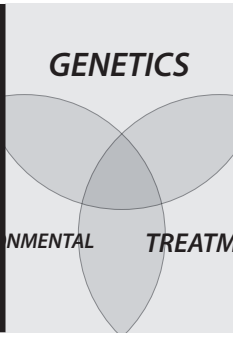
Haemophilia Foundation of New Zealand Inc.
HFNZ

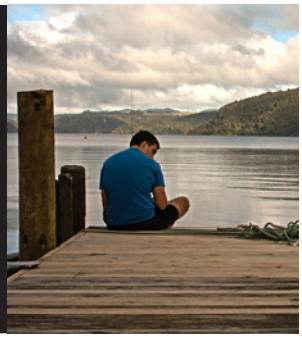
bloodline

Newsletter of the Haemophilia Foundation of New Zealand Inc

June 2015
Volume 43 / Number 2

Building a Family of Support





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The H Word

Deon offered me the opportunity to write 'The H Word' for this edition of Bloodline and I was pleased to take up that offer.

I have now been with the Foundation for 10 months. To be honest it has been a learning curve, but the thing that has struck me is the strength of this community. It is clear to me that, as an organisation, we have to focus on our roots and the things that make us strong. The recent Buddy Awards were a great reminder of what the Foundation is about…people helping people. Each nomination told a story of how a person can make a big difference in someone's life, often through the simple things that make all the difference.

The Haemophilia Foundation is a network of people who care about and for each other; this is the defining character of your Foundation. We need to retain that collective support for each other. We need to be strong together and remember how the Foundation grew and what it has achieved. HFNZ grew from the desire to help and support other people with bleeding disorders, and it has faced many challenges together. We are and will face new challenges going into the future, such as access to new interferon-free treatments for HCV and longer-acting factor, and changes to the way the government funds pharmaceuticals.

You are the Foundation. Kia Kaha.

Ngā mihi nui / Regards,

Richard Chambers
Chief Executive Officer

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Masters Group (request to join)
www.facebook.com/groups/hfnzmasters

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Account Name: Haemophilia Foundation of New Zealand
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Cover photo: *Northern World Haemophilia Day Event at Mount Rangitoto*

WORLD HAEMOPHILIA DAY CELEBRATED WITH BUDDY AWARDS

World Haemophilia Day is observed around the world on 17 April to increase awareness of haemophilia and other bleeding disorders, with an ultimate goal of ensuring better diagnosis and access to care for the millions who have a rare bleeding disorder yet remain without treatment.

TThe theme for World Haemophilia Day 2015 focused on encouraging the global bleeding disorders community to Build a Family of Support. Families come in many forms but they all share the ability to support and advocate.

In line with this theme, HFNZ marked World Haemophilia Day by launching the Buddy Awards. Sponsored by Novo Nordisk, the Buddy Awards recognise the vital support provided by friends, families, and health professionals who have to cope with the everyday challenges that haemophilia and bleeding disorders can involve.

HFNZ Chief Executive, Richard Chambers, said: "The lack of public awareness of bleeding disorders means that families and friends take on a great deal of responsibility for their friends and loved ones.

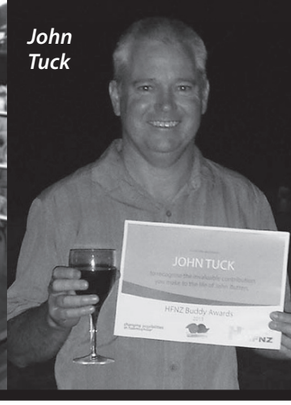
The Buddy Awards are a way for people with a bleeding disorder to give a very special thank you to their 'buddy'."

The 18 inaugural Buddy Award nominations include nurses, physiotherapists, family and friends of people with a bleeding disorder. Over the weekend of 18-19 April three award ceremonies were held around the country, in Christchurch, Wellington and Auckland, to honour all those nominated and celebrate World Haemophilia Day.

HFNZ President, Deon York, said: "The Buddy Awards are a perfect way to mark World Haemophilia Day, celebrating inspirational individuals, committed healthcare professionals and families living with a bleeding disorder."

Congratulations to all the fantastic Buddies recognised by the awards and, on behalf of HFNZ, thank you for all you do to support the people in our community.

BUDDY AWARD RECIPIENTS



Andrew Scott

Nominated by: ***Izack Silva (age 7)***

Relationship: ***Camp Buddy***

I met Andrew at Camp.

He was kind and friendly and happy, but not when he got a bleed in his foot.

He helped me learn how to do my own treatment and I know how to do it now.

Andrew is cool and I'd like to see him again.

Neil Smith

Nominated by: ***Trinette Giborees-Smith***

Relationship: ***Husband***

Neil has been with me on my bleeding disorder journey from the beginning.

He helped me through coming to terms with having von Willebrands while coming to terms with our 1 year old son having von Willebrands at the same time.

He is always encouraging me to reach out to other people with bleeding disorders and was the driving force behind getting involved in HFNZ – which has been life changing not just for me but for our whole family.

The Parents Empowering Parents (PEP) programme was the best thing we have ever done.

Whenever our son Henry or I have a bleeding issue Neil is always our rock. He is so strong and will ALWAYS push for us and be our advocates.
I could not have done through the birth of both our children without him there.
Neil totally deserves this!!

Luca Enna

Luca Enna

Nominated by: ***Henry Smith (age 5)***

Relationship: ***Best Friend***

When we were at kindy, whenever I had a graze or a bleed, Luca would always run and get a teacher to come and help me. And when I am crying he always gives me a hug. He also tells other kids to go away if they try to hurt me or are annoying me.

I love Luca because he is my best friend and I can't wait until he comes to c School with me.

Amanda Pichon

Nominated by: ***Ashley Taylor-Fowlie***

Relationship:
Best friend, Previous Flatmate

Amanda has always been there to support me. Whether it was taking me to the doctor or hospital appointments, or to university when I was unable to drive or dropping me to the airport so I can attend HFNZ events.

Amanda has made herself knowledgeable about my bleeding disorder and is always there when I need her support. She has adjusted and changed her life in order to ensure I live and healthy and fulfilling life.

I couldn't ask for a better friend and her support is greatly appreciated.

Brie Krissansen

Nominated by:
Alaina and Rowen Krissansen

Relationship:
Daughter / Older Sister to Kev

Our son Kev Krissansen has severe haemophilia A. As a family we all support Kev to administer his factor 3 times a week. Rowen and I make time after work to do Kev's factor, Brie, our 16-year old daughter assists.

Brie has been given the opportunity to opt out of helping mum and dad with factor but her answer is always the same, "I want to do this for my little brother."

Because of Brie's commitment to her little brother she plans her schedule around Kev's factor. Sometimes she will change her plans with friends just so she can always be there 3 times a week for her little brother.

The Scott Family
(Richard, Lynley, Andrew and Toby)

Nominated by: ***The Giborees-Smith Family, Brodie Family, Hirst Family, Greg Jamieson and Ken MacGregor***

Relationship: ***Friends/Mentors***

A few families within the Northern Region nominated the entire Scott Family for a Buddy Award. Each family has provided reasons of their own.

- ***The Giborees-Smith Family:***

We first met Lynley and Richard 2 years ago at a Parents Empowering Parents (PEP) workshop. We found them to be very inspirational and so full of knowledge about parenting a child with a bleeding disorder. Since then they have been amazing support for us, particularly each time our son Henry has a bleed – they are always offering support and kind words through our PEP Facebook page.

We really got to know the whole family better this year at National and Northern region camp. Andrew in particular has formed an amazing relationship with our 5-year old son Henry who has von Willebrands. Henry really looks up to Andrew as a role model. Since the camps, her confidence and ability to cope with abled has increased phenomenally and we put this down to Andrew's postivie influence. Henry often talks about Andrew and want to celebrate any 'wins' with his bleeds by telling Andrew about them. An amazing young man, is Andrew.

We also got to know Toby a little better this year and what an amazing little man he is. Such a caring guy towards others and the love he has for his brother, and concern and empathy he has when he is unwell is amazing. A very deserving person of the Buddy Award.

Lynley and Richard are so giving of their time and knowledge with us families and HFNZ and continue to give despite the rough times they may be having with Andrew's haemophilia.

We cannot think of a better recipient of the Buddy Award than the Scott Family and as you can see from this nomination we are not the only lives they have touched and changed for the better.

- ***The Hirsts***

We would love to nominate the whole Scott Family for the Buddy Awards. They go over and above their call of duty with helping out with HFNZ. They do so much behind the scenes and are a constant support to all of us. They both put so much in all the events and meeting, and their children are so helpful and supportive to everyone.

They really are the backbone and a real strong rock for us all. We highly recommend the Scott Family for the Buddy Awards.

- ***Greg Jamieson***

I would like to nominate the Scott Family for the Buddy Awards for a number of reasons, including:

- There was a time where the Northern committee was falling apart and the Scott's kept it all together. The strength of our committee today is a result of their hard work.
- Richard takes on a number of leadership roles, including Chair of Northern and Vice President on National Council. And they are constantly giving their time to facilitate PEP and camp programmes.
- They are also one of the first people to be there to support anyone going through a touch time when it's needed.
- They have a wealth of knowledge and are very happy to share it and as a consequence they make life with haemophilia just that little bit easier and manageable.

- ***Ken MacGregor***

Their work on Armageddon is first class – they have done this for a number of years on behalf of HFNZ and it consumes a fair bit of Richard's time. He organises everything for us and he can usually be found working on each day of Armageddon filling in when we don't have enough people.

- ***The Brodies***

When Lee and I first found out about our bleeding disorder we like everyone we have met in this beautiful haemophilia world felt lost and alone and meeting the Scott's absolutely changed that feeling to love, support, trust and fun - all within 5 minutes of meeting them.

