note 15) - excluding GST	14,885,630	14,885,630	14,885,630	-	-	-
Borrowings - finance lease (note 20)	5,029,358	9,606,188	875,459	1,670,476	1,640,986	5,419,267
Borrowings - term credit facility (note 20)	3,300,000	3,434,435	110,605	3,323,830	-	-

Contractual maturity analysis of derivative financial instruments

30 June 2019	Liability carrying amount	Asset carrying amount	Contractual cash flows	Less than 6 months	Between 6 months and 1 year	1-2 years	2-5 years
Forward foreign exchange contracts							
outflow	-	46,297	29,370,882	4,775,092	18,318,813	6,276,977	-
inflow	647,900	-	28,769,279	4,623,266	17,843,261	6,302,752	-

30 June 2018	Liability carrying amount	Asset carrying amount	Contractual cash flows	Less than 6 months	Between 6 months and 1 year	1-2 years	2-5 years
Forward foreign exchange contracts							
outflow	-	539,434	30,522,950	11,121,684	8,620,064	10,781,202	-
inflow	-	-	31,062,384	11,438,102	8,720,682	10,903,600	-

34 Capital management

New Zealand Blood Service's capital is its equity comprising crown equity, accumulated funds and the adverse fractionation event reserve. Equity is represented by net assets.

New Zealand Blood Service is subject to the financial management and accountability provisions of the Crown Entities Act 2004 which imposes restrictions in relation to borrowings, acquisition of securities, issuing of guarantees and indemnities and the use of derivatives.

New Zealand Blood Service manages its equity by managing revenues, expenses, assets, liabilities, investments and general financial dealings to ensure it effectively achieves its objectives and purpose, whilst behaving in a financially responsible manner in accordance with the financial management obligations imposed by the Crown Entities Act 2004.

35 Explanation of major variances against budget

The reported deficit of -$0.59 million was influenced by the following factors when compared to the budgeted deficit of -$1.43 million;

1. **Gross revenues** of $133.07 million were +$5.68 million favourable to budget mainly due to stronger demand for blood products +$3.81 million overall (combination of fresh and fractionated product demand) and higher services sales +$1.56 million (mainly Tissue Typing testing and Therapeutic procedures, +1.26 million and +$0.47 million respectively).
2. **The cost of consumables and changes in inventory** at $49.56 million was -$3.07 million unfavourable to budget. These unfavourable adjustments were due to higher consumable and 'changes in inventory' costs totaling $2.55 million overall, a consequence of higher fresh blood product demand, immunoglobulin (IVIg) fractionated product growth and higher services sales. Product expiry was also elevated by -$0.52 million due to higher red cells, platelets, and fractionated products expiry.
3. **Mark to market revaluation movement of derivative financial instruments** was -$1.20 million unfavourable overall mainly due to the movement in the NZD/AUD cross rates ruling at 30 June 2018 and 2019 when compared to foreign exchange contracts held at balance date. The 2018/19 Budget assumed a closing 30 June 2018 NZD/AUD rate of 0.934 whereas the actual was NZD/AUD 0.918, generating an opening 1 July 2018 unfavourable movement of -$0.37 million. In addition at 30 June 2019 an unfavourable mark to market loss off a stronger NZD of -$0.83 million was also recorded against the budgeted position.
4. **Employee benefit expense** +$1.80 million favourable overall due to tight control over staffing levels compared to budgeted establishment levels offset by an increase in sick leave and annual leave entitlements.
5. **The balance of other variances** was unfavourable to budget by -$2.38 million and was represented by a combination of;
   (i) Lower depreciation and amortisation costs of +$0.26 million overall due to timing on general capital spend over the course of the financial year.
   (ii) Lower finance charges of +$0.06 million.
   (iii) Higher 'Other expenses' being -$2.70 million unfavourable overall from a combination of the following;
   - Higher foreign exchange losses (-$0.81 million) driving from NZD/AUD foreign exchange contracts held to settle the cost of manufacturing fractionated products, those costs denominated in Australian dollars.
   - Higher occupancy spend (-$0.51 million) due mainly to higher than budgeted premises reinstatement provision costs driving from the impact of the Waikato District Health Board issuing notice that the Waikato Blood Centre tenancy will not be renewed.
   - Higher consultancy spend (-$0.32 million) due mainly to a higher spend on legal fees associated with employment related matters and consultancy fees associated with the redevelopment of the facility and site at 71 Great South Road Auckland.
   - Higher marketing spend (-$0.22 million) mainly relating to growing donor panels to ensure NZBS can meet product and source plasma for fractionated product demand.
   - Higher distribution spend (-$0.25 million) due mainly to higher sales demand and collection volumes.
   - Higher repairs and maintenance spend (-$0.16 million).
   - Higher travel and accommodation costs (-$0.15 million).
   - Higher capital charge (-$0.09 million) due to a more favourable closing equity position.
   - Other expense variances -$0.19 million unfavourable overall.

