

2008 annual report

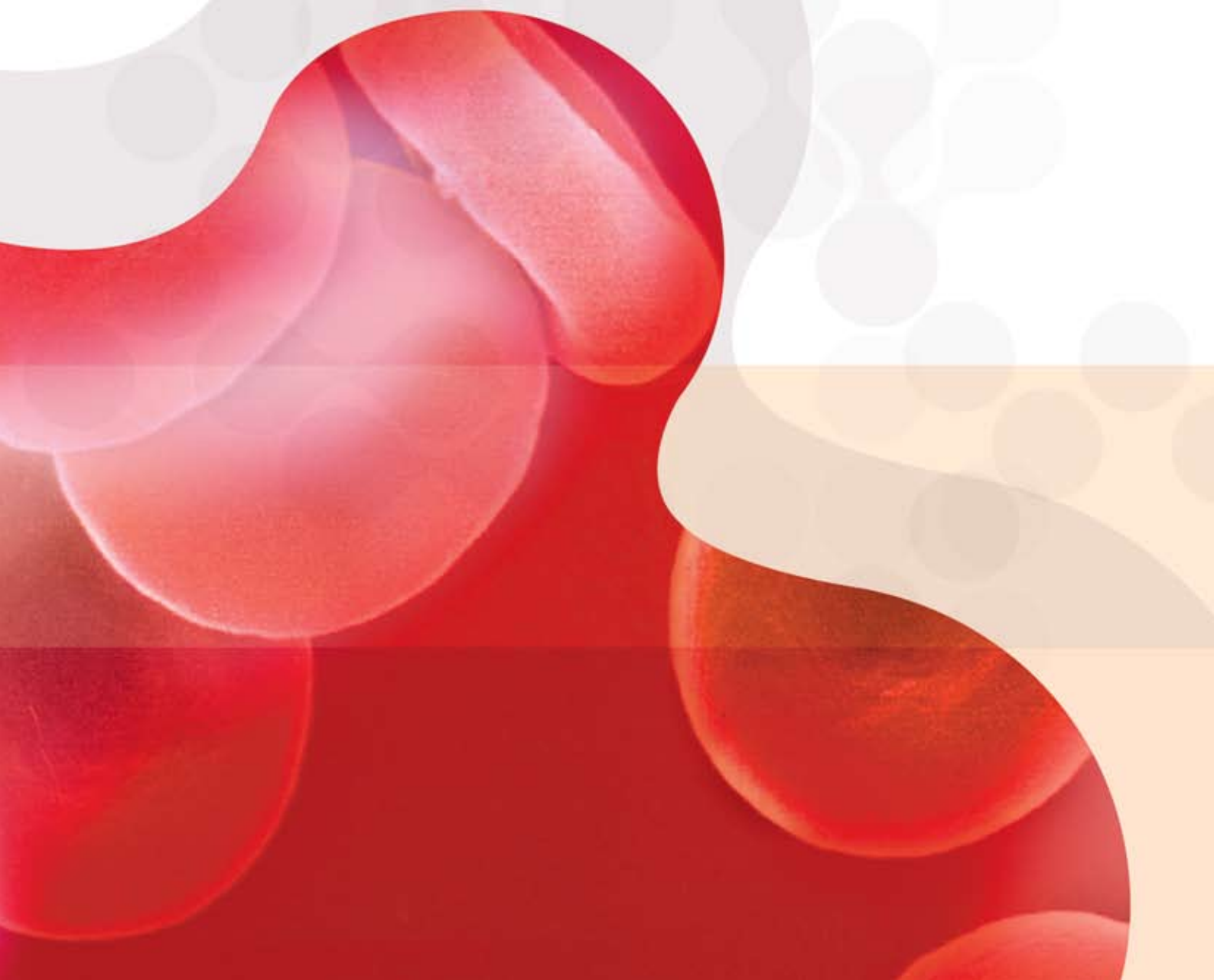
**The over-riding priority of the IBTS is to provide sufficient quantities of the highest quality blood components to our clinicians in our hospitals.**

In the year ended 2008 bloodstocks were successfully maintained at the levels required to meet the needs of our health service.

# ibts

OUR MISSION STATEMENT

“The IBTS is committed to excellence in meeting patients’ needs through the professionalism of our staff and the generosity of our donors.”



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## Our Values

### **Excellence in service**

We will achieve excellence in delivering a quality service to our patients and our donors

### **Respect**

We will treat our donors, patients, colleagues and all others with whom we interact with consideration and respect

### **Honesty**

We commit to honesty and openness in all our dealings

### **Learning**

We are committed to ongoing organisational learning, professional and personal development and research

### **Accountability**

We will hold ourselves accountable to the highest professional, personal and public standards

### **Team work**

We commit to working together in a positive and constructive manner

“My message this year as Chairperson of IBTS is simple but heartfelt. We need more donors and we need more new donors. We need them on a continuous basis to ensure that patients in need of essential blood products can receive essential treatment.”



## Chairperson's message

The over-riding priority of the IBTS is to provide sufficient quantities of the highest quality blood components to our clinicians in our hospitals. In the year ended 2008 bloodstocks were successfully maintained at the levels required to meet the needs of our health service. This was very satisfying for all concerned and we are extremely grateful to our donors for their unique contribution.

However, due to the rigorous application of donor screening, maintaining bloodstocks has proved to be a challenge for us. In order to ensure that we have sufficient quantities of the highest quality blood components we need to maintain our present donor numbers and attract new donors continually.

My message this year as Chairperson of IBTS is simple but heartfelt. We need more donors and we need more new donors. We need them on a continuous basis to ensure that patients in need of essential blood products can receive essential treatment.

During 2008 we embarked on a new advertising approach for IBTS together with the creation of our brand 'giveblood .ie'. We hope these initiatives will help to modernise and personalise our communications with donors and potential donor audiences nationwide and so enhance our profile so that we can deliver on our most important priority.

June 14th - World Blood Donor Day - was kindly hosted by President McAleese in Aras an Uachtarain. Two hundred people, including donors, volunteers, healthcare professionals, recipients and staff attended this event. President McAleese acknowledged the magnificent voluntary contribution made by so many for the greater good of others.

Discussions with the Department of Health and Children resulted in a positive decision on a new centre for Cork in December. This decision was very strongly welcomed by the Board of IBTS and work is now underway on the design stage of the new Centre. The Board is especially grateful to the Minister for Health and Children Ms Mary Haney TD for her continued support in this regard.

I wish to acknowledge the support of my Board members who gave so generously of their time during the past year.

To the commitment and loyalty of IBTS staff in Ardee, Carlow, Cork, Limerick, Tuam and Dublin I wish to express the appreciation of the Board for your continued efforts as you provide this most important service – Thank You.

**Maura McGrath**  
Chairperson

# Report of the Chairperson

## Report of the Chairperson of the Irish Blood Transfusion Service regarding the assessment of internal financial controls of a State body for the year ended 31st December 2008, in accordance with Appendix E of the Code of Practice for the Governance of State Bodies.

1. I, as Chairperson, acknowledge that the Board is responsible for the Body's system of internal financial control.
2. The IBTS system of internal control can provide only reasonable and not absolute assurance against material error, misstatement or loss.
3. The Board confirms that there is an ongoing process for identifying, evaluating and managing significant risks faced by the IBTS. This process is regularly reviewed by the Board via reports by the Chief Executive.
  - i. Management are responsible for the identification and evaluation of significant risks applicable to their areas of business together with the design and operation of suitable controls. These risks are assessed on a continuing basis and may be associated with a variety of internal or external sources including control breakdowns, disruption in information systems, natural catastrophe and regulatory requirements.
  - ii. Management reports twice monthly on operational issues and risks and how they are managed to the Executive Management Team. The Executive Management Team's role in this regard is to review on behalf of the Board the key risks inherent in the affairs of the IBTS and the system of actions necessary to manage such risks and to present their findings on significant matters via the Chief Executive to the Board.
  - iii. The Chief Executive reports to the Board on behalf of the executive management on significant changes in the work of the IBTS and on the external environment which affects significant risks. Where areas for improvement in the system are identified the Board considers the recommendations made by the Executive Management Team.
  - iv. The Director of Finance provides the Finance Committee, which is a sub-committee of the Board with monthly financial information, which includes key performance indicators.
  - v. An appropriate control framework is in place with clearly defined matters which are reserved for Board approval only or, as delegated by the Board for appropriate Executive approval. The Board has delegated the day-to-day management of the IBTS and established appropriate limits for expenditure authorisation to the Executive. The Chief Executive is responsible for implementation of internal controls, including internal financial controls.

- vi. The system of internal financial control is monitored in general by the processes outlined above. In addition, the Audit and Compliance Committee of the Board reviews specific areas of internal control as part of their terms of reference.
4. The Audit and Compliance Committee of the Board have satisfactorily reviewed the effectiveness of the system of internal control on behalf of the Board. The Audit and Compliance Committee carried out a formal review of these systems in respect of 2008 at its meeting on 10th February 2009.