They have through such a lot of heart ache in their lives but always have such optimism and faith and will always have a smile on their face and will always, without doubt, be the first folk to put up their hands to help others no matter what they are going through. They have such a wealth of knowledge and are the 'go to people' for such a lot of people, including us. Andrew is such an inspiration and is very quickly following in his wonderful parents' footsteps. He is most definitely Flynn's 'go to person' we, for one, are so very blessed to know him and his brother Toby, who takes is so hard when his big brother has a bleed or is hurt.

These wonderful people do such an awful for HFNZ as a whole it is a no brainer to nominate them for a Buddy Award.

Fiona Bolden

Nominated by:
Linda Mellsop-Anderson

Relationship: ***General Practitioner***

Fiona has a skill at putting me at ease – she not only hears but listens.

She's always been there for me with well-based advice and knows me better than any specialist I might see irregularly. Her words have given me strength, understanding and patience.

Fiona allows me to be me – cry when I need too – she is a friend, confidant and a skilled GP. Fiona is the person I trust!

John Tuck

Nominated by: ***John Rutten***

Relationship: ***'Buddy' (friend)***

At the conclusion of an HFNZ Men's Workshop in 2008, participants were asked to choose a 'buddy'. 7 years later, John and I continue having regular contact! It's probably true that John is more diligent at staying in touch than I am.

John uses both his intelligence and his persistence to very good effect with me. On several occasions during the 7 years John has also arranged in Auckland, Otorohanga or the Mount to get together or link up with other men living with haemophilia – usually over lunch. I know from being there that


BJ Ramsay and Helen Dixon


Willy and Dee Tekira


Dominique and Chanelle Spencer


Kathy Fawcett


Donna Bradley

these men appreciated the opportunity to catch-up or converse about the challenges they were/are living with and dealing with. I think most people would agree that John Tuck willingly goes 'that extra mile' to support others living with a bleeding disorder. John is unaware that I am nominating him – because if his nomination is successful this news has the potential to come as a wonderful surprise. John's nomination has my unqualified support and gratitude.

BJ Ramsay

Nominated by: ***Marty Waring***
Relationship:
Haemophilia Nurse Specialist

Where do I start? There is no comparison to the 'Before BJ" level of haemophilia care and the level of care, support, understanding or comfort having BJ constantly in behind the scenes, going the extra mile and keeping in touch that we experience since BJ has arrived on the scene.

The man is more than a Buddy. He is living legend to the Central haemophilia community and should be knighted! He deserves all the recognition he gets.

Helen Dixon

Nominated by: ***Steve Waring***
Relationship: ***Physiotherapist***

The difference in my day to day life, between having and not having a dedicated haemophilia physiotherapist is like night and day.

Having someone as skilled as Helen apply her vast understanding to the haemophilia environment and only a text or phone call away give me the confidence to increase my physical activity. Helen is very aware that this increased activity is not only good for my body but by mind also.

Being part of the Hutt Gym/Swim Club organised by Helen every Thursday and being with encouraging and being encouraged by other people with a bleeding disorder is some of the best medicine a person can have.

She is always a bright, bubbly, positive injection into often difficult days and is a great 'buddy' to me and the other 'boys' in the Central region. She deserves recognition for going the extra mile, always being available and making haemophilia life a bit better and a bit brighter.

Willy Tekira

Nominated by: ***Ian Reddie***
Relationship: ***My uncle Arnie!***

I want to nominate Uncle Willy mainly because of his attitude!! He is so POSITIVE! And UPBEAT!! He is a huge source of inspiration and motivation for me, as when I see him working hard at the Masters Gym sessions he makes me want to work that much harder and do more for myself as ultimately health professionals such as BJ and Helen can only offer their expertise but we are living it, and need to put their advice and help into action!!

I really look forward to catching up with Uncle Willy as his personality and demeanour are positive, and after and during workouts he always has a joke or a laugh.

Dee Tekira

Nominated by: ***Willy Tekira***
Relationship: ***Wife***

Dee took over where my mum left off. She was always by my side.

When I met Dee 43 years ago I was so afraid of her finding about me having this health complaint. I happened to get a nasty bleed and of course went to the hospital and from that time she has and is still going through the same thing to this very day. I've had some nasty ones and I've put her thought hell.

She's everything to me and I wouldn't be here if not for her.

Rob Silva

Nominated by: ***Rorie Poff***
Relationship: ***Friend***

Rob encourages me at camps. He helps me to join in all the activities. He makes sure I am safe. He always asks how I am going. He helps with the physical activities and is quick to hold my hand or pick me up if I fall.

Linda Dockrill and Rob Silva

Dominique and Chanelle Spencer

Nominated by: ***Sandra Poff***
Relationship:
Friends of Rorie and his sisters

Joint award nomination for two beautiful sisters, who while being part of a family affected by a bleeding disorder have also made life for other children in the community fun and safe.

Both girls attend camps and events and always think of the children and others before themselves. They encourage, motivate, support and care for the children.

As a parent with a child with haemophilia I have felt confident with them both caring for my children and grateful for their kindness. Children love them and they have individually and together provided hundreds of hours of care and support.

Karen Davidson

Nominated by: ***Connor McCone***
Relationship: ***Mother***

Mum has been my Rock! I honestly can't imagine what things would be like without her, she has been a key support person with the usual daily struggles of a teenager with a bleeding disorder. She even gave my nurses an education about haemophilia and prophylaxis.

Mum doesn't let haemophilia stop me from doing what I want, she doesn't wrap me up in cotton-wool, she lets me live my life to the fullest without letting the 'H' word get in my way.

Kathy Fawcett

Nominated by: ***Matt Coleman***
Relationship: ***Nurse***

Kathy is always extremely friendly, helpful and quick to deal with any problems.

She is great to deal with and makes a big difference by making sure things run smoothly.

She has helped me and many others I know with numerous things including organizing factor quickly, getting dental work done, recommending physio and following up on bleeds via text and phone.

Kathy really cares and it shows with her dedication and willingness to support people with bleeding disorders even outside of work hours.

Linda Dockrill

Nominated by: ***Bo Silva***
Relationship: ***Outreach Worker***

Linda has been an amazing support person for me!

She is very non-judgemental, understanding and always willing to help.

Linda you are amazing at your job and I hope you never leave.

Donna Bradley

Nominated by: ***Alister (Sam) Bradley***
Relationship: ***Wife***

My name is Alister Bradley, known as Sam, from Greymouth on the West Coast in New Zealand. I have been a West Coaster all my life.

What is a Buddy? To me, a buddy is someone that is always there for you, helping, assisting, supporting you and even giving you advice. Basically, they are your best friend.

A buddy is someone who even gives you a hand giving your treatment when you are unable to.

Over the past 14 years (9 years married) Donna has supported me. I have severe haemophilia A and in the past also had Hep C. Donna has been my nurse and doctor and often told real doctors and nurses what to do.

She almost always is the one that gives me my treatment, or shi is the one in the treatment rooms helping/teaching nurses how to draw up the factor – especially during surgeries. She is always in consults, recovery rooms; you name it she's there with me. She never complains when I wake her at ungodly hours of the morning for pain meds, treatment, a coffee, a rub, a heat pack, a cold pack or re-bandage or yet another trip to A&E.

The big major thing is that she was right by my side when I went through the Hep C treatment which was often challenging. But when I have surgery Donna would be by my side from early morning to late night, day in day out. Colleen McKay can vouch for this and I never had to have a nurse shower me. Donna would get her children up in the early hours to take me to A&E and has supported my daughter with her carrier status as she now supports my granddaughters.

It is Donna that has encouraged me to be an active member of the HFNZ camps/functions. She always gets on with everyone, a little, cherry, happy lady who loves being part of HFNZ. I would also like to say a big thank you to all the staff from HFNZ for organizing us to get here and be part of the experience.

So here's to you Donna – forever and always.

Risk Factors for Inhibitors *By Chantal Lauzon*

Despite advances in factor replacement therapy for people with haemophilia (PWH) and related improvements in survival, joint status and quality of life, the development of inhibitors remain the most severe complication.

Inhibitors are antibodies to factor VIII or factor IX made by the body's immune system that attack and destroy the factor VIII and IX proteins in clotting factor concentrates, making treatment ineffective. While genetics definitely contribute to their development there are many non-genetic risk factors that also play a part. In order to make well-informed decisions about treating haemophilia, it is important to better understand inhibitors and their risk factors.

Inhibitors Basics

An inhibitor is a type of antibody. Antibodies are designed to destroy substances in the body that it does not recognise. In a PWH, the antibody may be created following treatment with factor VIII or IX. This is because that person's body does not recognise factor VIII or IX as a normal protein. It will attach itself to the factor and inhibit (stop) its ability to help form a clot. Developing an antibody is the body's normal reaction to something it does not think should be there and is usually a good thing. For example, developing antibodies to common illnesses after vaccination or getting an illness prevents you from infection or re-infection.

Inhibitors are most likely to be detected when bleeding does not respond to treatment as well as it has in the past. The presence of an inhibitor is usually confirmed by using a blood test called the Besthesda inhibitor assay. The amount of antibody is measured in Bethesda units (BU). The concentration of inhibitor in the blood is measured by the titre; a low titre measure is less than 5 BU and a high titre is equal to or more than 5 BU. About 40 per cent of people who develop inhibitors have a low titre.

Generally inhibitors in patients with low titres are easier to treat, however, the ability of patients to respond to tolerisation treatment is divided into low responders (where the titre does not increase when factor is given) and high responders (where the titre rises, often dramatically, after re-exposure to factor).