Note when comparing the Financial Statements to the Statement of Service Performance, the budget numbers shown in the Statement of Service Performance are recorded at an aggregated level whereas budget figures shown in the financial statements are broken out at a more detailed level.

The overall cash flow movement for 2018/19 was an increase in cash of +$1.18 million resulting in a closing cash position at 30 June 2019 of $5.15 million. This figure was +$3.22 million favourable to budget due to favourable operating activities of +$1.22 million, lower investing cash spend of +$4.09 million offset by higher financing activity spend -$2.31 million as detailed below.

(a) Cash from Operating Activities at +$4.32 million was +$1.22 million favourable to budget. Key factors influencing this outcome were:
(i) Higher receipts (+$4.65 million) driving from higher demand for blood products and services.
(ii) Higher supplier payments (-$6.12 million) due to higher demand and corresponding increase in production levels to meet that demand.
(ii) Lower payments to employees (+$2.55 million) mainly due to lower staffing levels overall compared to budget.
(iii) Other payments in total being favourable to budget by +$0.14 million overall.

(b) Cash flows from Investing Activities at +$4.98 million were +$4.09 million favourable to budget mainly due to timing on capital expenditure relating to plant and equipment, property related projects and the blood management software enhancements.

(c) Cash flows from Financing Activities at -$1.85 million were unfavourable to budget by -$2.31 million due to timing on purchasing of plant and equipment to be funded by finance leases and timing on the draw down in borrowings for the redevelopment of the facility and site at 71 Great South Road Auckland.

The equity position at 30 June 2019 totaled $38.24 million (budget $37.23 million) representing an equity ratio of 78.2% (budget 74.9%) and a debt ratio of 21.8% (budget 25.1%). Tangible assets totalled $74.09 million (budget $71.61 million) compared to last year's $66.79.

New Zealand Blood Service Output Class and Outcome

Output	Outcome
NZBS has one overall Output Class, comprising three interrelated outputs related to: • Donors (and patients) • Products and Services • Demand Management Each of which collectively contributes to the achievement of the NZBS Outcome.	Health needs of people in New Zealand are supported by the availability of safe and appropriate blood and tissue products and related services.

Performance Measures stated in Financial Years	Target Set 2018/19	Historical Trend Line of Actual Outcomes						Result	Target Set
		2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Provision of a safe and effective blood service for all New Zealanders through supply and delivery of: • Fresh Blood Components; • Fractionated Blood Products; and • Other products and related services.	Revenue of $127.40 with no price rebate to DHBs planned.	$104.9m	$104.0m	$109.0m	$115.6m	$114.42m	$121.62m	Revenue of $133.07m with no price rebate declared to DHBs.	Revenue of $138.56m with no price rebate to DHBs planned.
	Expenses of $128.83m	$107.0m	$103.1m	$104.3m	$117.9m	$114.50m	$122.19m	Expenses of $133.66m	Expenses of $139.66m
	Deficit of $1.43m	-$2.1m	$0.9m	$4.7m	-$2.3m	-$0.08m	-$0.57m	Deficit of $0.59m	Deficit of $1.10m

Financial Performance Commentary

The reported deficit of $0.59m was favourable to the budgeted deficit of $1.43m and slightly unfavourable to last year's deficit of $0.57m. This result was delivered off revenues of $133.07m which were 4.5% and 9.4% up on budget and last year revenue levels respectively. The reported result was achieved in a financial year that witnessed a lift in overall demand throughout the year with an overall 5.34% lift in volume, a major component of which was the 10.14% lift in immunoglobulin (IVIg) demand that required plasmapheresis collection volumes to be increased by 3.3% to better align the collection of source plasma volumes for fractionation with demand driven production requirements. In the 2018/19 financial year fractionation production volumes totalled 77,356 kilograms of plasma an increase of 24.45% in fractionation production volumes.