**Ms Maura McGrath**

Chairperson



“The IBTS during the development of its current Strategic Plan recognised that the way of working in our laboratories and how the donation clinics were collecting donations needed to be reviewed to make them more efficient.”





# Chief Executive's Report

It is my pleasure to present the major issues and achievements that occurred during 2008. It was a very busy year but the main focus of my report relates to the management of change and how this is being supported in the IBTS.

The other major breakthrough was the approval of Government for the building of a new Transfusion Centre in Cork. The IBTS has been seeking funding for many years and it showed the commitment of Government to the IBTS when it approved €17m for this Centre.

The IBTS during the development of its current Strategic Plan recognised that the way of working in our laboratories and how the donation clinics were collecting donations needed to be reviewed to make them more efficient. Recognising this issue was the easy bit but if the necessary changes were to be implemented then we had to ensure that the organisation had the capacity to deliver the change required.

This was addressed in two ways; one was to review the management structures to see if they were appropriate for the task and also if the different levels of management had the necessary tools to manage the change programme. Consequently, these two issues were dealt with by the announcement of revised management structures with a new Executive Management Team and the commencement of the most significant training and development programme ever undertaken by the organisation.

## Revised Management Structures

The management structure was a matrix style. However, there was a need to build a cohesive national organisation with the critical functions organised on a national basis. This structure was launched in October following consultation with the key people. The Executive Management Team was also established and is now the senior decision making body in the IBTS.

The management structures will allow for a more complete supply chain with single point of responsibility for the blood supply, national functions of Testing and Patient Services and a restructuring of the donation collection process. The changes will also deliver a better model for the allocation of resources which will be very necessary over the medium term with constrained resources available to the IBTS.

These new structures will take time to deliver significant change to how the business of the IBTS is conducted but I believe over the next few years will build a more effective and efficient service.

## Quantum Leap – Transformation Change

The IBTS has provided excellent training to ensure that we complied with all aspects of GMP. However, there was a deficit in the development of staff to deal with managerial issues and this area of competence was not given sufficient prominence. This resulted in the organisation not having the capability at all levels of management to implement significant change. Therefore, the IBTS decided that a major training and development initiative was necessary and tendered for such services. The programme was to cover clinic supervisory staff, middle management and senior management. It was also agreed that if

## Chief Executive's Report

the initiative was to be successful there had to be some elements of the programme where the different grades would undergo the same aspects. These aspects were Conflict, Communication and Change. The programme has been very successful and a spinoff of the initiative has been the establishment of a network of managers across the organisation. The programme will be completed in September 2009 but the biggest challenge for the IBTS is how to embed the learning into the everyday working of the organisation. There are major change programmes currently underway, specifically the changes to our donation collection process. The staff who will be implementing these changes underwent the training and are now using the skills and knowledge to make that change happen.

The skills and knowledge gained from this programme will be tested over the coming years when the IBTS will have to operate within an environment of much constrained resources.

### Challenges

The global economic downturn and the effect that is having on the Irish economy will have a significant impact on the IBTS and we will be required to become more efficient and deliver greater value for money to the health system. This will be against the backdrop of fifteen years of substantial investment by successive Governments in the blood transfusion service which makes the transformation to working with less resources much more difficult.

The possibility of a test for vCJD becoming available in 2009 will pose significant challenges for the organisation if it is decided to implement such a test, particularly with the possibility of prion filtration also being available for implementation.

Finally, as always the excellent service the IBTS delivers relies on the professionalism of staff and the commitment they show to patients and the care of donors.

### Andrew Kelly

Chief Executive



# Medical and Scientific Director's Report

Every year, millions of healthy volunteers around the world donate their blood, plasma and platelets for the benefit of others. Those others are patients who need blood, plasma or platelets because of surgery, trauma, cancer, congenital disorders, or other conditions with blood loss, bone marrow failure, or blood cell destruction. This essential medicine can only be safely and securely obtained from healthy volunteers: buying and selling blood is always associated with problems of supply and problems of safety from infectious diseases.

Most developed countries need between 30 and 60 units of blood per thousand of the population. The differences in use between countries such as Canada at the lower end and some Scandinavian countries at the high end are probably more due to clinician preferences than to evidence-based practices. Ireland's rate is approximately 35 units transfused per 1,000 population, similar to the rate in the UK and France. In the developing world the picture can be very different with few volunteer blood services capable of providing comprehensive supplies of safe blood; the needs in these countries are often very different, reflecting poor maternity services, widespread malaria or other infections, high rates of trauma, and limited access to elective surgery.

The necessity for large scale blood transfusion has given rise to a health risk for patients that was not fully appreciated before the 1970s and 1980s – use of blood transfusion exposes patients to a global risk of infectious disease. Donors travel to and from all corners of the world, and can carry back viruses, bacteria and other infections that they can subsequently pass on via blood or tissue donations. They can get these infections from food, insect and animal bites, or from other humans. Similarly, donors

who immigrate from countries with different endemic infectious diseases can pass on, via blood donation, infections that they themselves can keep dormant.

The IBTS, therefore, must expend a lot of effort in keeping the blood supply free from infectious diseases. The infectious diseases that exercised us in 2008, (apart from the constant monitoring and testing for syphilis, HIV, Hepatitis C & B, HTLV I/II, CMV, and bacterial contamination of platelets), were vCJD (Ireland, UK, mainland Europe), West Nile Virus (North America, Israel and Hungary), Chikungunya virus (Indian Ocean, North-eastern Italy), T. Cruzi (South & Central America, Spain and the USA), Malaria & Dengue fever (worldwide tropical areas) Crimean Congo fever, (Eastern Turkey), Q fever (Netherlands), lymphochoriomeningitis virus (USA) and Parvovirus 4 (worldwide). Local epidemics of mumps in Ireland and the threat of H5N1 influenza virus were also areas of concern.

Our response to these threats takes several forms. Surveillance both in Ireland and worldwide is through local and global networks in the transfusion, infectious diseases, and global health fields. This constant activity is complimented by the national haemovigilance system which monitors every transfusion in the country for unexpected adverse events and collates the data centrally. We also test over 3,000 donations weekly for HIV, Hepatitis B & C and syphilis, giving us a sensitive and up-to-the minute window on emerging trends and changes in these infections in Ireland. Every positive result is communicated quickly to the donor, and the source of the infection is identified where possible.

Where a new infection arises, or a new area in the world becomes at risk for infection, we change our

## Medical and Scientific Director's Report

donor deferral policies to reflect this. This is usually by deferring potential donors who have visited the relevant areas until the risk period is over. For example travellers to the USA, Canada, Mexico, and all tropical regions are deferred from donating for varying time periods after they return. These deferrals usually vary from weeks to months, but some deferrals can be much longer - residents of the UK and Northern Ireland are still deferred indefinitely because of the risk of variant CJD.

vCJD remains an unknown but serious risk to the safety of blood transfusion. It is the reason we bar large numbers of otherwise eligible people from donating blood because they have lived for a cumulative period of greater than one year in the UK, including Northern Ireland, the Isle of Man and the Channel Islands. We also defer people who have had blood transfusions in the past. These also constitute a large percentage of potential blood donors. In addition we import plasma for transfusion from the USA, where the risk of donors carrying the vCJD infection is thousands of times lower than in Ireland.

As part of the response to the threat of infectious diseases, the IBTS also seeks to introduce new technologies in blood safety as they are developed: during 2008 we began the process of introducing the next generation of advanced blood testing: single donation virus testing, replacing the pooled sample testing currently in use. This novel and demanding screening test represents the holy grail of testing for HIV, Hepatitis C and Hepatitis B, giving the highest level test accuracy. Introduction into routine use will take place in 2009.

Screening tests for vCJD in blood donors are under development. So far no test has emerged that has the sensitivity to detect this elusive infection in the preclinical phase in blood donors, but we will keep this area under close scrutiny during 2009.

During 2008, Cork University Hospital conducted a safety trial of a new blood filter designed to remove the vCJD infectious agent, an aberrant form of a protein called prion protein, from red cell transfusions. This study was the first of its kind in the world. It indicated that the filter was safe for use in patients requiring red cell transfusions, and the studies will be extended and completed in 2009.

### **Dr William Murphy**

Medical & Scientific Director  
MD, FRCPEdin, FRCPATH

# Operations

## Website

June 2008 saw the launch of a new website for the Irish Blood Transfusion Service, [www.giveblood.ie](http://www.giveblood.ie). The new site has an average of 12,000 visits per month, with the eligibility quiz and clinics being the most visited pages. New features include donor and recipient stories, current blood supply by blood group and days of availability, google mapping to locate clinics nationwide and facilities to book the bloodmobile, corporate and school presentations and give feedback on many aspects of the service.

## Blood For Life Week

Blood for Life Week took place in September, kicking off with a photo shoot with Taoiseach Brian Cowen. Donor award ceremonies took place in Dublin and Cork, attended by IBTS Ambassador Sharon Ni Bheolain and the Lord Mayor of Cork. Today FM and TV3 supported the week as key media partners and facilitated an outside broadcast on St. Stephen's Green with live interviews of staff, donors and recipients.