Approximately 30% of people with haemophilia A and 2-3% of people with haemophilia B develop inhibitors.

Low responders may just need a double or treble dose of clotting factor to overcome the inhibitor's effects and the inhibitor might disappear on its own over time. However, among high responders even very high doses of clotting factor can be ineffective and bleeding has be controlled by other means.

Immune tolerance therapy involves the regular administration of high doses of factor for up to 2 years. An international study is currently underway, which will assess whether the outcome can be influenced by the dose of concentrate given. The immune tolerance regime can be very demanding for a child and family. In many cases it is also necessary to insert a central venous line (such as a PIC line or Portacath), which carries with it risks of bacterial infection and/or thrombosis.

Inhibitors are more likely to occur in the first 50 exposure days (EDs) in patients with severe haemophilia, but a baseline low risk remains through a patient's life [i]. The cumulative risk of developing an inhibitor in previously untreated patients (PUPs; i.e. have had less than 50 treatments) is approximately 30% [ii], whereas in previously treated patients (PTPs; more than 50 treatments) it is 2-3 per 1000 patient/years [iii].

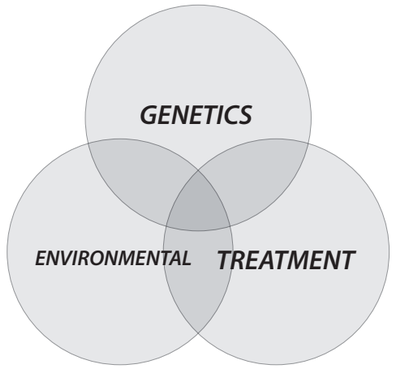
Bleeds can be much more difficult to control in patients with inhibitors. The treatment strategy for patients with inhibitors has two distinct aims: to control individual bleeding episodes and to eradicate the underlying antibody through immune tolerance therapy (ITT). Infusions of conventional factor VIII concentrates are unable to control the bleeding, although they are used for ITT.

Once inhibitors develop, they have an adverse outcome both in terms of morbidity and mortality [iv] and, almost invariably, patients with inhibitor titres more than 5 BU will require bypassing agents [v]. In New Zealand, two bypassing agents are currently available recombinant activated factor VII (NovoSeven® by Novo Nordisk) and an activated prothrombin complex concentrates, FEIBA® (Baxalta). Many new bypassing agents are currently under development.

Although the development of inhibitors is far more common in people with haemophilia A, inhibitors in people with haemophilia B pose a particular challenge. Severe allergic reactions may develop after infusions of factor IX concentrate and the response to immune tolerance induction is also poor. The total cost of treatment for patients with inhibitors can be very high and stretch a hospital budget, even in affluent countries.

Factors for Inhibitor Development

Why inhibitors develop continues to be an area of ongoing investigation. We do know that the development of inhibitors has been associated with all FVIII therapies and most inhibitors emerge after relatively few treatments. In general, the more treatments a person has had without developing inhibitors, the less likely he is to develop an inhibitor.



The risk of inhibitor is a phenomenon influenced by multiple causes, in which individual factors may be neither necessary nor sufficient on their own but rather are usually a result of their combined effects. While there is no definite answer the age of first factor exposure, treatment factors surrounding first factor exposure (i.e. trauma, how much, associated surgery, etc), gene mutation (increase inhibitor development in large genetic deletions), and immunological aspects all play a role.

The development of inhibitors is a complicated process. Risk factors for the development of an inhibitor can be grouped according to the patient's genetic susceptibility, environmental factors, and by the type and mode of replacement therapy.

Genetic Risk Factors

Some factors are genetic, including genotype, race, family history, and the presence of several immune response genes.

It is now clear that the major factor that determines the predisposition to inhibitor development is the gene mutation responsible for causing the haemophilia.

Certain types of gene defects in haemophilia are definitively associated with a significantly increased risk of inhibitor development (large deletions, non-sense mutations and intron 22 inversions) [vi].

However, there is also additional evidence from family and twin studies that other subtle genetic factors play a role. Race may also influence the risk of inhibitor development, for example rates appear to be higher in Hispanics and African-Americans [vii].

The risk of developing an inhibitor also often relates to type of haemophilia and severity. For example, inhibitors develop in many more cases of haemophilia A than haemophilia B. Also, there seems to be a higher risk in people with severe haemophilia than moderate, with the lowest risk for people with mild haemophilia. People with severe haemophilia A are the most likely to develop inhibitor. Although inhibitors are thought to run in families, having one child or adult with an inhibitor does not mean that other family members will necessarily get one as there are many factors at play.

Environmental Risk Factors

In patients with a genetic predisposition non-genetic factors, such as the environment and treatment, may have an impact on changing the immune response to no longer recognise FVIII as it previously has.

Researchers have looked at many types of environmental factors including age at the start of treatment and immune system challenges such as major haemorrhages, surgery, immunisations and infections. Some studies have shown a higher risk of inhibitors in patients who received their first treatment before 6 months of age compared with those who do not have a treatment until after 18 months of age.

Other environmental risk factors include bleeding frequency, site and intensity, and events occurring at the same time.

Treatment Risk Factors

Treatment risk factors can be regimen-related (ie, on demand, high- or low-dose prophylaxis) and concentrate-related.

Mode of administration can vary between on demand, prophylaxis and intense exposure due to continuous infusion as a result of surgery or a severe bleed. Intense exposure seems to be related to a higher risk of inhibitor development, but this can be complicated by factors such as long exposure to the plastic used for the infusion that may also cause the body to react. One study in PUPs has shown prophylaxis to have a protective effect against the risk of developing inhibitors [viii].

Each person's chemistry is unique and they might react differently to every available product, even those that are very similar. Concentrates vary depending on their manufacturing process and their purity (i.e., levels of vWF or other proteins). For example, debate still exists as to whether plasma-derived and recombinant FVIII concentrates are associated with different risks of developing inhibitors and whether the risk varies among different recombinant molecules.

Although higher rates of inhibitors were reported with some of the recombinant FVIII products, those, in general, were recorded by the authors of more recent studies when more intense inhibitor testing was performed, and it is possible that the reported difference is the result of confounders (confounding or background factors get in the way of the comparison between groups because they either create differences between groups or influence outcomes). [ii] Inhibitors induced by plasma-derived concentrates have been found to be of lesser occurrence, yet to be more persistent and higher in titres [ix].

In 2013, the results of the Research Of Determinants of INhibitor Development among PUPs with haemophilia (RODIN) study were published [x]. One of the outcomes of this study was a comparison of the effect of different factor VIII replacement products. In this study there was a higher risk of patients developing inhibitors when treated with Kogenate (Kogenate FS in New Zealand) compared to Advate. These results prompted a review in Europe by the Pharmacovigilance Risk Assessment Committee (PRAC). The PRAC considered that the data did not support a conclusion that Kogenate were associated with an increased risk of developing factor VIII inhibitors compared to other products.

Top Risk Factors for Inhibitor Development

Age (young)	Severe haemophilia A
High intensity factor treatment	Family History
Continuous infusion of clotting factor vs bolus infusion	Certain factor VIII and IX genetic mutations
Surgical procedure during first 50 exposure days	Other genetic factors (African American, Hispanic, Asian ethnicity)

The publication of the RODIN study prompted further analyses using different data sets, which have recently been published. The results raised concerns from haemophilia treaters worldwide. However, after reviewing both the RODIN study and the additional analyses, members of New Zealand's Medicines Adverse Reactions Committee have concluded there is insufficient evidence to support a difference in the risk of inhibitor development when patients are treated with different factor VIII products [xi]. The Committee considered that it would be very difficult to account for all the factors that influence inhibitor development in the studies. For example, the choice of which factor VIII product is used is dependent on the physician, patient factors such as ease of use of the product, what factor VIII products are available and over time is also related to funding. There was no centralised laboratory testing used in the analysed studies and there was an imbalance between comparison groups for genetic risk factors for developing factor VIII inhibitors. It was unclear if there were significant differences between centres in choice of product and if this may have influenced the results. The results may also have been influenced by changes in the use of products over time. It seemed likely that most studies were not powered (i.e., large enough) to detect differences between different products.

Given the low number of events and the potential for residual confounding, the Committee concluded that there is no clear evidence of any differences between recombinant factor VIII products in terms of inhibitor risk in PUPs. However, the Committee considered that the data were sufficient to show that there was no difference in risk of inhibitor development between recombinant factor VIII products and plasma-derived factor VIII products. They recommended that haemophilia treaters and patients should continue to use the product which best suits the needs of the patient.

Concerns about product switching

There is often a reluctance, on both the part of PWHs and their clinician to switch factor concentrates because of concerns about increasing the risk of inhibitors.

A reluctance to change product was initially triggered by the epidemics of blood-borne infections, where having switched was an obstacle to track back the infection to the culprit concentrate. In addition, PWHs often develop a strong psychological link with the product they use and they are firm in their reluctance to change their current product. Even after products became safer the theoretical reluctance to switch remained, and the main reason became avoiding the development of new inhibitors.

In reality it is extremely rare, for adult PWH in most countries to have used the same concentrate throughout their lives. Although in countries in which there is a choice of available concentrates it may be worth keeping at least PUPs on the same product until 50 EDs, in many countries with national contracting avoiding a switch may not be feasible [xii].

Switching can be a reasonable choice for several reasons, including:

- Improved safety (real or perceived) – such as less risk of infection or less inhibitor risk
- Fewer side-effects (e.g., allergic reactions)
- Newer generation of product
- Price
- National contracting
- Volume of final product
- Mixing and administration device
- Storage advantage
- Patient/family preference
- Longer half-life
- Participation in a clinical trial of a new product/formulation
- Research study participation that specifies product to be used

With new products becoming available and as patients switch products more readily, the question of whether the switch will induce new inhibitors is a common one. Current evidence does not suggest that switching products significantly influences inhibitor development [xiii]. Even though many publications have shown no increase in switching between products and that most inhibitors develop soon after initiation of treatment, it should be noted that the lifetime risk of spontaneously developing an inhibitor might never be zero.