In a strong demand environment the reported result was favourable to budget by +$833k (+58.4%) and largely in-line with last year's result. The key contributors to the year's result as compared to budget are further explained as follows:

- Stronger demand levels drove a favourable increase in gross margin as against budget of $2.86m,
- Increased demand similarly lifted production activity resulting in a favourable increase of $2.33m in production recoveries,
- Operational expenditure including labour, consumables, distribution, product expiry, inventory adjustments and general overhead expenses were overall unfavourable to budget by $2.04m,
- Foreign exchange movements were in total unfavourable to budget by $2.00m of which $1.34m arose from an unfavourable mark to market position at 30 June, the consequence of a stronger New Zealand dollar as against the Australian dollar,
- Redevelopment expenses relating to the redevelopment of 71 Great South Road were $315k unfavourable to budget.
- In the current operating environment and having regard to the forward outlook the Board elected not to declare a price rebate to DHBs for the 2018/19 financial year.

Change in Accounting Standards

Please note from the 2014/15 financial year, information has been prepared under International Public Sector Accounting Standards (IPSAS) with all prior reported financial information within this document prepared under International Financial Reporting Standards (NZ IFRS).

1. External output measures reported in this section of the Statement of Service Performance relate to key products and services which contribute to achievement of NZBS Enduring Outcome to provide a range of products and services which are appropriate to New Zealanders Health needs and priorities.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Product and Service availability 1.1 Key products and services are available at all times (24 x 7). Measure is instances when this is not achieved and which could potentially have a negative consequence for patients.	**TARGET** 0	**ACHIEVED** 0	**ACHIEVED** 0	**ACHIEVED** 0	**ACHIEVED** 0	**ACHIEVED** 0	**ACHIEVED** 0	0