## World Blood Donor Day

On June 14th, President McAleese hosted a very memorable celebration to mark World Blood Donor Day at Áras an Uachtaran. Guests on the day represented the 'journey of blood', including donors, medics, IBTS staff, volunteers and blood recipients from all over Ireland.

## Advertising

A new advertising provider was selected following a tender and has made significant changes to the give blood brand since their appointment with the introduction of a new 'tag line' and set of key values for the give blood brand. This has been developed through all key media such as TV, radio, press, outdoor, online and direct mail.



## Operations



### Hospital Services

The essential link in the supply chain between the hospitals and the IBTS is the hospital services department located at the NBC and the Cork Centre. This team is responsible for the safe and secure distribution of all products released for treating patients.

### Components Processing

The conclusion of the Laboratory Agreement negotiations and the implementation of the changes in rosters and work practices contributed to a busy and eventful year in the component processing laboratory at the National Blood Centre. Revised 7 am to 7 pm rosters were introduced and week day overtime effectively eliminated. Additionally on-duty rosters were implemented for the 7 pm to 7 am period each day and for the 48 hours of each weekend. The laboratory took on additional Laboratory Aides who have been up-skilled to undertake most aspects of component processing.

Additional duties were also successfully introduced to this laboratory including final product labelling and the issuing of platelets, irradiated red cells and phenotyped red cells.

### BLOOD & BLOOD PRODUCTS ISSUED

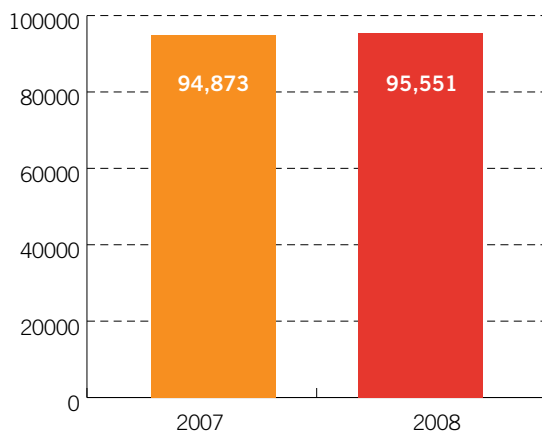
Product	2008	2007	2006
Red Cells & Whole Blood	141,364	140,089	138,540
Platelets - Therapeutic Doses	24,415	22,123	20,355
Frozen Plasma	474	639	707
Octaplas	23,856	22,478	25,425
Cryo Depleted Plasma	-	-	1,143
Cryoprecipitate	2,717	2,429	1,984
Factor VIIA (xIU)	276,120	526,260	519,600
Anti Thrombin III (x IU)	1,500	2,500	48,376
Factor VIII Recombinant (x IU)	30,521,500	25,491,000	22,641,750
Von Willebrand Factor (x IU)	752,000	1,303,000	478,500
Factor IX Recombinant (xIU)	10,486,500	9,198,800	8,570,370
Prothromplex (x IU)	480,600	520,200	537,600
Factor XIII	4,000	6,000	7,500

# Donor Statistics

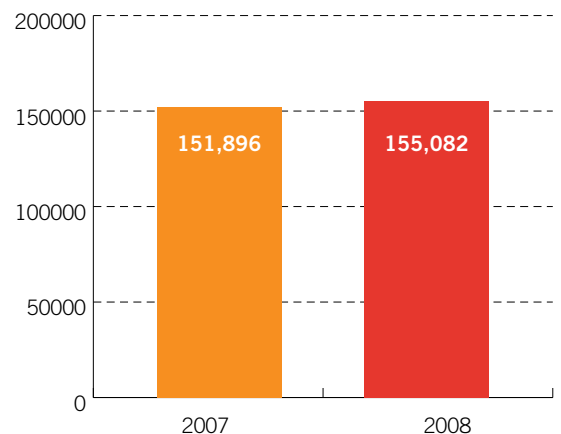
2008 saw an increase in whole blood donations by over 3,100 and almost 700 more donors gave blood during the year. The frequency of donation per donor increased slightly and is now close to two per person per annum.

- More 28 year olds give blood than any other age group
- 562 more donors gave 2 donations in '08 than '07
- 782 more donors gave 3 donations in '08 than '07
- 6 of the top 10 clinics remained the same from 2007
- B+ donors 'increased' more than other blood groups
- O- donors 'increased' by just 195 in 2008