Whether there is an increased risk of developing inhibitors when switching from plasma-derived to recombinant has been debated. Out of 11 publications reporting an increase in inhibitor development in previously treated patients after switching to a new product, all were written about the switch between the same two products. Later studies showed that the second product was responsible for an immune response to a change to the particular recombinant FVIII that resulted from the manufacturing process. In Canada, most patients were switched from plasma-derived to recombinant FVIII when it became widely available. This would have been an ideal population to observe the real risk of switching; however, no inhibitors have yet been reported as result of this switch.

Researchers have concluded that there is no clear sign of increased inhibitor development when switching to and from the currently available factor concentrates. If any minor effect is present, this cannot be superior to a fraction of the overall 2-3 per 1000 patient/years rate, and no clustering of inhibitors soon after the switch has been reported. Even in the recently published data regarding the UK experience of switching recombinant products because of national contracting in 2010 in over 500 people with severe haemophilia. Researchers found that that switching was not associated with increased inhibitor development [xiv].

The study was unique in that they had a clear group of over 600 non-switchers to compare results with. Four inhibitors did develop in people who switched products (and one in a non-switcher) but this was not considered to be any higher than the historical rate of inhibitor development in the UK. The inhibitors observed in switchers were transient or disappeared rapidly following immune tolerance induction (ITI) and may have been transient without the use of ITI. The authors noted that because of the relatively low incidence of new inhibitors in PTPs, multinational collaboration with aggregation of data from several databases might be required to evaluate the relative risks of different FVIII concentrates and, realistically, perhaps no experimental design is powered to demonstrate anything other than major differences in FVIII immunogenicity in PTPs.

Two other studies on national product switches have been published. In Ireland, a national tender process in 2006 resulted in all patients with haemophilia A changing their FVIII treatment product en masse to a plasma and albumin-free recombinant full-length FVIII product [xv]. In this study, case records of Irish PTPs were retrospectively reviewed to evaluate the risk of inhibitor formation following this treatment switch. Only one of the 96 patients without a previous history of inhibitors developed an inhibitor following the switch and there were no cases of recurrent inhibitor formation in any of 16 patients with previously documented inhibitors. The Canadian national product switch surveillance study comprised 460 haemophilia A paediatric and adult patients from 17 Canadian comprehensive haemophilia care centres [xvi]. An inhibitor was detected in four of the 274 (1.5%) evaluable patients at the time of the switch, but no additional patients with inhibitors were reported afterwards. This finding highlights the importance of studying patients prospectively and testing for inhibitors before and after switching.

As these three studies employed different methodologies and studied different patient populations, the findings of each cannot be directly compared, nor can the data be pooled for a combined analysis. While the results should be interpreted with caution, all three studies suggest that switching is not associated with an increased risk of inhibitor formation relative to the very low background frequency of immunogenicity of these products [xii].

Looking ahead

Studying the complicated nature of inhibitor development has allowed new insights into the interactions between the factor VIII or IX and the various cells of the immune system. These insights will hopefully lead to the development of treatments with even less chance of inhibitor reactions. Researchers are not certain they will ever find a way to prevent inhibitors, and it is generally accepted that between 10 and 30 per cent of people with severe haemophilia A will develop inhibitors at some stage in their lives.

It has been suggested that wherever a switch presents added value for the patient or the society, this should be seriously considered and safely adopted. Researchers in several papers have concluded that there is no good evidence to suggest that switching factor concentrate in PTPs will have any significant effect on the development of clinically relevant inhibitors [xi,xii]. Most do note, however, that a risk for developing an inhibitor following a product switch cannot be completed excluded.

While the uncontrolled observation of several thousands of switches that did not raise any majors concerns, recommendations are that all haemophilia centres and countries planning to switch patients to new FVIII concentrates enrol both switching and non-switching patients in registries, test for inhibitors prospectively immediately before the switch and at a minimum for at least 1-2 months after the switch. Inhibitor testing should also be performed before and after intensive treatment/surgery.

With the arrival of new long-acting haemophilia treatments on the horizon, there is a call for an international centralised database recording inhibitor development to help better understand the actual risks.

References

i. Hay CRM, Palmer B, Chalmers E, et al. Incidence of factor VIII inhibitors throughout life in severe hemophilia a in the United Kingdom. Blood. 2011; 117(23):6367-6370.

ii. Iorio A, Halimeh S, Holzhauer S, et al. Rate of inhibitor development in previously untreated haemophilia a patients treated with plasma-derived or recombinant factor VIII concentrates: a systematic review. J Thromb Haemost. 2010;8(6): 1256-1265.

iii. Kempton CL. Inhibitors in previously treated patients: a review of the literature. Haemophilia. 2010;16(102):61-65.

iv. Darby SC, Keeling DM, Spooner RJD, et al. The incidence of factor VIII and factor IX inhibitors in the hemophilia population of the UK and their effect on subsequent mortality, 1977-99. J Thromb Haemost. 2004;2(7):1047-1054.

v. Hay CRM, Brown S, Collins PW, Keeling DM, Liesner R. The diagnosis and management of factor viii and ix inhibitors: a guideline from the United Kingdom Haemophilia Centre Doctors Organisation. Br J Haematol. 2006;133(6):591-605.

vi. Schwaab R, Brackmann HH, Meyer C, Seehafer J, Kirchgesser M, Haack A, Olek Tuddenham EG & Oldenburg J. Haemophilia A: mutation type determines risk of inhibitor formation. Thrombosis Haemostasis. 1995;74:1402–1406.

vii. Astermark J, Berntorp E, White GC & Kroner BL. The Malmo International Brother Study (MIBS): further support for genetic predisposition to inhibitor development in hemophilia patients. Haemophilia. 2001;7:267–272.

viii. Santagostino, E., Mancuso, M.E., Rocino, A., Mancuso, G., Mazzucconi, M.G., Tagliaferri, A., Messina, M. & Mannucci, P.M. Environmental risk factors for inhibitor development in children with haemophilia A: a case-control study. Brit J Haematol. 2005;130:422–427.

ix. Keeling D, Tait C, Makris M. Guideline on the selection and use of therapeutic products to treat haemophilia and other hereditary bleeding disorders. A United Kingdom Haemophilia Center Doctors' Organisation (UKHCDO) guideline approved by the British Committee for Standards in Haematology. Haemophilia. 2008;14(4):671-684.

x. Medicines Adverse Reactions Committee. Minutes of the 161st Medicines Adverse Reactions Committee Meeting. 12 March 2015.

x. Gouw SC1, van der Bom JG, Ljung R, et al.; PedNet and RODIN Study Group. Factor VIII products and inhibitor development in severe hemophilia A. N Engl J Med. 2013;368(3):231-9.

xi. Iorio A, Puccetti P, Makris M. Clotting factor concentrate switching and inhibitor development in haemophilia A. Blood 2012;120(4):720-727.

xii. Santagostino, E., Auerswald, G., Benson, G., Dolan, G., Jiménez-Yuste, V., Lambert, T., Ljung, R., Morfini, M., Remor, E. and Zupančić Šalek, S., Switching treatments in haemophilia: is there a risk of inhibitor development?. Eur J Haematol.2015; 94: 284–289.

xiii. Hay CRM, Palmer BP, Chalmers EA, Hart DP, Liesner R, Rangarajan S, Talks K, Williams M, Collins, P., The incidence of factor VIII inhibitors in severe haemophilia A following a major switch from full-length to B-domain-deleted factor VIII: a prospective cohort comparison. Haemophilia. 2015; 21: 219–22.

xiv. Bacon CL, Singleton E, Brady B, White B, Nolan B, Gilmore RM, Ryan C, Keohane C, Jenkins PV, O'Donnell JS. Low risk of inhibitor formation in haemophilia A patients following en masse switch in treatment to a third generation full length plasma and albumin-free recombinant factor VIII product (ADVATE). Haemophilia 2011;17:407–11.

xv. Rubinger M, Lillicrap D, Rivard GE, Teitel J, Carcao M, Hensman C, Walker I. A prospective surveillance study of factor VIII inhibitor development in the Canadian haemophilia A population following the switch to a recombinant factor VIII product formulated with sucrose. Haemophilia 2008;14:281–6.

Haemophilia treatments funding proposal

In February 2015, PHARMAC issued a request for proposals (RFP) for the funding of the haemophilia treatments (rFVIII, rFIX, rFVIIa and factor eight inhibitor bypassing fraction.

Bids received were evaluated from a financial and clinical perspective, taking into account considerations around security of supply and product usability. The products were also evaluated by haematologists and nurses who are specialists in the area of haemophilia.

PHARMAC is now seeking feedback on a proposal involving the funding of haemophilia treatments, with a closing date for submissions of Monday, 15 June 2015. The treatments include recombinant factor VIII (rFVIII), recombinant factor IX (rFIX), recombinant factor VIIa (rFVIIa) and factor VIII inhibitor bypassing fraction. They have reached provisional agreements for the listing and supply of these treatments.

As the changes could potentially mean a change of treatment product to many people with haemophilia A, HFNZ wanted to outline the proposed plan. It is HFNZ's intention to respond to PHARMAC's proposal. You are welcome to make individual responses directly to PHARMAC, but we would also appreciate you sharing your thoughts with us so that we can make an informed response on behalf of the Foundation. HFNZ will be keeping a close eye on developments and will share PHARMAC's final decision as soon as it is known, likely towards the beginning of July.