2. External output measures related to Demand Management and the relationship with DHBs which contribute to achievement of Strategic Goal 4 – NZBS relationships with other health sector entities are mutually supportive and productive.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
2.1 Planning and Communication with District Health Boards (DHBs) NZBS will demonstrate a productive and supportive relationship with the DHBs consistent with maintaining a strategic partnership, including proactively engaging with them through the Lead DHB CEO to agree pricing matters in a timely manner in order to inform preparation of DHB Annual Plans. NOTE: Exact measure has changed over recent years.		**ACHIEVED**	**ACHIEVED**	**ACHIEVED**	**ACHIEVED**	**ACHIEVED**	**ACHIEVED**	
	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a greater strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2018/19 financial year.	Feedback received from the Lead DHB CEO stated: "NZBS has fully met the requirements of its "Planning and Communications with DHBs".	Feedback received from the Lead DHB CEO stated "I can confirm from a DHB point of view NZBS has fully met the requirements of its "Planning and Communications with DHBs" performance measure in the 2014/15 financial year".	Lead DHB CEO confirmed an open communication process with DHBs over price setting and utilisation patterns to inform the new financial year. To quote: "I believe you have developed an open partnership with me which will hopefully see a greater strategic partnership developed".	NZBS assesses its communication obligations to the DHBs and relationship management were met over the course of the 2016/17 financial year. However, the Lead CEO changed twice during the year with an extended period of no Lead CEO. In these circumstances formal feedback could not realistically be expected.	NZBS has received the following feedback from the Lead DHB CEO on meeting this target. NZBS has engaged in a positive and proactive relationship with the DHBs throughout the year, via the nominated lead DHB CEO. NZBS via its CEO has remained accessible, available and attentive to the challenges faced by both NZBS and the DHBs. The pricing discussion was well researched and informed leading to a mutually acceptable outcome for both parties.	NZBS has received the following feedback from the Lead DHB CEO on meeting this target. "The DHBs have enjoyed another year of a positive and proactive relationship with NZBS through myself as the CE Lead for Blood Services. The service has remained responsive and the pricing discussion while difficult to achieve for the DHBs was well researched and informed, leading to an acceptable outcome for both parties. NZBS, through Sam Cliffe (CE) has remained accessible, available and attentive to the challenges faced by both NZBS and the DHB's. I look forward to another year's involvement in this complex environment of NZBS."	NZBS to receive favourable feedback from the Lead DHB CEO on maintaining a greater strategic partnership and the timely and relevant provision of information, including any issue resolution over the course of the 2018/19 financial year.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
		ACHIEVED	ACHIEVED	ACHIEVED	ACHIEVED	SUBSTANTIALLY ACHIEVED*	ACHIEVED	
2.2 NZBS Reports for DHBs Monthly demand management reports outlining purchase volumes by key product line are provided to DHBs to assist them to manage local usage and costs	Reports are provided to each DHB by the 10th working day of the following month.	Monthly reports detailing product and expiry information provided to all 20 DHBs throughout 2013/14.	Monthly reports detailing product use and expiry information provided to all 20 DHBs in 2014/15 financial year.	Monthly reports detailing product use and expiry information were provided to all 20 DHBs throughout 2015/16	Monthly reports detailing product use and expiry information were provided to all 20 DHBs throughout 2016/17	Monthly reports detailing product use & expiry information were provided with 1 exception, within set timeframes to all 20 DHBs throughout 2017/18	Monthly reports detailing product use & expiry information were provided within set timeframes to all 20 DHBs throughout 2018/19.	Reports are provided to each DHB by the 10th working day of the following month.
* The September 2017 reports were delayed due to problems with extracting data following the implementation of eTraceline the new national blood banking management system. Over the 2018/19 financial year the average despatch time was 4 working days.								
2.3 Clinical Oversight Programme All Blood Banks located in main DHB hospitals (other than the 6 DHBs where NZBS is responsible for Blood Bank provision) will receive at least 1 NZBS Clinical Oversight visit (and audit report) per year in order to enable them to meet the requirements of ISO15189 for IANZ Accreditation.	100% achievement of a minimum one clinical oversight visit and report per year to all non NZBS managed blood banks located in main DHB hospitals.	ACHIEVED 100%	ACHIEVED 100%	ACHIEVED 100%	ACHIEVED 100%	ACHIEVED 100%	ACHIEVED 100%	100% achievement of a minimum one clinical oversight visit and report per year to all non NZBS managed blood banks located in main DHB hospitals.
Haemovigilance - Patient safety (measured in calendar years)	**Target Set**	**CALENDAR YEARS**						**Target**
	2018	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
	2017 Annual Haemovigilance Report published and provided to all DHBs in the December quarter of 2018.	ACHIEVED	ACHIEVED	ACHIEVED	ACHIEVED	ACHIEVED	ACHIEVED	2018 Annual Haemovigilance Report published and provided to all DHBs in the December quarter of 2019.
2.4 Haemovigilance Reporting 2.4.1 To promote risk awareness and best practice in transfusion, NZBS will publish an annual Haemovigilance Report for each calendar year and will share this information with all DHBs to assist them to reduce the incidence of adverse transfusion related events.		2012 Annual Haemovigilance Report distributed to all DHBs in December 2013 and available on NZBS web-site.	2013 Annual Haemovigilance Report distributed to all DHBs in December 2014 and available on the NZBS web-site.	2014 Annual Haemovigilance Report distributed to all DHBs in October 2015 and available on the NZBS web-site.	2015 Annual Haemovigilance Report distributed to all DHBs in October 2016 and available on the NZBS web-site.	2016 Annual Haemovigilance Report distributed to all DHBs in October 2017 and available on the NZBS web-site.	2017 Annual Haemovigilance Report distributed to all DHBs in October 2018 and available on the NZBS web-site.	
2.4.2 Number of transfusion related adverse events occurring as a result of an NZBS "system failure" reported to the National Haemovigilance Programme, with a severity score greater than 1 and an imputability score classified as likely/probable or certain.[1]	Relates to adverse recipient reactions in calendar year 2017. While zero is always the desired outcome it is considered inappropriate to set a target for this measure.	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	ACHIEVED 0	Inappropriate to set a target for this measure noting the desired outcome is always 0.

[1]This measure reports adverse events that have occurred as a result of NZBS "system failures" and therefore excludes adverse events resulting from a physiological reaction to the transfusion of a biological product.