**DONORS 2007 VS 2008**



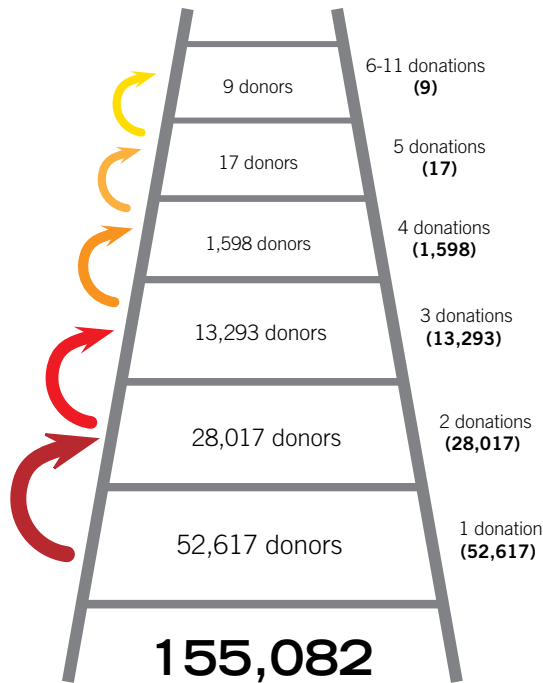
**WHOLE BLOOD DONATIONS 2007 VS 2008**



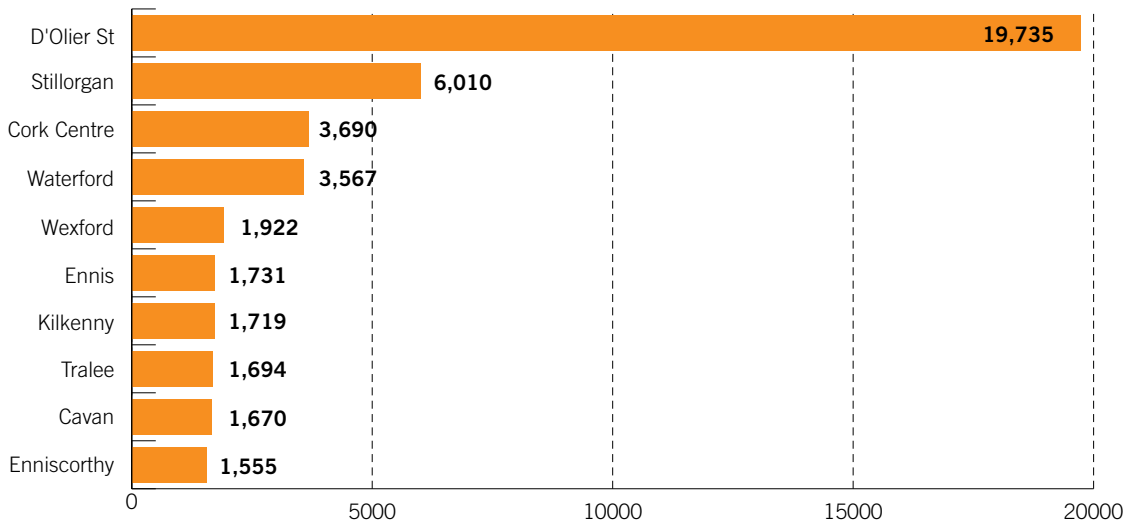


Donor Statistics

**WHOLE BLOOD DONATIONS 01 JAN '08 - 31 DEC '08**

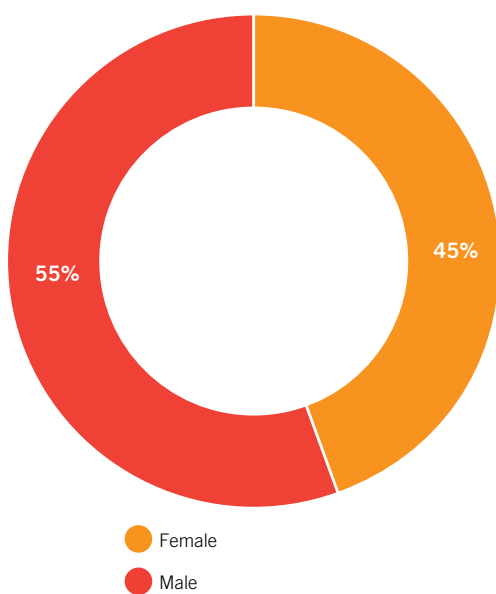


**DONATIONS BY TOP 10 CLINICS**

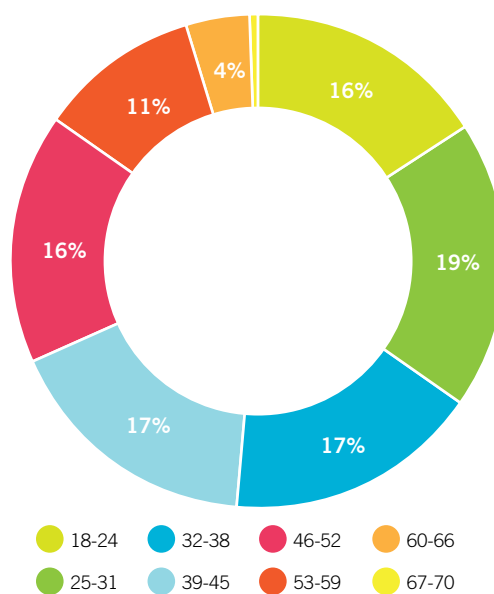


## Donor Statistics

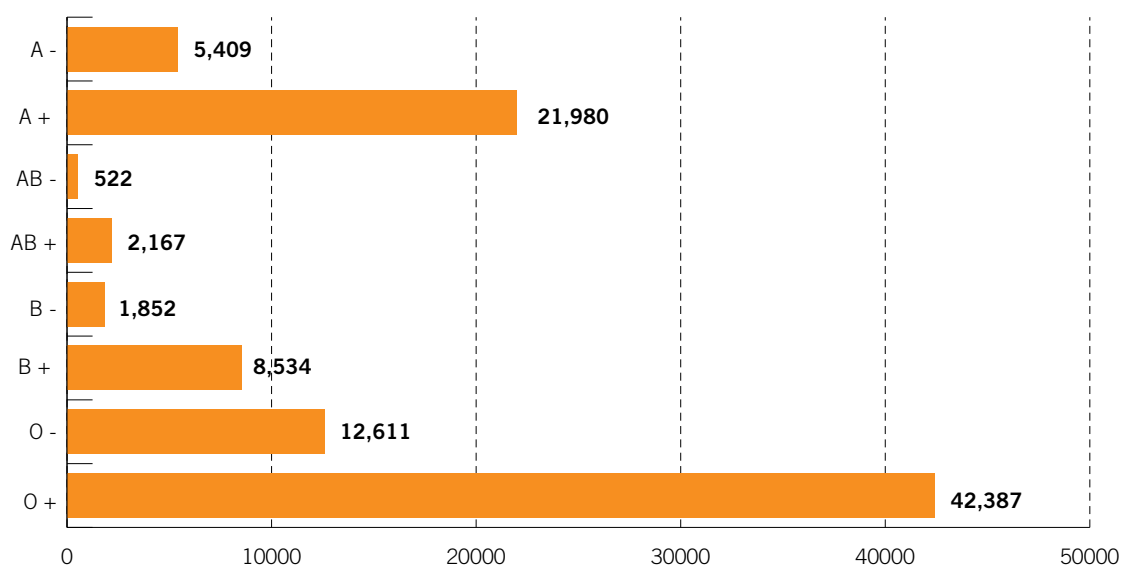
### DONOR BY GENDER



### DONOR BY AGE



### DONORS BY BLOOD GROUP



“The Nucleic Acid Testing (NAT) laboratory located at the NBC brings cutting edge technology to current blood screening practices by combining advanced Nucleic Acid testing technology within a unique, single-tube system.”

# Testing

## **Nucleic Acid Testing Laboratory**

The Nucleic Acid Testing (NAT) laboratory located at the NBC brings cutting edge technology to current blood screening practices by combining advanced Nucleic Acid testing technology within a unique, single-tube system. Current available screening technologies are designed to detect antibodies to a virus or surface antigens. However these infection indicators leave a small residual risk for disease transmission. NAT detects very low levels of viral RNA that may not be detectable through current approved serological assays during the very early stages of an infection.

The NAT laboratory tests all donations using the Chiron Procleix HIV-1/HCV Assay. This assay is a qualitative in-vitro nucleic acid testing assay system for the detection of Human Immunodeficiency Virus type 1 and/or Hepatitis C virus RNA in human plasma. This assay is highly sensitive and specific for viral nucleic acids and is capable of detecting infection earlier than other screening methods, thus narrowing the window period.

Currently the NAT laboratory is validating the Tigris platform to be used in 2009 in conjunction with the Ultrio assay. It is a fully automated closed system for NAT testing with the Procleix Ultrio assay. The Chiron Procleix Ultrio assay will detect Hepatitis B virus DNA in addition to Human Immunodeficiency Virus type 1 and/or Hepatitis C virus RNA in human plasma. The instrument provides inventory management, and has a wide range of built-in process controls to help ensure cGMP compliance.

An archive sample is retained on all donations. Prevention of cross-contamination within the laboratory itself and also between processed samples is critical to the success of NAT testing.

Every donation collected in 2008 was tested in the laboratory and there was no requirement to invoke the contingency testing plan which the IBTS has with the Scottish National Blood Transfusion Service. The NAT laboratory participates in two proficiency programmes, one circulated by the National Institute for Biological Standards and Control in the UK and the second by the National Serological Reference Laboratory, (NRL Australia).

The NAT laboratory also participates in a QA programme (EDC.net) provided by the NRL, Australia, which is regarded as a world leader. The NRL is a WHO Collaborating Centre and its Quality Control programmes provide a mechanism for laboratories to monitor the day to day quality of their testing processes.

## Testing

### Virology laboratories

The Virology laboratories receive a clotted serum sample from each donor taken at the time of donation which is identified with a unique bar code identifier at the time of donation. The sample is tested for the presence of specific viral/microbiological markers that may be transmitted by transfusion. Over 160,000 donations were tested in 2008.

These tests are performed using the latest cGMP (good manufacturing practice) compliant equipment. When all tests are complete and if satisfactory results are obtained, the unit is cleared and labelled for issue provided that it is also negative by Nucleic Acid Testing.

The following serology tests are carried out in the virology laboratory and are mandatory for all donations.

- Hepatitis B surface antigen (HBsAg) and antibody to Hepatitis B core
- antibody to Human Immunodeficiency Virus 1/2
- antibody to Hepatitis C virus
- antibody to Human T-Lymphotropic Virus I & II
- antibody to Treponema Pallidum the causative agent of Syphilis

Selected donations are tested for Cytomegalovirus (CMV) in order to have a supply of Cytomegalovirus negative donations for those patients who need it e.g. immunocompromised patients. A serum sample (archive sample) is also stored frozen from each donation.

In addition the laboratories perform screening tests for viral markers for various departments within the IBTS, including bone marrow donors, stem cell donors, heart valve donors and samples from recipient tracing testing programmes

The quality of the testing system is ensured by using standards from the 'National Institute of Biological Standards and Control U.K.', as 'go/no go' controls on all testing runs. This ensures that equipment is functioning to the highest standard. The laboratory participates in a monitoring programme which allows IBTS to compare results to Blood Centres in the UK.

The laboratories also participate in the surveillance programme run by National Blood Service/Health Protection Agency. The reactive rates for testing kits using various lot numbers of reagents with the National Blood Authority are monitored. A notifying report is generated which details assay performance and trends in reactive rates.

The Virology laboratories participate in two proficiency programmes, one circulated by the National Institute for Biological Standards and Control in the UK and the second by VQC-Acrometrix in association with National Serology Reference Laboratory (NRL, Australia).

## Testing

### Diagnostics

Clinical and laboratory immunohaematology services are provided by the diagnostics laboratories at the Dublin Centre and the Cork Centre, which includes routine serology, reference services, irradiation and emergency preparation of blood components for hospitals on a 24/7 basis. The diagnostics laboratories also investigate suspected transfusion reactions in all hospitals for which we provide compatibility services.

During 2008, the services of the diagnostics laboratories were as follows:-

- 8,300 samples were referred to the laboratories, for 3,550 samples compatibility testing was undertaken and 8,500 corresponding red cell preparations were issued.
- 2,090 antibody investigations were carried out.
- 588 reference samples were received from hospitals with blood banks. These required specialist knowledge and experience in order to investigate and identify unusual antibodies and to carry out other investigations.
- 685 patients had Rh phenotypes determined and a further 12,200 antigen typing tests were performed.
- 2,625 direct antiglobulin tests were undertaken.
- Antigen screening of red cell preparations was undertaken.
- Red cell components were irradiated by the diagnostics laboratories.
- Investigation of suspected haemolytic transfusion reactions.
- Prevention of HDN by routine antenatal screening for at risk pregnancies. This includes the quantitation of Anti-D and titration of clinically significant antibodies.
- Provision of suitable blood at delivery for at risk pregnancies
- Scientific advice to hospital colleagues

The diagnostics laboratories introduced a traceability system “Bag and Tag” for the IBTS to ensure traceability of blood components in conformance with European and Irish regulations. The User’s Manual is available on our website – [www.giveblood.ie](http://www.giveblood.ie).