Why the proposed change?

Haemophilia treatments are essential life-saving medicines for people with haemophilia. Currently, in New Zealand, approximately $25 million per year is spent on these treatments; of which $18 million is used to fund rFVIII. Usage is likely to increase in New Zealand, where patients are living longer and healthier lives.

There are a number of rFVIII brands now available worldwide and international experience supports the feasibility and safety of national brand switches. Competitive processes in other countries have succeeded in obtaining significant price reductions.

The proposed changes in New Zealand would enable PHARMAC to make these treatments more cost-effective and enable them to obtain savings following a competitive process in this therapy area.

PHARMAC are aware of the impact of this proposed change on clinicians and patients. If the proposal is approved, PHARMAC plans to work with the NHMG, haemophilia treatment centres, the Haemophilia Foundation and pharmaceutical suppliers to ensure adequate support and resources are in place for clinicians, patients and their families during a change.

What is PHARMAC proposing to do?

PHARMAC's proposal is to continue funding of four haemophilia treatments, and to make changes to the funding rules. The four treatments are rFVIII, rFIX, rFVIIa and factor VIII inhibitor bypassing fraction.

The changes proposed mainly concern rFVIII. They would result in funding for a Preferred Brand, a Second Brand and a Rare Clinical Circumstances Brand. An expert panel would be established (the Haemophilia Treatments Panel) which would consider applications for funded access to the Second Brand or Rare Clinical Circumstances Brand of rFVIII for specific patients, taking into account a patient's specific clinical circumstances and the suitability of the relevant brand sought.

If implemented, the changes to rFVIII funding would mean that some people with haemophilia A would need to change the brand of rFVIII they currently use.

Changes would occur from 1 September 2015, and would be phased-in over a six-month period, giving patients time to make any adjustments necessary to move to the Preferred Brand or clinicians time to make funding applications for the appropriate funded Second Brand or Rare Clinical Circumstances Brand of rFVIII.

This proposal would involve only minor changes to the listing of the other haemophilia treatments – rFIX, rFVIIa and factor VIII inhibitor bypassing fraction. Further details are listed below.

Recombinant Factor VIII

Preferred Brand Status, Second and Rare Clinical Circumstances Brand Statuses

The proposed changes to the supply of rVIII involve:

- Moroctocog alfa (Xyntha, Pfizer) would be awarded Preferred Brand Status and would be the nationally preferred or first treatment choice of rFVIII. An application to the Haemophilia Treatments Panel would not be required for patients prescribed Xyntha.
- Octocog alfa (Kogenate FS, Bayer) would be awarded Second Brand Status and would be the second treatment choice of rFVIII for patients. Funded access would be by application to the Haemophilia Treatments Panel.
- Octocog alfa (Advate, Baxalta) would be awarded Rare Clinical Circumstances Brand Status and would only be funded for patients where treatment with Xyntha and Kogenate FS are clinically inappropriate. Funded access would be by application to the Haemophilia Treatments Panel.

- **A Haemophilia Treatments Panel** would be established, and managed by PHARMAC.
- The Haemophilia Treatments Panel would be largely comprised of haematologists who treat haemophilia. Clinicians would need to make an application to the Haemophilia Treatments Panel for funded access to Kogenate FS or Advate if they considered a switch to Xyntha would compromise appropriate clinical care for their current patients.
- PHARMAC proposes that patients would, where possible, be treated with Xyntha in order to obtain the best value for money from the more favourable price for this product.
- Clinicians would be able to seek access to funded treatment with Kogenate FS as the second treatment choice in cases where it is considered that the use of Xyntha would be likely to compromise appropriate treatment and care. Funded access to Advate would only be provided in cases where the use of Xyntha and Kogenate FS would be considered likely to compromise treatment and care.
- PHARMAC has received clinical advice that a brand switch may not be appropriate for some patients including those who:
  - previously had high titre inhibitor levels;
  - are undergoing active or have undergone immune tolerance therapy;
  - have a known product allergy; and
  - have recently commenced therapy (Previously Untreated Patients or PUPs).
- PHARMAC would work closely with clinicians and the Haemophilia Treatments Panel to coordinate ongoing funding of Kogenate FS and Advate for these patient groups.
- All new patients commencing rFVIII treatment from 1 March 2016 would be commenced on Xyntha as the nationally preferred brand where possible.
- This proposed arrangement would apply for 3 years (1 March 2016 to 28 February 2019).
- PHARMAC is aware of the impending availability of new longer-acting rFVIII products. This proposal would not prevent the funding of these products. However, because they are new treatments, they would need to be assessed by PHARMAC through its normal funding processes before a funding decision is made.

Transition process and implementation

If implemented:

- There would be a six-month transition period from 1 September 2015 to 29 February 2016 to enable current patients to be safely transitioned to Xyntha, where possible, during their next routine clinic visit.
- This six-month transition period would also allow time for clinicians to make applications to the Haemophilia Treatments Panel for continued funding of Kogenate FS or Advate in situations where they consider a change to Xyntha would be clinically inappropriate for any of their patients.
- From 1 March 2016, only patients with access approved from the Haemophilia Treatments Panel would be eligible for funded treatment with Kogenate FS and Advate.
- For existing patients, applications to the Haemophilia Treatments Panel should be made prior to 1 March 2016 to avoid interruption to clinical care.
- A Haemophilia Treatments Panel application is not required for patients who remain on, or are switched to, Xyntha.
- PHARMAC would work closely with the National Haemophilia Management Group, the Haemophilia Treaters Group and the Haemophilia Foundation to support clinicians and patients through this proposed change process.

Recombinant Factor IX

- Nonacog alfa (BeneFIX, Pfizer) will continue to be funded and there are no substantive changes to its current funded access arrangements.
- An alternative brand of rFIX, nonacog gamma (Rixubis, Baxalta) could be listed in the future, subject to Medsafe registration. It would be listed subject to restriction criteria similar to those currently in place for BeneFIX.
- There would be no brand funding restrictions for rFIX so choice of brand for treatment would be based on clinician and patient preference.

Recombinant Factor VIIa and Factor Eight Inhibitor Bypassing Fraction

- Eptacog alfa (NovoSeven RT, Novo Nordisk) would continue to be funded on the Pharmaceutical Schedule and there would be no substantive changes to its current funded access arrangements.
- Baxalta's brand of factor eight inhibitor bypassing fraction (FEIBA) would continue to be funded on the Pharmaceutical Schedule and there would be no substantive changes to its current funded access arrangements.

How to provide feedback

The full consultation document is available on the PHARMAC website (pharmac.health.nz/news/#consultation) or from HFNZ.

PHARMAC welcomes feedback on this proposal. To provide feedback, please submit it in writing by Monday, 15 June 2015 to:

Sue Anne Yee
Senior Therapeutic Group
Manager/Team Leader

PHARMAC
Email: haemophilia@pharmac.govt.nz
Post: PO Box 10254, Wellington 6143

All feedback received before the closing date will be considered by PHARMAC's Board (or its delegate) prior to making a decision on this proposal.

PHARMAC representatives will also take part in a session at the upcoming Adult Workshop Weekend (12-13 June) to discuss the proposal and hear feedback from participants.

Please note: Feedback received is subject to the Official Information Act 1982 (OIA) and PHARMAC will consider any request to have information withheld in accordance with our obligations under the OIA. Anyone providing feedback, whether on their own account or on behalf of an organisation, and whether in a personal or professional capacity, should be aware that the content of their feedback and their identity may need to be disclosed in response to an OIA request.

Coping with stress, anxiety, and calming the busy mind

By Sarah Elliott, Haemophilia Outreach Worker - Northern

Coping with the demands of living with a bleeding disorder can be very stressful and cause much anxiety at different times in you or your child's life. These concerns can get your 'chatty brain' going 100 miles per hour, and you may find it hard to concentrate or think clearly as your talkative inner voice works overtime and accentuates all your concerns, stressors and fears.

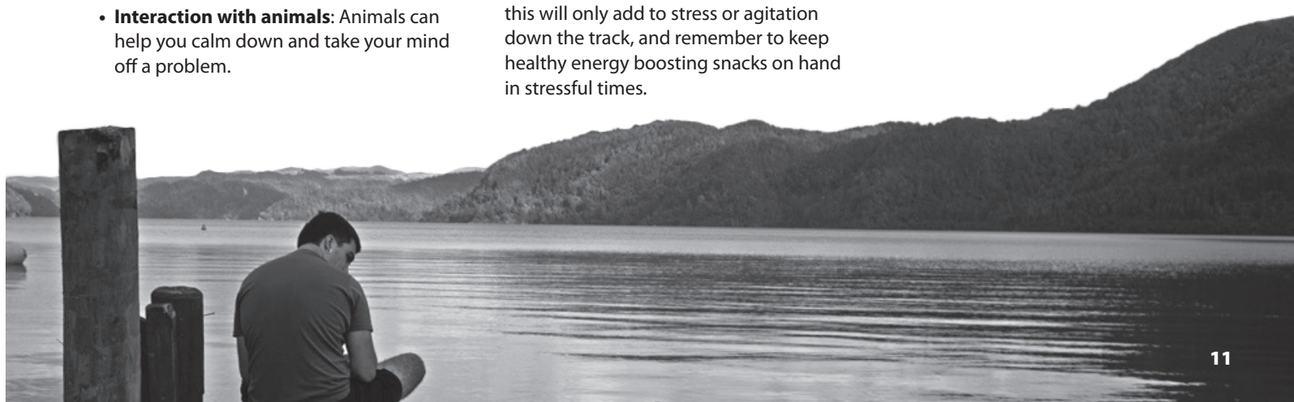
Each time you contemplate or worry over small details your body produces a surge of stress hormones which is bad for all elements of your wellbeing and causes clouded thought which often leads to further anxiety and making mistakes. Although some stress is 'normal' and even important for us, there are times when stress builds up and is detrimental to our health.