3. Internal measures related to Products and Service Quality which contribute to achievement of Strategic Goal 2 – NZBS achieves the highest possible Safety and Quality standards in all that it does.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
3.1 Donation Testing Each donation will be tested prior to use in accordance with the NZBS Manufacturing Standards (as approved by Medsafe).	To maintain 100% tested donation Testing	**ACHIEVED** 100% tested	**ACHIEVED** 100% tested	**ACHIEVED** 100% tested	**ACHIEVED** 100% tested	**ACHIEVED** 100% tested	**ACHIEVED** 100% tested	To maintain 100% donation testing
No product is released for issue to a patient until it has passed all safety tests and associated records are maintained.								
3.2 Regulatory Compliance - Medsafe NZBS will ensure it maintains Medsafe licences for its 6 hub sites 100% of the time, to provide an assurance of GMP compliance. • NZBS is required to maintain a licence in order to manufacture medicines. The licence requires mandatory compliance with GMP code at all times.	To maintain 100% GMP Licensing Compliance	**ACHIEVED** 100% GMP Licensing compliance maintained	**ACHIEVED** 100% GMP Licensing compliance maintained	**ACHIEVED** 100% GMP Licensing compliance maintained	**ACHIEVED** 100% GMP Licensing compliance maintained	**ACHIEVED** 100% GMP Licensing compliance maintained	**ACHIEVED** 100% GMP Licensing compliance maintained	To maintain 100% GMP Licensing compliance
3.3 Regulatory Compliance – IANZ (International Accreditation New Zealand) NZBS will ensure it maintains IANZ accreditation 100% of the time at all of its diagnostic laboratories. • IANZ is the national authority for accreditation of testing and calibration laboratories, inspection bodies and radiology services.	To maintain 100% IANZ accredited	**ACHIEVED** 100% IANZ accreditation maintained	**ACHIEVED** 100% IANZ accreditation maintained	**ACHIEVED** 100% IANZ accreditation maintained	**ACHIEVED** 100% IANZ accreditation maintained	**ACHIEVED** 100% IANZ accreditation maintained	**ACHIEVED** 100% IANZ accreditation maintained	To maintain 100% IANZ accredited
3.4 Regulatory Compliance – ASHI (American Society of Histocompatibility and Immunogenetics) NZBS will maintain ASHI accreditation 100% of the time at the national Tissue Typing laboratory. • ASHI accreditation is a programme to evaluate laboratory personnel, procedures and facilities to determine compliance with published ASHI standards. Maintaining ASHI accreditation is a mandatory NZBS requirement.	100% ASHI accreditation maintained	**MAINTAINED** 100% ASHI accredited Biennial on-site audit completed	**MAINTAINED** 100% ASHI accredited	**MAINTAINED** 100% ASHI accredited Biennial on-site audit completed	**MAINTAINED** 100% ASHI accredited	**MAINTAINED** 100% ASHI accredited Biennial on-site audit completed	**MAINTAINED** 100% ASHI accredited	100% ASHI accredited Biennial on-site audit to be conducted

4. Internal measures related to Donors which contribute to achievement of Strategic Goal 3 – *NZBS maintains a sustainable donor population capable of supporting ongoing product demand in New Zealand.*

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
4.1 Donor Population NZBS maintains a donor population capable of meeting the on-going demand for blood and blood products.	These reported donor numbers represent the donor population required to meet demand noting that within any given year is flexed constantly to ensure demand alignment in order to minimise expiry.							
• Active Whole Blood & apheresis donor panels	106,000	112,744	109,158	110,746	109,751	107,210	**108,588**	107,500
NOTE: NZBS actively manages its donor population of whole blood & apheresis donors at levels required to support ongoing demand meaning the panels may be above or below the original target set. The closing donor panel numbers at 30 June 2019 were primarily the result of continuing to grow the plasmapheresis panel (+8.5% growth) to meet the need for source plasma, following a lift in the demand for immunoglobulin product (+10.1% growth) experienced over the 2018/19 financial year. Also refer to Section 4.4.								
4.2 Donor Satisfaction (Old Measure) Measure of Overall Satisfaction with the Quality of Service using the Common Measurement Tool (CMT) questionnaire.	Discontinued Measure	**NOT ACHIEVED** 88.3%	**NOT ACHIEVED** 88.4%	**NOT ACHIEVED** 87.9%	**DISCONTINUED MEASURE** (See new measure below)			
• Aspirational target of greater than 90% of donors surveyed state that they are either "Satisfied" or "Very Satisfied" with the overall quality of service.								
Note: From the 2016/17 reporting year onwards a new measure has been developed that is better suited to blood donation and related activities. The CMT measurement tool was discontinued as its use is primarily for measurement of satisfaction with Government departments not frontline services. The new measure (refer below) more accurately reflects true donor experience.								
4.2 Donor Satisfaction (new measure) Measure of Overall Satisfaction with the Quality of Service	Greater than 90% satisfaction with the service	**NEW MEASURE** in 2016/17 financial year			**ACHIEVED** 91.35%	**ACHIEVED** 92.78%	**ACHIEVED** 94.50%	Greater than 90% satisfaction with the service
• 90% of donors give an 8 or higher score out of 10 of their experience / satisfaction with the service.								
Note: This is ascertained by internal NZBS donor surveys conducted 6 monthly over the financial year. The first survey was conducted in June 2017. The surveys over the 2018/19 financial year were undertaken in November 2018 (94%) and May 2019 (95%). The reported donor satisfaction figure is the average of the two surveys conducted over the financial year.								