The re-routing of red cell preparations was reactivated as a measure to optimally utilise in-date red cell components within Cork City and reduce wastage. During 2008 - 667 red cell components not clinically applied at St. Mary’s Orthopaedic Hospital and South Infirmary Victoria University Hospital were transferred to Cork University Hospital Blood Bank. 652 (98%) of these were subsequently applied clinically at CUH. This programme will be extended to Mercy University Hospital during 2009.

A diagnostics laboratories ‘User manual’ will be available on the [www.giveblood.ie](http://www.giveblood.ie) in the first quarter 2009. It is planned to have a Diagnostics User Satisfaction Survey conducted in 2009, to identify significant areas in the laboratory service for improvement and development.

## Testing

### **National Histocompatibility and Immunogenetics Reference Laboratory (NHIRL)**

The National Histocompatibility and Immunogenetics Reference Laboratory (NHIRL) provides a comprehensive range of clinical testing services designed to support the allogeneic haematopoietic stem cell transplantation (HSCT) programmes at St. James's Hospital and Our Lady's Children's Hospital, Crumlin. The laboratory determines the human leucocyte antigen (HLA) type of all patients and donors prior to transplantation to aid donor selection. The laboratory uses exclusively molecular methods based on the polymerase chain reaction (PCR) to define the genes that encode the HLA molecules. This technology can achieve a high level of resolution that distinguishes between individual alleles of the HLA genes. The NHIRL provides an immunogenetics support service for the Irish Unrelated Bone Marrow and Platelet Registry (IUBMR) and a routine disease association HLA typing service. The NHIRL has performed several studies with Irish hospitals to demonstrate the role of HLA genes in disease susceptibility. In particular, the laboratory has published its findings in relation to Multiple Sclerosis and Hepatitis C. In 2008 the NHIRL published the frequencies of the HLA-A, B, Cw, DRB1, DQB1 and DPB1 alleles and haplotypes in the Irish population in the *International Journal of Immunogenetics*.

In addition, a platelet immunology service for the serological investigation of neonatal alloimmune thrombocytopenia (NAITP), post transfusion purpura (PTP), platelet refractoriness, alloimmune thrombocytopenias and adverse transfusion reactions is also provided. The laboratory also has an extensive

quality assurance programme including participation in both internal and external proficiency testing programmes for HLA typing, HPA genotyping and HLA/HPA antibody investigations. The NHIRL was first accredited by the European Federation for Immunogenetics (EFI) in 2001.

In 2008 there was an increase of 17.9% in the number of samples referred to the laboratory for testing over the previous 12 month period and there has been an increase of 33% since 2006. The platelet clinic has provided a considerable increase in the number of donors for HPA phenotyping and HLA-A and B typing in order to support the provision of an optimal platelet product to the hospitals. A substantial rise in the number of volunteer donors joining the bone marrow registry has also taken place in 2008. HLA typing for disease association testing continues to increase and represents nearly 40% of the laboratory's samples as compared to 2005 when these constituted approximately 20%. The upward trend in the requirement for allelic level HLA typing of patients and unrelated donors for HSCT continued in 2008. The total number for all samples referred to the NHIRL for testing has now increased by 78% since 1999.



## Testing

### Automated Donor Grouping

Automated donor grouping is carried out at the NBC and the Cork Centre and is continually striving to introduce the most up to date testing techniques and expand the number of red cell antigens that can be routinely typed. These tests improve not only the safety of red cell products, but also increase the efficiency of providing red cells of rare or complex phenotypes in response to specific requests from hospitals.

In 2008 over 165,000 donations were tested and each red cell unit requires certain mandatory tests before they may be released for issue. These include ABO & RhD types and a screen for irregular antibodies.

All red cell units are now routinely typed for the Kell antigen, to minimise the number of females of child bearing age stimulated to produce Anti-K post transfusion of red cell units. This in turn will reduce the cases of Haemolytic Disease of the Newborn (HDNB) due to Anti-Kell.

Over 70% of donors receive a full Rh phenotype (C, c, E, e type) every time they donate and a percentage of these will go for further antigen screening or typing. These donations are then available for issue to patients who are known to have produced multiple red cell antibodies.

Over the last year red cell units have been made available for several cases, where the frequency of that particular cell type in the donor population would be less than 1 in 1000. In real terms this means that if every donation was typed, only 3 donations per week would be suitable for such cases. Where as, with selective typing and good stock management,

in most cases units can be provided out of current stock for emergency issue.

The current blood typing analysers in use at the NBC are the Olympus PK7200 which were introduced in 2000 and are no longer in production. As these machines perform the majority of blood typing, it is planned to upgrade these machines in the near future. In the Cork Centre the Galileo is in use, which was introduced in 2004.

“The NHO collects SAEs relating to the quality and safety of blood which are mandatory under the EU Blood Directive 2002/98/EC and non mandatory SAEs, termed Incorrect Blood Component Transfused (IBCT), which relate to errors in the clinical areas and are reportable under professional responsibility. ”

# National Haemovigilance Office

In the eight years of its operation (2000-2007) a total of 1,570 serious adverse transfusion reactions/events have been reported to the National Haemovigilance Office (NHO).

## Serious Adverse Events (SAEs) and Incorrect Blood Component Transfused (IBCT)

The NHO collects SAEs relating to the quality and safety of blood which are mandatory under the EU Blood Directive 2002/98/EC and non mandatory SAEs, termed Incorrect Blood Component Transfused (IBCT), which relate to errors in the clinical areas and are reportable under professional responsibility. The total number of IBCT SAEs reported in 2007 was 115 representing 52% of all incidents (115 of 222). Thirty two of these events (34%) were mandatory.

## REPORTS PROGRESSED BY NHO n = 115

### Reports received in the Mandatory and Non Mandatory Adverse Event Categories

#### Reportable under the EU Directive

	Yes (SAE)	No (IBCT)	Total
Components	32	63	95
Products	0	20	20

## Serious Adverse Reactions (SARs)

In 2007, 107 SARs were accepted by the NHO. The majority of these were in the categories of Acute Allergic, Anaphylactic Transfusion Reactions and Febrile Non-Haemolytic Transfusion Reactions.

Eight cases of Suspected Transfusion Transmitted Infection (STTI) were reported. On investigation four cases (three bacterial and one viral) did not progress. Transfusion transmitted infection was excluded, or considered unlikely, in a further three cases, and in the last case STTI was considered unlikely but possible in bacterial contamination associated with red cells.

## Annual Notification of Serious Adverse Reaction and Events' (ANSARE)

From 2007 hospitals transfusing blood were required to fill in the ANSARE form in compliance with Commission Directive 2005/61/EC Annex II D and III C. In January 2008, 84 reporting centres (82 hospitals and two supply centres) were issued with the ANSARE form, for the reporting year 2007 and were required to return the form to the NHO by Friday 14th March 2008. Twenty-five (30%) sites reported one or more SAR and nine (11%) reported one or more SAE. Eleven (13%) reported both SAR and SAE and a further 39 (46%) indicated that they had not reported any SAR or SAE in 2007. The ANSARE form, however, does not collect non mandatory clinical IBCT incidents. These accounted for 37% of the total reports analysed by the NHO in 2007, therefore ANSARE returns underestimate the overall rate of reporting.

## National Haemovigilance Office

### 7th NHO/IBTS Conference

The 7th NHO Conference “Haemovigilance-Supporting Quality Transfusion Practice” was held in Limerick in October.

The main topics included Electronic Crossmatch, Transfusion Risks in Paediatrics, Traceability and guidelines for Massive Transfusion and Anti-D. Delegates were updated on Regulatory requirements, illustrated by presentations from the 2007 NHO Annual Report relating to Serious Adverse Reactions and Serious Adverse Events (clinical and laboratory Errors). The conference also focused on educational initiatives and the competencies assessment framework developed in collaboration with hospital based Haemovigilance Officers.

This event was open to everyone with an interest in haemovigilance and transfusion safety and was very successful with in excess of 170 delegates attending to hear speakers from a number of agencies and centres within Ireland and abroad.

### E-Learning

The e-learning programme developed by the Effective Use of Blood Group of the Scottish National Blood Transfusion Service is ongoing. E Learning represents a unique opportunity for those involved in the transfusion process to be updated in best practice at their convenience. A pilot project was run in five hospitals from September 2007 to February 2008. The findings from this pilot project were used to develop an elearning training programme and roll-out for Irish hospitals commenced in September 2008.

### Haemovigilance Education Initiatives at DCU

The NHO in partnership with Dublin City University continues to offer a choice of professional development modules and postgraduate awards aimed at clinical and laboratory staff working in blood donation and transfusion.

This year, three level 8 (Degree) modules were delivered.

- Blood Donation and Transfusion (NS447)
- Haemovigilance Practice (NS448)
- Professional Development for Specialist Practitioners (NS449)

Fifteen students attended the initial module run in October 2008, which was evaluated as being helpful to their professional development. Twenty seven students have applied to complete the latter two modules.