Below are some ways to overcome and deal with stress and anxiety, as well as to calm and center yourself. Try some of these techniques to find which ones work best for you:

- **Me time**: Value yourself by making time for things you enjoy such as reading, listening to music and getting a massage.
- **Conscious relaxation**: Things like meditation, yoga, mindfulness, breathing techniques and positive affirmations can help to quieten your mind and find peace. They can help you control and decrease the stress in your life and simultaneously increase your capacity for inner growth.
- **Exercise**: Exercise releases endorphins and makes you feel good, it also helps you sleep better and maintain healthy body weight and strength. In particular, rhythmic exercise such as swimming, cycling or running is calming. Be careful though as when you are stressed as it is often a time for increased accidents as your concentration is lacking. Also make sure your exercise is appropriate for you and your bleeding disorder.
- **Interaction with animals**: Animals can help you calm down and take your mind off a problem.
- **Manage your time well**: A common cause of stress is having too much to do and too little time in which to do it, but you have more time then you think. Write priority lists, learn to say "No" and make limits on what you can and can't do.
- **Remove harmful toxins:** Limit stimulants such as alcohol, caffeine, nicotine and even sugar as these can aggravate and trigger panic attacks.
- **Build a relationship with the environment**: Many of us feel more connected and calm when we are out in nature. Life's problems seem to diminish when surrounded by magnificent mountains or clear blue lakes. Visiting places of significance in your life can also revitalise you.
- **Sleep**: When you are stressed your body needs additional sleep – but when you are stressed it is always harder to sleep! Rather than relying on medication, your aim should be to maximise your relaxation before going to sleep. Make sure that your bedroom is a tranquil oasis with no reminders of the things that cause you to worry and have a routine time to go to sleep and wake up.
- **Relationships**: We can reduce stress by making time for important people in our life and eliminating people who drain our energy and time. The people who know us well can help us put things in perspective.
- **Spiritual connectedness**: Whether it be a religion, or a connection to a higher power this can bring comfort or security, a place to belong, a feeling that not EVERYTHING is on your shoulders or up to you to control. Connecting with your culture can also uplift your spirit and increase your resilience.
- **Healthy diet**: Eat well-balanced healthy meals regularly as it helps to balance your mind and thoughts and can make you more rational. Do not skip any meals just cause you are 'too busy' as this will only add to stress or agitation down the track, and remember to keep healthy energy boosting snacks on hand in stressful times.
- **Take control**: Consider what you can and can't control – let go of what you can't control and accept it. Be smart about what you can control. Try writing down your problems and stress triggers and finding solutions to these. Find out what decreases your stress and put these into action ASAP.
- **Connect to wider society**: To fit in or belong, to be a part of something bigger and to connect to others socially is vitally important. Get involved in different social groups or volunteer until you find something you really enjoy and where you feel accepted and comfortable.
- **Welcome humour**
- **Ask for help when needed**: Sometimes we are so deep into coping with our lives and what is happening that we don't recognise when we need to ask for help. Reach out - there are people out there who can help you to find ways and mechanisms to reduce stress and anxiety. There are people willing to share some of the load and help you through if you let them.

It is so important to recognise your own stress cycle, acknowledge and understand what causes stress, and trial different techniques to see what reduces your stress. Try to be proactive and preventative in caring for your mind by using positive strategies to build your resilience, support systems and happiness in times when everything is good; instead of just waiting until you are stressed out. Think of it like prophylaxis – taking your factor preventatively reduces the chance of getting a bleed, it is the same with your mental wellbeing.

If you would like more information about reducing stress, anxiety and your 'chatty brain' then contact your HFNZ Outreach Worker. They can help to support or refer you on to someone who can.



Gum Bleeding

Penny McCarthy, *Haemophilia Clinical Nurse Consultant, Ronald Sawers Haemophilia Centre, Alfred Health, Melbourne*

Gum bleeding in the absence of trauma or injury in adults with haemophilia is often reported. This can be distressing for the patient and often leads to days off work. In managing your haemophilia it is important to use simple preventative health measures such as brushing your teeth to maintain good oral hygiene as this will prevent gum bleeding.

Without good oral hygiene gum bleeding will occur with or without haemophilia.

It is important to remember haemophilia does not cause gum bleeding.

In the absence of trauma or injury, gum bleeding is usually caused by plaque build-up. Plaque is a sticky bacterial film found on teeth. The bacteria found in plaque changes sugars into acids which then causes tooth decay.

The plaque can build up on the gum line and cause the gums to become inflamed. Inflamed gums bleed easily. The plaque if left untreated may destroy the gingival fibres that hold the teeth in place leading to periodontal disease and eventually loss of teeth.

No matter how much factor is administered, if the plaque is not removed, the bleeding will continue.

The best way to remove plaque is regular (twice a day) brushing with a fluoride tooth paste and using dental floss between the teeth plus regular trips to the dentist for professional cleaning. Rinsing will not remove plaque.

Fluoridated drinking water and toothpastes have reduced the amount of dental decay. However, remember bottled water usually does not contain fluoride! So, save your money and, if you can, drink water from the tap (if you live in an area with fluoridated water) .

In 2010 the Australian Haemophilia Centre Directors' Organisation (ACDHO) wrote a consensus statement on the dental treatment of patients with inherited bleeding disorders. Their view is:

> *With children routine normal or assisted exfoliation of primary teeth does not require haemostatic cover. Persistent oozing and bleeding following the procedure should initially be managed with local measures, such as pressure and 5% tranexamic acid solution.*

What this means is, a person with a bleeding disorder needs to visit their local dentist for routine care. If there is bleeding following the visit to the dentist this is best managed using tranexamic mouthwash.

Tranexamic mouthwash and tablets are relatively inexpensive compared to the very costly factor concentrate, but more importantly it is more effective at stopping gum bleeding.

So next time you have bleeding gums, before you treat with factor, call your Haemophilia Treatment Centre. Try tranexamic acid and visit your dentist!

MORE INFORMATION

Healthy Smiles, the New Zealand Dental Association website: http://www.healthysmiles.org.nz/

Australian Haemophilia Centre Directors' Organisation. A consensus statement on the dental treatment of patients with inherited bleeding disorders. Melbourne: AHCDO, 2010. www.ahcdo.org.au

[Editor's Note: This article was written for people with bleeding disorders in Australia. Be sure to check with your treatment provider when seeking dental interventions or experiencing prolong bleeding to your gums.]

This article originally appeared in the March 2015 issue of National Haemophilia Journal and is republished with permission from Penny McCarthy and the Haemophilia Foundation of Australia.

Gathering for Members with von Willebrand's and Rare Bleeding Disorders

By Ashley Taylor-Fowlie

Last year I was lucky enough to attend the HFNZ Youth Leadership Training Workshop. During this weekend we formed small groups where we planned an idea or event to pitch to the CEO.

I can remember having a conversation about support for members who live with von Willebrand's Disorder (vWD), so naturally I was drawn to the idea of wanting to organise something in the Foundation for members with vWD.

Coming back to Auckland I had a meeting with Northern Outreach Worker Sarah Elliott and Sophie, the social work student, to work out the details and then discussed the idea with the Northern committee.

I was excited to see the amount of people that jumped on board with the idea and were willing to offer their help and support.

Following this we decided to hold an afternoon tea for vWD and Rare Bleeding Disorder members.

So on Saturday 21 March 2015 a group of seven people with vWD met at Circus Circus in Mt Eden, Central Auckland for afternoon tea. We were lucky enough to have the sun shining for us and a fantastic range of cakes and drinks.

During the afternoon tea there was constant chattering and sharing experiences with ages ranging from 5 to over 80 years. It really was a great opportunity which I'm sure will happen again in the future as it was really a well worth experience.

TAKE A LEARNING HOLIDAY

Have you planned to take a holiday later this year?
Why not use the opportunity to catch up on the latest information in the world of bleeding disorders?

The 17th Australian & New Zealand Conference on Haemophilia and Related Bleeding Disorders will be held at the QT Hotel, Gold Coast 1-3 October 2015.

The Conference will be a chance for people in the bleeding disorders community from Australia and New Zealand to meet up, renew friendships and learn more about living with bleeding disorders or managing them regardless. The venue has good access in and around the hotel. The area does not involve long walking distances, and the hotel is suitable for people who use wheelchairs.

Earlybird registration closes 31 July 2015. For more information see the registration forms mailed with this issue or visit www.haemophilia.org.au/ conferences.

Who should attend?

- People with haemophilia, von Willebrand disorder or other bleeding disorders and their families - parents, siblings, partners
- Health professionals – doctors, nurses, physiotherapists, social workers/counsellors and other health care providers
- Treatment product producers, suppliers and service providers
- Policy makers and government
- Haemophilia foundation volunteers and staff

Multidisciplinary Program

The program has topics and issues to interest everyone including the following and more:

- Living well with bleeding disorders
- Best practice treatment and care and how this is measured and monitored
- Supply and safety of treatment products, including long acting clotting factors
- Family planning
- Youth matters
- Helping children live with a bleeding disorder
- Improving your joints
- Women's health and bleeding issues
- Understanding von Willebrand disorder
- Managing pain
- Hepatitis C treatment and care – including new treatments
- Living well with HIV
- The global bleeding disorders picture

The program will include people living with bleeding disorders as experts as well as health professionals and others presenting from different perspectives.