4. Internal measures related to Donors which contribute to achievement of Strategic Goal 3 – *NZBS maintains a sustainable donor population capable of supporting ongoing product demand in New Zealand.*

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
4.3 Targeted donor recruitment strategies (old measure)								
4.3.1 To increase the percentage of Māori donors on the active donor panel from the level achieved in the prior year.	Discontinued Measure	**ACHIEVED** 7.7%*	**ACHIEVED** 9.3%	**ACHIEVED** 9.8%	**NOT ACHIEVED** 9.6%	**DISCONTINUED MEASURE** from 2017/18 financial year*		
4.3.2 To increase the percentage of youth donors between the ages of 19 - 25 years on the active donor panel from the level achieved in the prior year.	Discontinued Measure	**ACHIEVED** 18.8%	**NOT ACHIEVED** 18.8%	**NOT ACHIEVED** 18.3%	**NOT ACHIEVED** 17.5%	**DISCONTINUED MEASURE** from 2017/18 financial year*		

* Note: From the 2017/18 reporting year a new measure targeting new and reinstated donor levels (refer below) is considered an improved performance monitoring metric for these particular donor categories. These new measures set out below for the 2017/18 financial year provide real targets for performance not a shifting % of the total donor panel which is always dependent on demand profile.

4.3 Targeted donor recruitment strategies (new measure from 2017/18 Financial Year)	Target 2018/19	2012/13	2013/14	2014/15	2015/16	2017/18	2018/19	Target Set 2019/20
4.3.1 Recruit 2,900 new and reinstated Māori donors to the active donor panel (each year measure).	2,900	**NEW MEASURE** in 2017/18 financial year				**NOT ACHIEVED** 2,731 (94%)	**ACHIEVED** 2,993 (103.2%)	2,900
4.3.2 Recruit 11,000 new and reinstated youth donors between the ages of 16 - 25 on the active donor panel - attracting youth donors assists in future proofing the service encouraging new donors to replace those retiring.	11,000	**NEW MEASURE** in 2017/18 financial year				**NOT ACHIEVED** 10,211 (93%)	**NOT ACHIEVED** 10,420 (95.2%)	11,000

NOTE: For clarity, the definition of a new donor is a donor who has made a valid donation for the very first time in New Zealand. The definition of a reinstated donor is a person who has made at least two donations of which one blood donation was made within the last 12 months and the interval between that donation and the prior donation is more than 24 months excluding autologous and therapeutic donations. The first year reporting of these new KPI fell just short of target. For the Maori donor target there was no discernible reason other than acknowledging the need to maintain in future a specific campaign focus throughout the year acknowledging the main focus in 2017/18 had been on plasma collection to secure the required quantities of source plasma for fractionation. For the youth target there continues to be pressure on the availability of rooms at the universities. Similarly a number of schools rescheduled their originally planned days to later in the financial year adversely impacting the original planned collection timetable.

4.4 Raw Material (Collections) Inputs – based on Demand Outcomes and Forecasts	Target 2018/19	2013/14 Actual	2014/15 Actual	2015/16 Actual	2016/17 Actual	2017/18 Actual	2018/19 Actual	Target Set 2019/20
4.4.1 Total Whole Blood donations	109,300	120,858	120,099	119,967	111,146	111,588	112,341	109,300
4.4.2 Total Plateletpheresis donations	2,700	3,942	3,436	3,145	2,852	2,637	2,647	2,860
4.4.3 Total Plasmapheresis donations	61,100	32,514	41,438	52,026	53,081	58,441	60,359	66,500
4.4.4 Total Donations	**173,100**	**157,314**	**164,973**	**175,138**	**167,079**	**172,666**	**175,347**	**178,660**

Note: Collection inputs targets are not fixed. The collection inputs have been / will be flexed over the year to meet demand indications noting the increase in plasmapheresis collections as a consequence of immunoglobulin demand growth.