The NHO achieved accreditation for two further modules at Level 9 (post-graduate), which are available as stand-alone professional development modules or as part of a graduate diploma programme. This offers opportunities to students to advance their knowledge, skills and competencies in their chosen clinical area and progress to complete an MSc in Nursing or Health Care Practice.

# Additional Services

## Therapeutic Apheresis Service

The Therapeutic Apheresis service provides therapeutic apheresis treatments to hospitals in Dublin and Cork. It is a demand led service and all treatments are carried out at the patient's bedside using mobile apheresis equipment.

An IBTS consultant haematologist leads the service in Cork and Dublin and treatments are managed and administered by specialist medical staff and specially trained therapeutic apheresis nurses.

The service is primarily provided to Neurology, Haematology and Nephrology patients who may require Plasma Exchange, White Cell Depletion, Red Cell Exchange, Red Cell Depletion or Platelet Depletion for a variety of medical conditions.

### Case load

A total of 504 procedures were carried out in 2008, an increase of 77 from the previous year. While the majority of procedures were Plasma Exchange, there was an increase in White Cell Depletion procedures.

### PROCEDURES BY HOSPITAL

Hospital	No of cases
AMNCH	152
Mater	71
SVUH	47
Beaumont	10
CUH	192
MUH	24
Other	8
<b>Total</b>	<b>504</b>

The IBTS registrar/ consultant receive requests for apheresis treatment from the hospital consultant or registrar. Each case is then assessed for suitability for treatment by the IBTS registrar.

The hospitals where patients were treated were: Tallaght Hospital (AMNCH), Mater, St Vincent's (SVUH), St. Vincent's Private Hospital (SVPH), Beaumont, Cork University Hospital (CUH), Mercy University Hospital (MUH), Other (Connolly, Beacon, SJH).

### PROCEDURES BY TYPE

Procedure type	No of cases
Plasma Exchange	486
Platelet Depletion	1
White Cell Reduction Depletion	12
Red Cell Exchange	3
Red Cell Depletion	2
<b>Total procedures</b>	<b>504</b>

The therapeutic apheresis team provide an on call service at week ends and bank holidays.

Emergency procedures are performed during day or night for life threatening disorders. Urgent procedures are for conditions that warrant treatment on week days and bank holidays.

## Additional Services

### Tissue Bank

In January, the Tissue bank at the National Blood Centre received a licence pursuant to Regulation 8 of SI 158 of 2006 for ocular, cardiovascular and umbilical cord blood banking. The tissue bank continues to import material for ocular surgery from the US in preference to sourcing it from Irish donors because of the possible risk of vCJD.

In January the tissue bank commenced importing pre cut corneas for endothelial keratoplasty upon request from ophthalmic surgeons nationally. Corneal imports were up 40% on 2007 and corneas for endothelial keratoplasty accounted for 28% of this increase. The tissue bank in collaboration with the National Blood Service in Liverpool also provides autologous serum for tears for those patients who cannot tolerate pharmaceutically prepared eye drops.

The heart valve bank which operates under the auspices of Professor Wood of the Mater Misericordiae University Hospital saw an increase in both donations of heart valves and issues for surgical use.

### Directed Cord Bank

The IBTS runs a small directed cord bank which facilitates the collection and cryopreservation of cord donations from the newborn for a sibling who has a condition for which a stem cell transplant may provide a cure.

During 2008, nine cord units were collected and processed which represented a 50% reduction in the number of requests for collection. The collection of the cord blood unit must be requested by a bone marrow transplant physician.

# Irish Unrelated Bone Marrow Registry

The Irish Unrelated Bone Marrow Registry (IUBMR) was established in 1989 to provide a panel of volunteer donors for Irish and International patients requiring stem cell transplantation as a curative therapy for some malignant haematological conditions such as leukaemia and for some inherited metabolic disorders, such as Hurlers Syndrome. The vast majority of Irish patients who do not have a sibling donor will find suitably matched donors either on the Irish or international bone marrow stem cell donor panels.

During 2008, the IUBMR reached the milestone of the 200th transplant facilitated for an Irish patient. To date the IUBMR has facilitated 242 transplants, 166 of those since 2000. Of the 242 transplants, 208 were for Irish patients and 34 for international patients. During 2008 the registry facilitated 25 transplants on behalf of Irish patients and 3 for international patients.

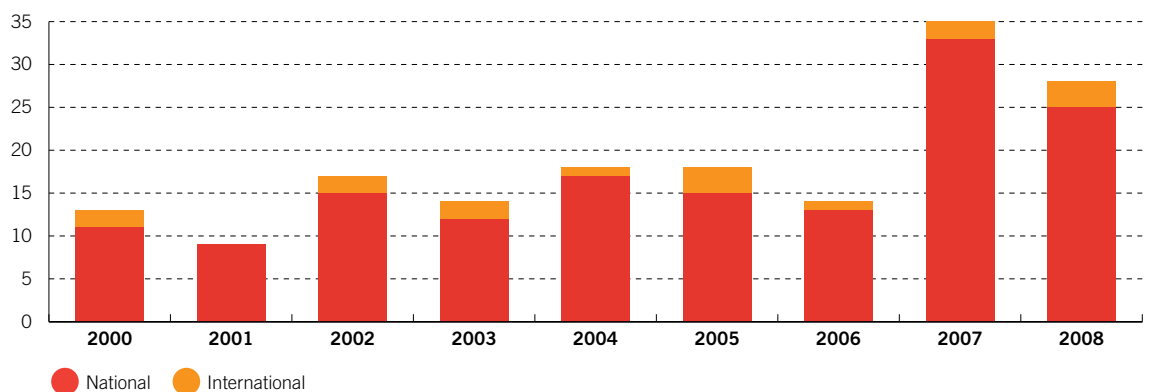
The majority of stem cell donations for Irish patients came from international donors (23). Five Irish donors donated in 2008. Two of the donations were for Irish patients and 3 were for international patients.

## WMDA

The World Marrow Donor Association sets international standards for bone marrow registries for the collection and transfer of haemopoietic stem cells. The IUBMR has been affiliated with the WMDA since 1991 and in 2007 the IUBMR achieved accreditation with the WMDA, the 8th Registry worldwide to achieve this status.

In 2008 the Registry made a successful bid against stiff competition from international registries to hold the prestigious 2010 WMDA Biennial conference in Trinity College which will also commemorate the 21st Anniversary of the founding of the Registry.

## IUBMR TRANSPLANTS FACILITATED FROM IRISH AND INTERNATIONAL DONORS 2000-2008





# Quality Assurance

The third annual report in compliance with SI 360 of 2005 was submitted to the Irish Medicines Board in 2008. This report covered the number of donations collected, donations not used, quantity of products used and quantity of products recalled. The report also covered data with regards to haemovigilance reporting from the Blood Establishment and pertinent information on the virology marker testing reported during the year.

There were nine IMB (Irish Medicines Board) inspections carried out during 2008, measuring compliance with the IBTS (Irish Blood Transfusion Service) Blood Establishment licensing activities. Two additional special inspections were also completed by the IMB. These dealt with the conditions of the Good Distribution Practice (GDP) license. A major non-compliance was raised during the GMP (Good Manufacturing Practice) inspection at NBC (National Blood Centre). The second special inspection was concerned with new hardware as part of the stabilization project for Progesa. A number of fixed and mobile clinics were covered during these inspections and the outcome was satisfactory.

There were two comprehensive inspections of the IBTS Centre in Cork and NBC facilities during the months of May and November. There were two major non-compliances raised in the Cork Centre in the areas of irradiation and haemovigilance. A major non-compliance was raised in NBC relating to donor vigilance.

Throughout 2008, the EQMS (Electronic Quality Management System) Pilgrim Smart@Solve suite was implemented throughout the IBTS. Progress was made on the design and definition of the Smart@Train module of EQMS. It is planned that the

Smart@Train module should be live organisation wide by mid 2009.

As part of the IBTS Blood Establishment Haemovigilance system during 2008, there were 29 SARs (Serious Adverse Reactions) reported to the NHO (National Haemovigilance Office) by the NBC. Four of these were not progressed. There were 48 SAEs (Serious Adverse Events) reported by the NBC. In the Cork Centre, there were seven SARs reported to the NHO, three of which were not progressed. In addition there were 13 SAEs reported by the Cork Centre.

One of the key Quality Management System elements is the control of changes to the process, product, equipment and systems. During 2008, there were 305 change controls raised at a national level covering major/significant changes to process and materials (for example: introduction of new blood bag systems). At a local level there were 161 change controls raised at MRTC and 250 change controls raised at NBC. A total of 659 change orders were raised under the change order process in Smart@Doc covering document changes. The project of harmonising SOPs within the IBTS progressed well during 2008 with an increase of 71% by year end.