Other Functions and Activities Associated with the Conference

- Workshops - Watch out for more information about special workshops on selected topics that might interest you during the Conference.
- Welcome and Exhibition Opening - Join us on Thursday evening at the official opening and welcome to the Conference. This is complimentary to all registered delegates.
- Men's Breakfast & Women's Breakfast - The breakfasts have always been popular and give an opportunity for men and women to meet and share their experiences – speakers not yet confirmed but they will be interesting and relevant!
- Youth - Youth activities will be organised throughout the Conference and the program will have sessions of interest to young people integrated throughout the program over the Friday and Saturday. Additional activities for young people will be organised and HFA will advise youth who have registered once the final program is confirmed.
- Remembrance Service - A Remembrance Service is a very special time during our Conference to remember friends and family, and the people we have cared for in our community, who have died. The service is non-religious and everyone is welcome. It will be held on Friday 2 October before the Conference Dinner.
- Conference Dinner - Join other delegates for a relaxing and casual night on Friday 2 October 2015.

HFNZ encourage everyone in our bleeding disorders community to attend the Conference, however, please note that HFNZ will not be providing travel/registration subsidies to this conference and your attendance would be your choice and responsibility.

If you need advice on travel insurance or related information we will be happy to help.

MRG REPORTS

HFNZ have six groups that represent our members, four regional branches (Northern, Midland, Central and Southern), the National Youth Committee (NYC) and Piri-toto, which represents Māori members.

Central *By Stephanie Coulman*

Our Buddy awards ceremony recognised four special people, all from Wellington.

Willy Tekira was nominated for an award by his nephew Ian Reddie for his positive attitude and dedication to his gym and physio sessions.

Dee Tekira was nominated by her husband Willy. For 42 years she has been by his side through good times and bad, and thoroughly deserved to be recognised.

BJ Ramsay was nominated by Marty Waring who said there was no comparison to the 'before BJ' level of haemophilia care and support.

Helen Dixon was nominated by Steve Waring for the difference her physio expertise has made to his health and fitness.

After the presentation of certificates to Willy and Dee Tekira (BJ and Helen were unable to attend and received their certificates later) the small group in attendance enjoyed a fancy high tea at the James Cook Hotel.

Armageddon Expo is a fun, fantasy and gaming expo with international TV stars in attendance. Thanks to Carol Reddie who is again co-ordinating the volunteers for Armageddon. Again this is a 3-day event in Wellington from 17-19 July.

Would you like to volunteer your time and support HFNZ, (your hourly rate is paid to HFNZ as a fundraiser)? You can work a half day or a full day, 1, 2 or 3 days. Let Carol know if you can volunteer email: credmat@gmail.com or phone: 021 721 292

Helen Dixon was unable to attend her Buddy award because she was at a conference in Qatar! She spoke to healthcare workers about the haemophilia joint health score we use - at present they do no monitor the joints of their patient population. Helen also spoke to the patients and families about sport and exercise in haemophilia, which was really well received. "The doctors seem to be very conservative about physical activity," says Helen.

Helen said it was an eye-opening experience. "The patient and family group there are very keen to emulate the comprehensive care team model that we have in NZ. I was able to give them insight into what was needed to establish the team."

Sadly we lost one of our members, John Ferguson, in April. John passed away after being ill for a long period. He was an active member of the central region and will be missed, especially by his Masters buddies.

TOP: Willy and Dee Tekira with their Buddy awards.

BOTTOM: Wellington Buddy Awards

ABOVE: Midland Blowkarting in Tauranga

Midland *By Wendy Christensen*

We had a lovely afternoon out Blowkarting in Tauranga in March with another great turn out. The weather was quite windy enough for the adults to keep their Blowkart going and the younger children enjoyed flying around the track with huge smiles on their faces. Some members were lucky enough to instead take part on the drift bikes and had a great time flying around the track skidding out; lots of fun and laughter could be heard. We enjoyed a BBQ lunch cooking while everyone was taking turns on the tracks and it was a great time for the members to talk with one another. It is great to see the friendships of the children building when they see each other at the events. The events also give adults a chance to talk with one another and learn about different ways they have dealt with issues. We are looking forward to our next get together coming up soon.

Piritoto *By Te Whainoa Te Wiata*

FROM LEFT:

Rosalie & Tahi

Kia hiwa raa, kia hiwa raa, ngaa mihi nunui ki a koutou katoa te whaanau o HFNZ. Well 2015 so far has proven to be a very busy year for everyone, sometimes a good busy and sometimes a bad busy. With that in mind I would like to congratulate Rosalie Reiri on graduating with her Masters of Education from Waikato University and also to Tama Pene and those of his whaanau who stood and performed at Te Matatini Kapa Haka Festival this year in Christchurch. The time that you have all put in to get to that stage is a huge commitment, naa reira, ngaa mihi nui ki a koutou.

It is a very exciting time for Piritoto, with our whaanau diligently preparing for our third noho marae coming up at the beginning of June (5-7 June, Te Roro-o-te-rangi Marae, Ohinemutu, Rotorua). Like most camps it is an important time for Piritoto, to get together and touch base with everybody from all over the country.

Whanaungatanga or relationships is a big part of not only the Māori culture, but also our own culture within HFNZ. Therefore, our theme for this year's noho is "Kotahitanga" meaning "Unity" and it is something that we are progressively striving for as Piritoto, especially for those who we are yet to meet. In addition we will be holding our AGM on the final day of the noho as it is one of the only times during the year that we are all together as a whaanau.

As our noho are once a year, it makes things all the more special. With that being said, I would like to thank HFNZ for making it possible for us to do such things and connect with our wider based whaanau. The coming prospect of seeing everyone, really is something to look forward to, and it seems that everyone else feels the same way.

Paimarire ki a koutou katoa.

Southern *By James Poff*

The Southern MRG has been busy with the following events.

- There was great turn out for the recent HFNZ Buddy Awards/World Haemophilia Day celebrations. The event was held at the Christchurch Gondola and several awards were presented. The recipients of the awards were all grateful and somewhat humbled by this recognition being given.
- The Southern MRG recently held a fundraising event by teaming up with a local play director and through ticket sales, running the bar and raffle ticket sales raised $1300.00 for the Foundation.

As with all events, none of this would happen without the hard work of our volunteers who make up the Southern MRG and the support we get from National Office and our sponsors.

BELOW: WHD/Buddy Awards event at Christchurch Gondola

Northern *By Lynley Scott*

What a wonderful camp we had. It was great to have some new faces along and always lovely to see the old faces there. As with every other camp, the weather turned out beautiful so there was plenty of time to enjoy the outdoors. Saturday morning saw us head to the beach for a surfing lesson for some, for others it was a swim/dip in the ocean and for others a quiet sit on the beach. In the afternoon we had a great little session about 'Ages and Stages' and what we have all encountered at various ages and stages related to bleeding disorders. Then it was a DVD for the kids, a trip to the pub for some of the adults and a relaxed chat for others. The evening saw a fun evening quiz and then the annual battle of Singstar. Sadly to say for Nicky Jamieson, Jo Brodie halted her winning streak when she took out top prize. So this year it was a new name engraved onto the trophy. Sunday saw us all gather for a Q&A session with Andrew Scott, Tim Lowe and Jess Hirst. Lunch and then farewell until next camp. Thanks for all who came, helped out and had fun.

In March a small group of people with von Willebrands and Rare Beleeding disorders gathered for afternoon tea at a cafe. This was a fantastic initiative by one of our youth committee members, Ashley Fowlie. There was great feedback from them saying how much they enjoyed the event, especially for those who had not attended other events. Being a smaller number allowed for some great conversation.

ABOVE: Buddy Awards ceremony on Mt Rangitoto

On Sunday 19th April, a group of us boarded a ferry to travel to climb Rangitoto Island to celebrate World Haemophilia Day. We were rewarded with an amazingly sunny day which allowed for great views both on the climb up, down and from the summit. We also used this opportunity to celebrate the NovoNordisk Buddy Awards, and what better place to present them than at the summit of Rangitoto Island. It was great to have Kevin Anderson from NovoNordisk with us to present the awards. Congratulations to the Northern 'buddies'. Thanks to all who came and made this such a great event.

As always, keep an eye on your email inbox for invites for upcoming events.

NEWS IN BRIEF

Long-acting Factor Performs in Children

Extended half-life factor VIII enables patients to receive one or two prophylactic infusions each week without an increased risk of bleeding instead of the three or four normally needed. Until recently, data on extended half-life factor VII had mostly been for adults, however, the first report on the safety and efficacy of recombinant factor VIII Fc fusion protein (rFVIIFc) in children under 12 years old has been published online by the Journal of Thrombosis and Haemostasis.

Kids A-LONG was a phase 3 open-label study evaluating the safety, efficacy and pharmacokinetics of a longer-acting factor, rFVIIIFc, in 71 previously treated children with severe haemophilia A.

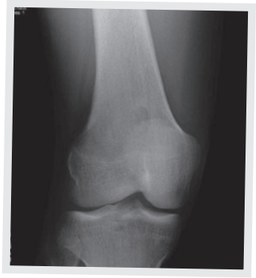
The new, extended therapy combines recombinant factor VIII with a fusion protein that allows the molecule to remain in the circulation longer - translating into a need for less frequent treatment. Investigators found that twice-weekly infusions of this novel therapy were well tolerated and resulted in a low incidence of bleeding events in children with severe haemophilia A. They also reported that no patients developed inhibitors against the factor.

Investigators concluded that by reducing the barriers presented by frequent infusions, rFVIIIFc may lead to the more widespread adoption of early prophylaxis in young children,which has the potential to have a positive impact on long-term outcomes.

The rFVIIIFc product used in this study is manufactured by Biogen Idec.