5. Internal measures related to People which contribute to achievement of Strategic Goal 5 – NZBS has a sustainable, competent and engaged workforce.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
5.1 Annual Employee turnover	12.0%	10.4%	8.1%	9.9%	10.6%	12.5%	**12.5%**	12.0%
5.2 Employee Engagement Index Score from biennial Staff Engagement Survey	Better than last survey	68.5%	No survey	No survey	**NOT ACHIEVED** 71.4%	No survey	66.7%*	Better than the last Survey

Comment: * While the employee participation rate at 88.5% was pleasing the drop in the engagement score from 71.4% to 66.7% while disappointing was not unexpected as the organisation has and is going through a period of change which can be unsettling for many employees.

6. Internal measure related to Development which contributes to achievement of Strategic Goal 6 – NZBS uses international 'best practices' and internal research and development capabilities to improve and develop and services for the New Zealand health and disability sector.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
6.1 Auckland Facility Redevelopment Project – 71 Great South Road Site Successful completion of key project milestones in accordance with Board approved project plan	Key Milestones achieved by 30 June 2019 in accordance with the approved redevelopment Plan for 71 Great South Road.	**NEW MEASURE** in 2015/16 financial year		**DEFERRED** This project was deferred to enable further scoping work to be completed on a whole of site redevelopment.	No measure as the project was deferred in the 2015/16 financial year pending further redevelopment planning work.	**ACHIEVED** A comprehensive Redevelopment plan Scoping paper was presented to the May 2018 Board meeting. The Board approved the redevelopment subject to Ministry of Health sanction.	**ACHIEVED** Ministerial approval of the Redevelopment plan and associated increase in NZBS borrowing capacity was received in April 2019, Stage 1-National Office relocation to level 1 was successfully executed in March 2019 and the next 3 stages; Stage 1A - new Atrium roof, stairs and cafeteria, Stage 2 - new donor centre and support services relocation to level 1 and Stage 2A – civil site works all underway prior to 30 June 2019.	Key Milestones achieved by 30 June 2020 in accordance with the approved redevelopment Plan for 71 Great South Road.

7. Internal measures related to Financial Sustainability contributing to achievement of Strategic Goal 7 – NZBS is a financially sustainable organisation operating effectively and efficiently.

Performance Measures stated in Financial Years	Target Set	Historical Trend Line of Actual Outcomes					Result	Target Set
	2018/19	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
7.2 Financial Management Assure cost efficiency and value for money management through maintenance of financial sustainability in an environment which is demand driven (i.e. changes in product demand - mix and volume by the DHBs, impacts on the NZBS financial result).	Achievement of Budget. Budgeted deficit of $1.43m on revenues of $127.4m. No rebate planned to DHBs	**ACTUAL** - surplus of $0.86m on revenue of $106.0m Rebate paid to DHBs of $2.0m.	**ACTUAL** - surplus of $4.7m on revenues of $109.0m. Rebate paid to DHBs of $3.55m.	**NOT ACHIEVED** - a worse than budget reported deficit of $2.3m on revenue of $115.6m. No rebate paid to DHBs.	**ACHIEVED** - a better than budget reported deficit of $0.08m on revenue of $114.4m. No rebate paid to DHBs	**ACHIEVED** - a better than budget reported deficit of $0.57m on revenue of $121.62m. No rebate paid to DHBs	**ACHIEVED** - a better than budget reported deficit of $0.59m on revenue of $133.07m. No rebate paid to DHBs	Achievement of Budget. Budgeted deficit of $1.43m on revenues of $127.4m. No rebate planned to DHBs

FOR THE FINANCIAL YEAR ENDED 30 JUNE 2019

STATEMENT OF RESPONSIBILITY

1/ The Board and Management of New Zealand Blood Service accept responsibility for the preparation of the annual Financial Statements and Statement of Service Performance and the judgements used in them.

2/ The Board and Management of the New Zealand Blood Service accept the responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of financial and non-financial reporting.

3/ In the opinion of the Board and Management of the New Zealand Blood Service, the annual Financial Statements for the year ended 30 June 2019 fairly reflect the financial position and operations of New Zealand Blood Service.

David Chamberlain
Board Chair
29 August 2019

Dr Jackie Blue
Deputy Board Chair
29 August 2019

INDEPENDENT AUDITOR'S REPORT FOR THE YEAR ENDED 30 JUNE 2019

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

To the readers of New Zealand Blood Service's financial statements and performance information for the year ended 30 June 2019

The AuditorGeneral is the auditor of New Zealand Blood Service. The AuditorGeneral has appointed me, Athol Graham, using the staff and resources of Audit New Zealand, to carry out the audit of the financial statements and the performance information of New Zealand Blood Service on his behalf.