Non-compliances within the Quality Management System are captured in the Quality Internal Incident Reporting (IR) system in the IBTS. Tracking and trending of incidents is clearly monitored, reported and acted on throughout the year, with a view to prevention of reoccurrence. There are monthly Quality meetings in both the NBC and Cork Centre where departments can share learning outcomes from these incidents. There were 1550 IRs raised in the NBC during 2008 with 165 (10.6%) graded

## Quality Assurance

as major. The main increase in numbers of Incident Reports raised from 2007 surrounded the introduction of a new bag system. In the Cork Centre, there were 584 Quality Internal Incident reports raised. 141 (24%) of these were graded as major. The number reported in 2008 had decreased from a figure of 612 IRs reported in 2007. Close out of the IRs is closely monitored by the QA function and is reported at the monthly Quality meetings.

A comprehensive recall system is in place in the IBTS mainly dealing with post donation information and suspected bacterial contamination issues. In 2008 there were 286 recalls initiated in the NBC with 140 (49%) due to suspected bacterial contamination and 83 (29%) related to post donation information. At the Cork Centre, 71 recalls were investigated during the year, with 40 (56%) related to post donation information and 9 (13%) relating to possible transfusion reactions where the Cork Centre acts as a Hospital Blood Bank.

The formal documented customer complaint system operating in the IBTS records both service and product complaints. In 2009 it is planned to further enhance this by providing a more comprehensive separate system for capturing donor and service complaints. This shall be in addition to the product complaint system. There were 917 complaints received by the NBC during 2008. These were categorised as post donation information (26.8%), DAT positive (17.2%) and suspected BacT contamination (15.9%). At the Cork Centre, there were 218 complaints received with the breakdown as (28%) transfusion reaction, (17%) delays at clinic and (10%) related to donor deferrals.

As part of the Quality Management System, there were 53 Validation plans and 193 change control plans raised during 2008. These covered the introduction of major and on-going changes within the IBTS Quality Management System.

The main training focus during 2008 was to roll out training for both higher level users and viewers of the EQMS module Smart doc. This was successfully completed during the year and was facilitated by the HR function.

The internal audit programmes covered 31 individual audits within the IBTS. These covered clinics, manufacture, testing, storage and distribution.

# Human Resources

Human Resources continued to focus on improving internal human resource strategies to ensure that staff are enabled to meet the needs of our donors and patients throughout the year. One area which has seen such improvement is the realignment of the IBTS internal working arrangements which has been informed by the following;

- IBTS Strategic Plan 05-09
- Towards 2016 – Social Partnership Framework
- International Market research
- Donor surveys

This realignment is being developed and improved through the 2007-2009 Laboratory Review, Donation Process Review, Transport Review and the review of our services in the D'Olier Street clinic.

2008 has seen significant developments take place with all of these projects. Leading the way was the introduction of the extended working day in the laboratories, under a new laboratory agreement which has streamlined the services in this area.

Phase One of the Donation Process Review was successfully completed this year and the roll out of Phase Two has been enabled by a significant Labour Court determination in 2008. The extended opening hours review of our Apheresis Donation Clinic at the NBC was also completed.

The improvement projects and change agendas of 2008 have continued to enhance the development of service delivery to patients and donors. This is an ongoing priority for human resources for the future, while continuing to promote and foster a culture of continuous change in a timely manner will also enable the delivery of a quality service in the times ahead.

The recruitment service played a major role in ensuring we hired and promoted the right people, at the right time, in the right role to support the delivery of and provide for an excellent service to our donors, patients and key stakeholders.

The IBTS commenced a major programme of training and development for staff in 2008. An integrated and unified approach to developing the capability of our managers and teams is the foundation of the approach adopted with the objectives of the programme being;

- To support the organisation to become more effective and efficient
- To build and develop high performing teams
- To develop leadership and management capabilities

## Human Resources

Four key management groups were identified and have been participating in one of the programmes conducted by IMI and IBEC.

- Executive Development Programme – IMI in association with IBEC
- Senior Development Programme – IMI in association with IBEC
- Executive Operations Development Programme – IMI & IBEC
- Frontline Operations Development Programme - IBEC in association with IMI

In order to achieve our objective of building and developing high performing teams, the team development programme in association with IBEC commenced with frontline teams in 2008.

All programmes have been tailored for the IBTS and work has commenced on the Team Development Plans, Personal Development Plans and targeted Continuous Improvement projects.

The average number of training days per staff member was 1.5 in such areas as Environmental Health and Safety, IT Skills, and Personal Development programmes. In our commitment to ongoing organisational learning, professional and personal development and research, 21 employees were granted fully sponsored financial assistance and 20 were granted limited financial assistance for further education.

The Library continued to drive and support learning, research and the information needs of the IBTS. Our collection of non-medical material was expanded to reflect the needs of our employees undertaking the Quantum Leap programme while the training needs of staff undertaking further studies were also addressed. Training was provided by Library staff on how to source management information and how to reference and cite sources with group and individual library and information skills sessions being maintained through 2008. In response to improving the alerting service to employees there were new subject specific email distribution lists for Dengue fever and Chikungunya developed.

2008 also saw revision of the internal communication strategy. One area identified as a priority for improvement was the intranet. As the intranet is a mainstream form of communication, available nationally, work commenced to revitalise, modernise, and improve its usage as a result of feedback from staff.

# Finance

The Accounts for 2008, as shown below, are in draft format

Finance	2008	2007
	€'000	€'000
<b>Income</b>		
Recurring income	116,714	110,634
Non-recurring income	853	557
Total Income	117,567	111,191
<b>Expenditure</b>		
Total expenditure	116,540	107,190
Surplus for year	1,027	4001

## Income

The Board's total income for 2008 of €117.56 million (2007 €111.19 million) is analysed into recurring income and non-recurring income. Recurring income consists of revenue generated from products and services provided to hospitals of €116.71 million (2007 €110.63 million). The Board increased its prices for 2008 by 4%. No direct funding was received, during 2008, from the Department of Health and Children in relation to expenditure incurred on the Hepatitis C programme. Non-recurring income during 2008 includes interest earned on bank deposits and proceeds from the sale of fixed assets

## Expenditure

Expenditure for 2008 amounted to €116.54 million (2007 €107.19 million). Increased expenditure in the year mainly related to implementing national pay agreements within the organisation, cost associated with the reorganisation of work in the laboratories and additional depreciation costs due to increased investment in assets over the last number of years.

The Board accounts for pensions in accordance with financial reporting standard 17 'Retirement Benefits' (FRS 17).

During 2006 the Board decided to set up a research reserve and transferred €752,000 to this fund. €296,000 was expended from this fund for the year ended 31st December 2008 (2007 €216,000).

The Board also has a Capital reserve fund for the development of new facilities in Cork. €5 million was transferred to this fund for the year ended 31st December 2005.

## Finance

### Capital Expenditure

The Board invested €1.7m in capital projects and equipment during 2008. The main investments during the year included Pippettor System for Virology Laboratory, the Bag and Tag traceability system, further investment in the IBTS electronic document management system (EDMS) and the data mining and reporting tool (BOSS) for our blood management system Progesa. Recurring expenditure for the replacement of I.T. infrastructure, medical and other plant and equipment, as well as new technologies.

### Financial Systems

During 2008 the financial system hardware and software were upgraded and the Oracle platform was also upgraded to the latest version available. This upgrade gave more enhanced functionality such as document imaging and purchase order/sales invoicing email capabilities to suppliers and customers. In 2009 a similar upgrade of hardware, software and Oracle platform is proposed to take place for our integrated HR/Payroll system.

### Prompt Payment Legislation

The Board complies with the requirements of Prompt Payment Legislation except where noted below. The Board's standard credit taken, unless otherwise specified in specific contractual arrangements, are 30 days from receipt of the invoice or confirmation of acceptance of the goods or services which are subject to payment. It is the Board's policy to ensure that all accounts are paid promptly. During the year ended 31 December 2008, under the terms of applicable legislation, a total of 215 invoices to the value of €2,226,136.65 were late, by an average of 32 days. These invoices constituted 1.27% by number and 2.60% by value of all payments to suppliers for goods and services during the year. Total interest paid in respect of all late payments amounted to €8,649.10. The Board continually reviews its administrative procedures in order to assist in minimising the time taken for invoice query and resolution.

# Corporate Governance

The Board's policy is to maintain the highest standards of corporate governance, in line with generally accepted policies and practices. The Board is accountable to the Minister for Health and Children.

The Board has agreed a formal schedule of matters specifically reserved to it for decision and a list of matters delegated to the Executive. The Board agreed the content of a manual for Board members. The Board also agreed to extend the remit of the Audit Committee to include compliance.

## **Compliance with the Code of Practice for the Governance of State Bodies**

The Board is committed to complying with the relevant provisions of the Code of Practice for the Governance of State Bodies, published by the Department of Finance in 2001.

A code of conduct for the Board and an employee code of conduct has been put in place. The Board is committed to review these codes regularly.

The IBTS Board reviewed reports on internal controls during the year along with regular reviews of the reports of the Irish Medicines Board on operational and compliance controls and risk management. The Board will continue to review these reports and to work closely with the IMB to ensure the highest international standards.