Source: Young G, Mahlangu J, Kulkarni R, et al. Recombinant factor VIII Fc fusion protein for the prevention and treatment of bleeding in children with severe hemophilia A. J Thromb Haemost 2015; DOI:10.1111/jth.12911.

Haemophilia Carriers Vulnerable to Joint Damage



The US Centers for Disease Control and Prevention (CDC) concluded that haemophilia carriers showed evidence of joint abnormalities as early as the pre-teen years regardless of the severity of bleeding symptoms. Results of the study were first published in "Females with FVIII and FIX Deficiency have Reduced Joint Range of Motion," in August 2014 in the American Journal of Hematology.

To learn whether haemophilia carriers reported joint bleeding and showed physical signs of joint damage or destruction, CDC looked at joint abnormalities among 451 women presumed to be haemophilia carriers aged 2-69 years. The women were enrolled in a national public health tracking project called the Universal Data Collection (UDC) system.

Data for the study were gathered by either an HTC physical therapist or other trained healthcare provider, who collected information on specific participant characteristics, such as race/ethnicity, income and educational level (demographic information), as well as information on bleeding and infectious disease history, and range of movement measurements in five joints (right and left shoulders, elbows, hips, knees and ankles).

CDC's most prominent findings were:

- The proportion of female haemophilia carriers reporting at least one joint bleed in the last six months increased as the severity of haemophilia worsened
- Approximately one in seven females with mild haemophilia reported at least one joint bleed in the last six months. Mild haemophilia means they have 6% to 40% of normal clotting ability.
- Approximately one in three females with moderate haemophilia reported at least one joint bleed in the last six months. Moderate haemophilia means they have 1% to 5% of normal clotting ability.
- Approximately half of females with severe haemophilia reported at least one joint bleed in the last six months. Severe haemophilia means they have less than 1% of normal clotting ability.
- Haemophilia carriers showed signs of joint abnormalities as reflected by reduced joint range of movement, which worsened with increasing levels of severity of haemophilia.

These findings suggest that joint bleeding might be occurring even before a carrier's adolescent years. The investigators also acknowledge that this research is preliminary and that the next step is to document joint disease with X-rays and other tools.

Source: CDC release dated March 26, 2015

Correlation between Haemophilia A Inhibitors and Mortality

Investigators from the US Centers for Disease Control and Prevention (CDC) and the Hemophilia Treatment Center Network (HTCN) conducted a retrospective study to determine whether patients with severe haemophilia A and an inhibitor were at an increased risk for death. The study "Impact of Inhibitors on Hemophilia A Mortality in the United States," was published January 2015 in the American Journal of Hematology.

The study included 7,386 males with severe haemophilia A. Patient data for the study, from May 1998 to September 2011, was culled from the CDC's Universal Data Collection System (UDC). During that 13-year period, 432 participants died; of those, 48 had an inhibitor.

Primary findings were:

- Males with severe haemophilia A who have an inhibitor are at increased risk of death.
- Males with an inhibitor were 70% more likely to die compared to those without an inhibitor, even when other risks for death, such as older age, liver disease and infection with either HIV (the virus that causes AIDS) or hepatitis C virus, were taken into account.
- Of the 48 patients with an inhibitor who died, 42% had a haemophilia-related cause of death (due to a bleeding complication) vs. only 12% of patients without an inhibitor who died of a bleeding-related complication.

Correlation between Haemophilia A Inhibitors and Mortality continued...

Investigators admitted that before an inhibitor prevention strategy can be developed, existing data will need to be supplemented by additional surveillance. CDC is partnering with the HTCN to perform blood screening tests for inhibitors in patients enrolled in the Community Counts Program. This program is a new initiative designed to augment UDC data with ongoing inhibitor surveillance in cooperation with HTCs.

"The results of this testing will be used to determine the number of people with inhibitors in the US haemophilia population and collect information about when they occur," concluded study authors. "Routine screening through this program or a haemophilia treatment centre may uncover an inhibitor early in its development when treatment to eliminate it is more likely to be successful."

Source: CDC, March 24, 2015

Formation of new Baxalta New Zealand Limited

Baxter Healthcare Limited (Baxter) is separating its Medical Products and BioScience businesses into two independent global healthcare companies, Baxter and Baxalta.

After separation Baxalta will focus on biopharmaceuticals for the treatment of:

- Haemophilia;
- A wide range of other bleeding disorders;
- Immune deficiencies; and
- Other chronic and acute medical conditions.

Baxalta began operating in Australia and and New Zealand on 1 April 2015, and the global separation is planned to occur by mid July 2015. The manufacturing processes, quality oversight and support that Baxter provides Healthcare Professionals and patients will continue at Baxalta.

Over the medium-long term Baxalta will update product labels and packing to reflect the new company name on medications.

Source: Baxter Healthcare Ltd.

New Hepatitis C Drugs make Essential Medicines List

The World Health Organization (WHO) has added a wave of new hepatitis C (HCV) treatments to its list of essential medicines - but has urged pharma firms to lower their prices. The latest edition of the Model List of Essential Medicines includes the new hepatitis C pills from Gilead's Sovaldi (sofosbuvir) Bristol-Myers Squibb's Daklinza (daclatasvir), which are two of the most expensive non-biologics on the market.

The move opens the way to improve access to innovative medicines that show clear clinical benefits and could have enormous public health impact globally.

Until recently, treatment for HCV presented minimal therapeutic benefits and serious side effects. Five new medicines, all direct acting oral antivirals, have recently come on the international market transforming chronic hepatitis C from a barely manageable to a curable condition. The new medicines have few side effects and high tolerance in patients.

In a statement WHO warns that whilst highly innovative, their "high prices currently make them unaffordable and thus inaccessible to most people who need them".

Dr Marie-Paule Kieny, WHO assistant director-general for health systems and innovation. "Treatments for hepatitis C are evolving rapidly, with several new, highly effective and safe medicines on the market and many in the development pipeline.

"While some efforts have been made to reduce their price for low-income countries, without uniform strategies to make these medicines more affordable globally the potential for public health gains will be reduced considerably."

Increasingly, governments and institutions around the world are using the WHO list to guide the development of their own essential medicines lists, because they know that every medicine listed has been vetted for efficacy, safety and quality, and that there has been a comparative cost-effectiveness evaluation with other alternatives in the same class of medicines.

The list is updated every two years by an Expert Committee, made up of recognised specialists from academia, research and the medical and pharmaceutical professions.

Source: http://www.pmlive.com/pharma_news/who_warns_on_hep_c_drug_pricing_734016

Congratulations to our friends at the Cambodian Hemophilia Association on celebrating their first ever World Haemophilia Day! Check out the CHA Facebook Page for more.

Upcoming Events

More details on all events are available from your local Outreach Worker.

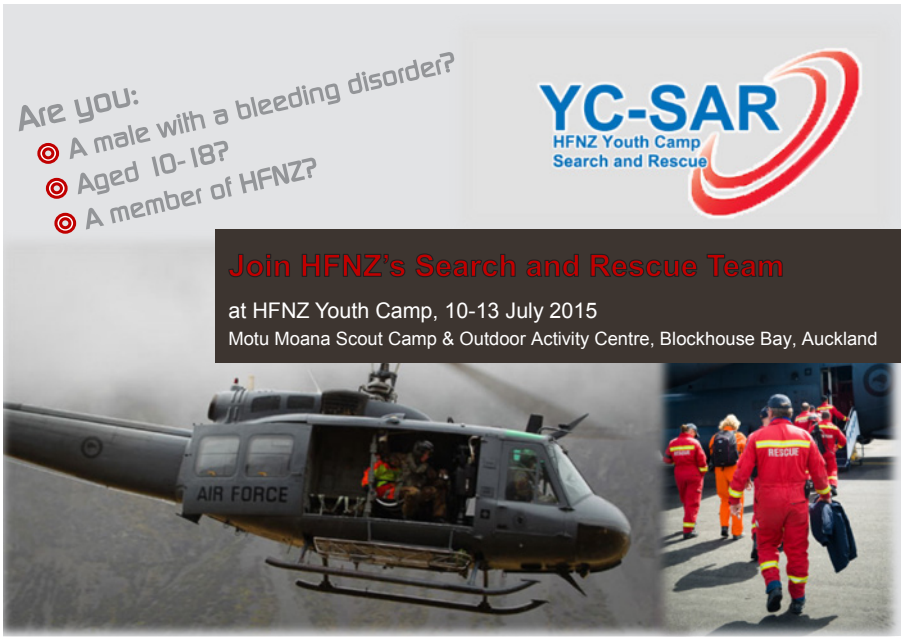
12-14 June 2015
National Adults Weekend
Wellington

10-13 July 2015
Youth Camp
Moto Moana Scout Camp
Auckland

12 September 2015
HFNZ National Annual General Meeting
Hamilton Airport Conference Centre
Hamilton

1-3 October 2015
17th Australian and New Zealand Conference on haemophilia and related bleeding disorders QT Hotel, Gold Coast, Australia

Visit **www.haemophilia.org.nz** for more information on bleeding disorders, HFNZ news and past issues of Bloodline



Changes to Bloodline

In the current economic environment HFNZ are always looking at ways to make our 'H' dollars stretch the furthest. Bloodline provides a quality and informative resource for the community. Feedback from readers has reinforced this and that people largely prefer to receive hard copies, however, we are conscious that the costs of postage continue to rise.

After careful review National Council have decided to only publish three issues of Bloodline for the 2015/2016 financial year. The next issue will be in November 2015 and will include coverage of the Annual General Meeting and the 2015 Australia and New Zealand Haemophilia Conference.

If you prefer to receive Bloodline electronically you can also contact the editor to update your subscription preferences.

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