OPINION

We have audited:

- the financial statements of New Zealand Blood Service on pages 37 to 67, that comprise the statement of financial position as at 30 June 2019, the statement of comprehensive revenue and expenses, statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the financial statements including a summary of significant accounting policies and other explanatory information; and
- the performance information of New Zealand Blood Service on pages 68 to 74.

In our opinion:

- the financial statements of New Zealand Blood Service on pages 37 to 67:
  - present fairly, in all material respects:
    - its financial position as at 30 June 2019; and
    - its financial performance and cash flows for the year then ended; and
  - comply with generally accepted accounting practice in New Zealand in accordance with Public Benefit Entity Reporting Standards; and
- the performance information on pages 68 to 74:
  - presents fairly, in all material respects, New Zealand Blood Service's performance for the year ended 30 June 2019, including:
    - for each class of reportable outputs:
      - its standards of delivery performance achieved as compared with forecasts included in the statement of performance expectations for the financial year; and
      - its actual revenue and output expenses as compared with the forecasts included in the statement of performance expectations for the financial year; and
  - complies with generally accepted accounting practice in New Zealand.

Our audit was completed on 29 August 2019. This is the date at which our opinion is expressed.

The basis for our opinion is explained below. In addition, we outline the responsibilities of the Board and our responsibilities relating to the financial statements and the performance information, we comment on other information, and we explain our independence.

Basis for our opinion

We carried out our audit in accordance with the AuditorGeneral's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the AuditorGeneral's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of the Board for the financial statements and the performance information

The Board is responsible on behalf of New Zealand Blood Service for preparing financial statements and performance information that are fairly presented and comply with generally accepted accounting practice in New Zealand. The Board is responsible for such internal control as it determines is necessary to enable it to prepare financial statements and performance information that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements and the performance information, the Board is responsible on behalf of New Zealand Blood Service for assessing New Zealand Blood Service's ability to continue as a going concern. The Board is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless there is an intention to merge or to terminate the activities of New Zealand Blood Service, or there is no realistic alternative but to do so.

The Board's responsibilities arise from the Crown Entities Act 2004.

Responsibilities of the auditor for the audit of the financial statements and the performance information

Our objectives are to obtain reasonable assurance about whether the financial statements and the performance information, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could

reasonably be expected to influence the decisions of readers, taken on the basis of these financial statements and the performance information.

For the budget information reported in the financial statements and the performance information, our procedures were limited to checking that the information agreed to New Zealand Blood Service's statement of performance expectations.

We did not evaluate the security and controls over the electronic publication of the financial statements and the performance information.

As part of an audit in accordance with the AuditorGeneral's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements and the performance information, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of New Zealand Blood Service's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board.
- We evaluate the appropriateness of the reported performance information within New Zealand Blood Service's framework for reporting its performance.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Board and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on New Zealand Blood Service's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements and the performance information or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause New Zealand Blood Service to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the financial statements and the performance information, including the disclosures, and whether the financial statements and the performance information represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

Other information

The Board is responsible for the other information. The other information comprises the information included on pages 1-36, but does not include the financial statements and the performance information, and our auditor's report thereon.

Our opinion on the financial statements and the performance information does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements and the performance information, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements and the performance information or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of New Zealand Blood Service in accordance with the independence requirements of the AuditorGeneral's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1 (Revised): Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board.

Other than in our capacity as auditor, we have no relationship with, or interests, in New Zealand Blood Service.

Athol Graham

Audit New Zealand
On behalf of the Auditor-General
Auckland, New Zealand

WĀHANGA TOHUTOHU

DIRECTORY

NZBS BOARD MEMBERS

Mr David Chamberlain
(Board Chair)
BEc, FNZSA, FIAA, CMinstD

Dr Jackie Blue
(Deputy Board Chair)
BSc, MBChB, FASBP, MNZM

Dr Bartrum Baker
MBChB, FRACP, FRCPA

Ms Cathryn Lancaster
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Ms Fiona Pimm
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Mr Ray Lind

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BSc (Hons)

Chief Medical Officer
Dr Sarah Morley
MBBS FRCPCH FFICM PhD

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John Harrison
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Director Human Resources and Organisational Development
Sue Jensen
RGON, GDipBus (ER)

Director Planning and Supply Chain
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NZCS, COPMLT, RMLS

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NZBLOOD
Te Ratonga Toto O Aotearoa

New Zealand Government