The IBTS have complied with disposal procedures, as outlined in the 'Code of Practice for the Governance of State Bodies' The IBTS complies with all relevant obligations as defined under Irish taxation law.

## **Guidelines for the appraisal and management of Capital Expenditure Proposals**

The Board is committed to complying with the Guidelines for the Appraisal and Management of Capital Expenditure Proposals issued by the Department of Finance in July 1994, (revised Jan 2005).

## Corporate Governance

### Workings of the Board

The Board is comprised of twelve members including a non-executive Chairperson appointed by the Minister for Health and Children.

The Board met on 10 occasions during the year. Attendance by Board members was as follows:

Board Attendance	Jan	Feb	Apr	May	Jun	July	Sept	Oct	Nov	Dec
Maura McGrath, Chairperson		✓	✓	✓	✓	✓	✓	✓	✓	✓
Sean Wyse	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mark Moran	✓		✓	✓	✓					✓
David Lowe	✓	✓	✓	✓	✓	✓	✓		✓	✓
Dave Keenan	✓	✓		✓		✓	✓	✓		✓
Dr Robert Landers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dr Margaret Murray	✓				✓		✓		✓	✓
Dr Cees Van Der Poel			✓	✓				✓	✓	
Dr Mary Cahill	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ms Margaret Mullett	✓	✓	✓	✓	✓	✓		✓	✓	✓
Ms Jane O'Brien	✓	✓	✓	✓	✓	✓		✓	✓	✓
Mr Gerry O'Dwyer	✓	✓	✓	✓	✓	✓		✓	✓	✓

All members receive appropriate and timely information, to enable the Board to discharge its duties. The Board takes appropriate independent, professional advice as necessary.

Guidelines for the payment of director's fees and expenses are observed. The Board has activated a committee structure to assist in the effective discharge of its responsibilities.

### Remuneration Committee

The Board has established a sub-committee to deal specifically with matters regarding the salary and performance of the Chief Executive. The Board complies with Government policy on pay for the Chief Executive and employees.

### Medical Advisory Committee

The Medical Advisory Committee is comprised of the medically qualified members of the Board and the medical consulting staff and meets on a monthly basis. Its function is to monitor developments relevant to the field of transfusion medicine and related fields, to inform the Board of any such developments and to advise the Board on appropriate action.



## Corporate Governance

### Finance Committee

The Finance Committee met five times during the year and is comprised of three members of the Board. It is also attended by the Chief Executive, Medical & Scientific Director, Director of Finance and Management Accountant. The Committee may review any matters relating to the financial affairs of the Board. It reviews the annual capital and operating budgets, management accounts, insurance, procurement, treasury policy, capital expenditure, costing exercises and banking and financing arrangements. The Committee reports to the Board on management and financial reports and advises on relevant decision-making. The Finance Committee operates under formal terms of reference which are reviewed by the Board regularly.

### Audit & Compliance Committee

The remit of the Audit Committee was extended to include the quality system and was renamed as the Audit & Compliance Committee from 1st January 2008. The Committee met five times during the year and is comprised of four members of the Board and two independent external members. It is also attended by the Chief Executive, the Medical & Scientific Director, the Director of Finance, the Operations Director, the Management Accountant and the Internal Auditor, Director of Quality and Compliance.

The Committee may review any matters relating to the financial affairs of the Board. It reviews the annual financial statements, reports of the Internal Auditor, quality reports, the accounting policies, compliance with accounting standards and the accounting implications of major transactions. The external auditors meet the Committee to review the results of the annual audit of the Board's financial statements. The Audit & Compliance Committee operates under formal terms of reference, which were amended by the Board and are reviewed by the Board regularly.

## Corporate Governance

### Risk Register

The risk register identifies strategic, clinical, financial and operational risks to the organisation and the existing controls and further actions necessary to minimise the impact on the organisation, in the event of the risk occurring. The Risk Register is divided into Organisational, Clinical and IT risk registers. The organisational risk register is reviewed and updated by the Executive Management Team. The Clinical Risk Register is reviewed by the medical consultants and the IT Risk Register is reviewed and updated by the ICT Council.

This monitoring ensures that the identified risks and controls are current and that new and emerging risks are identified and controlling measures put in place.

### Going Concern

After making reasonable enquiries, the directors have a reasonable expectation that the IBTS has adequate resources to continue in operational existence for the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing financial statements.

### Internal Control

The Board is responsible for internal control in the IBTS and for reviewing its effectiveness. The Board's system of internal financial control comprises those controls established in order to provide reasonable assurance of:

- The safeguarding of assets against unauthorised use or disposition; and
- The maintenance of proper accounting records and reliable financial information used within the organisation.

The key elements of the Board's system of internal financial control are as follows:

- A comprehensive system of financial reporting
- Annual Budget prepared and presented to both the Finance Committee and the board and monthly monitoring of performance against budgets
- Clearly defined finance structure
- Appropriate segregation of duties
- Clear authorisation limits for capital and recurring expenditure approved by the Finance Committee
- Key financial processes are fully documented in written procedures
- Monthly stock takes carried out by staff independent of stores staff
- Payment verification of supplier invoices by senior staff independent of accounts payable staff
- Financial system possesses verification checks and password controls
- Regular monitoring of credit control function
- All despatch dockets for issues of products are matched to their relevant invoices to ensure all the board's activities are fully billed

## Corporate Governance

- All purchase orders signed by purchasing officer
- Stock items are requisitioned by means of automatic ordering
- All non stock invoices signed and coded by budget managers
- All stock invoices independently matched with stores GRN

The Board are aware that the system of internal control is designed to manage rather than eliminate the risk of failure to achieve business objectives. Internal control can only provide reasonable and not absolute assurance against material mis-statement or loss.

### Statement of Board Members' Responsibilities

The Board is required by the Blood Transfusion Service Board (Establishment) Order 1965, to prepare financial statements for each financial year which, in accordance with applicable Irish law and accounting standards, give a true and fair view of the state of affairs of the Irish Blood Transfusion Service and of its income and expenditure for that year. In preparing those financial statements, the Board is required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and estimates that are reasonable and prudent;
- Disclose and explain any material departure from applicable accounting standards;
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Irish Blood Transfusion Service will continue in business.

The Board is responsible for keeping proper books of account, which disclose with reasonable accuracy at any time, the financial position of the Irish Blood Transfusion Service and to enable it to ensure that the financial statements comply with the Order. It is also responsible for safeguarding the assets of the Irish Blood Transfusion Service and hence taking reasonable steps for the prevention and the detection of fraud and other irregularities.

## Corporate Governance

### **Members of the Board**

Ms Maura McGrath (Chairperson)

Mr David Keenan

Mr David Lowe

Mr Sean Wyse

Ms Jane O'Brien

Dr Mary Cahill

Dr Cees van der Poel

Dr Rob Landers

Dr Margaret Murray

Ms Margaret Mullett

Mr Gerry O'Dwyer

Mr Mark Moran (reappointed 1st October 2008)

### **Auditors**

Comptroller and Auditor General

Treasury Building

Lower Castle Yard

Dublin Castle

Dublin 2

### **Solicitors**

McCann Fitzgerald Solicitors

Riverside One

Sir John Rogerson's Quay

Dublin 2

### **Bankers**

Allied Irish Bank

Dame Street

Dublin 2

# Irish Blood Transfusion Service

## **NATIONAL BLOOD CENTRE**

James's Street, Dublin 8  
t: 01 4322800  
f: 01 4322930  
e: [info@ibts.ie](mailto:info@ibts.ie)  
[www.giveblood.ie](http://www.giveblood.ie)  
Donor infoline 1850 731 137

## **CORK CENTRE**

St Finbarr's Hospital  
Douglas Road  
Cork  
t: 021 480 7400  
f: 021 431 3014

## **DUBLIN BLOOD DONOR CLINIC**

2-5 D'Olier Street  
Dublin 2  
t: 01 474 5000

## **STILLORGAN BLOOD DONATION CLINIC**

6 Old Dublin Road  
Stillorgan  
Co Dublin  
t: 1850 808 808

## **ARDEE CENTRE**

John Street  
Ardee  
Co Louth  
t: 041 685 9994  
f: 041 685 9996

## **CARLOW CENTRE**

Kernanstown Industrial Estate  
Hackettstown Road  
Carlow  
t: 059 913 2125  
f: 059 913 2163

## **LIMERICK CENTRE**

Carrig House  
Cloghkeating Ave  
Raheen Business Park  
Limerick  
t: 061 306 980  
f: 061 306 981

## **TUAM CENTRE**

Unit 49  
N17 Business Park  
Tuam  
Co Galway  
t: 093 708 32  
f: 093 705 87



**NATIONAL BLOOD CENTRE**

James's Street, Dublin 8

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[www.giveblood.ie](http://www.giveblood.ie)

aertel p691

Donor infoline 1850 731 137



**Irish Blood  
Transfusion Service**

Seirbhís Fuilaidriúcháin na hÉireann