16 DIRECTED DONATION POLICY

This policy and procedure describes the circumstances, responsibilities and process involved in the provision of Directed Donations within WNHS. It is the firm policy of the WNHS that Directed Donation is discouraged for the following scientific reasons:

- In terms of viral safety, Australia has one of the safest blood supplies in the world due to advances in viral testing and the use of a confidential and signed donor declaration to reveal high-risk activities (which carries a heavy penalty for false information).

- There is no evidence that blood from Directed Donors is any safer than blood from Anonymous Volunteer Donors attending the Australian Red Cross Blood Service (ARCBS). In fact, there is both anecdotal and published evidence to the contrary. A Directed Donor asked to give blood for a family member is often under significant pressure to donate and therefore more likely to conceal a high-risk activity.

- Non-viral risks, such as bacterial sepsis, haemolytic reactions, anaphylaxis, TRALI, etc, are not reduced by Directed Donation.

- Up to 1% of virology screens are ambiguous or give false positive results. It is standard practice to withhold the issue of Anonymous Volunteer Donor blood until secondary confirmation tests can be completed. Under a Directed Donation scheme, the blood is often required immediately and any delays in its release will require an explanation to the family. Ambiguous serology results on a family member under these circumstances can be extremely distressing for all involved.

- There is a documented increased risk of fatal graft versus host disease (GvHD) in blood transfusions from donors who share HLA haplotypes with the recipient e.g. family members. Transfusion related GvHD has also been documented in immunocompetent recipients. This mandates the need to irradiate all Directed Donor Blood Products. Irradiation also greatly reduces the shelf life of red cell products.

- The use of family Directed Donations must be avoided if the recipient may undergo a future haematopoietic stem cell transplant as there is an increased risk of graft rejection due to HLA sensitisation.

- ABO, Rhesus (D) and K blood group compatibility between donor and recipient is mandated before use. However, this does not prevent the formation of antibodies against other red cell antigens. In particular, Directed Donation from a man to his wife or female de facto partner is not recommended as she may develop antibodies against her partner, which could seriously affect a current or future pregnancy and cause haemolytic disease of the newborn.

- It is ARCBS policy not to use Directed Donations for other patients as they are considered to have a greater risk of transfusion-transmissible disease than Anonymous Volunteer Donations.
Directed Donations that are not used are destroyed. This is a significant wastage of resources in terms of funds and staff time.

In summary, Directed Donor Transfusion Practice should be discouraged and the reasons for this made clear to the families involved. All current scientific data strongly supports the use of blood products from ARCBS Anonymous Volunteer Donors as best practice.

RESPONSIBILITY

THE SURGEON OR CLINICIAN IN CHARGE OF THE PATIENT IS RESPONSIBLE FOR:

- Discussing the request with the donor taking into account the advice given above.
- Providing the donor with information ‘Directed Donation – Information for Parents/Donors’
  http://cahs.hdwa.health.wa.gov.au/__data/assets/word_doc/0018/96201/PKTMF2180.doc
- Ensuring the donor meets the ARCBS requirements. They must be an existing blood donor who has given blood at least twice within the last two years. OR Where the patient is under 18 years of age and is unable to have autologous blood collected, they must be a parent or legal guardian of the patient.
- Notifying the Transfusion Medicine Unit who will provide an ARCBS Directed Donation Request Form. Section A is to be completed and signed by the parent/legal guardian or patient over the age of 18 years and Section B by the requesting clinician, including the type of donation required (e.g. paediatric red cells) and the irradiation requirement. A copy is to be filed in the medical record.
- Completing a PathWest Transfusion Medicine Request Form for a Directed Donation, FBP, GAH, K phenotype and CMV (when appropriate). This form must be clearly marked “Directed Donor for ‘Recipient’s full name, UMRN, DOB’ and clinical details including the estimated day of transfusion or surgery.
- Referring the donor to the phlebotomy area (Transfusion Medicine Unit) with completed PathWest Transfusion Medicine Request and ARCBS Directed Donation Request Forms.
- If the donor is assessed as suitable the clinician is responsible for referring the donor to the ARCBS Donor Clerk (Telephone: 9325-3333 Extension 857) for a donation appointment.
- If a Donor is assessed as unsuitable the clinician is responsible for informing the donor and for discussing alternative options.

THE TRANSFUSION MEDICINE UNIT IS RESPONSIBLE FOR:

- Preliminary testing
- Informing the clinician or nurse coordinator of the donor’s suitability.

THE ARCBS IS RESPONSIBLE FOR:

Assessing donor eligibility and for blood collection and testing.

CRITERIA

There must be a high likelihood that the intended recipient will need transfusion in the particular circumstance outlined in the request. In most cases this will be neonatal top-up transfusion or elective surgery normally requiring a crossmatch. Directed Donation is applicable in a limited number of medical settings.

The circumstance should be planned to occur within a single episode of care. There should be a reasonable expectation of a definable transfusion requirement, which can be met by a Directed Donor. In practical terms, this will be a requirement for four units or less of Red Blood Cells (RBC).

Alternatives to Homologous transfusion including Autologous Donation, blood salvage and other techniques are either not appropriate or not available.
The request for Directed Donation should be made to ARCBS at least one week prior to the intended transfusion. Greater advance notice will be required when more than one unit of blood is requested.

Pre-transfusion testing, blood product administration, investigation of transfusion reactions and all other procedures relating to the transfusion of Directed Donations will proceed as per established Health Service protocols for the transfusion of homologous blood.

All Directed Donations will be irradiated to reduce the risk of transfusion-related graft versus host disease.

INFORMED CONSENT

The parent/legal guardian/patient over 18 years old will be provided with Form Providing the donor with information 'Directed Donation – Information for Parents/Donors' (Link below) http://cahs.hdwa.health.wa.gov.au/_data/assets/word_doc/0018/96201/PKTMF2180.doc and will be required to sign the ARCBS Directed Donation Request Form to acknowledge:

That there is no medical evidence that Directed Donation is safer than Anonymous Volunteer Donation. Many international Transfusion Medicine Organisations do not recommend Directed Donation on the grounds that it may be less safe.
That there are risks associated with receiving blood from family members. Some of these risks are known, but some are currently not well understood and cannot be anticipated.
That WNHS will follow all standard procedures in handling Directed Donations but cannot guarantee that these will be available for transfusion.
That if the blood products are required in addition to those provided by the Directed Donor, these will be provided from the Anonymous Volunteer Homologous blood supply at the request of the treating clinician.

ARCBS DONOR SELECTION CRITERIA

The following donor selection criteria must be satisfied prior to referral to ARCBS:

- BLOOD GROUPING - ABO, Rh D and K typing must be performed on samples from the intended recipient and the potential donors. The intended donor must be ABO, Rh D and K compatible with the recipient.
- ANTIBODY SCREEN - A red cell antibody screen must be performed on samples from the intended recipient and the potential donors. The antibody screens must show compatibility.
- CYTOMEGALOVIRUS (CMV) - The requirement for CMV negative blood is determined by the recipient’s clinician. Where CMV negative blood is required, potential donors will undergo CMV antibody testing.
- PREGNANCY AND BREASTFEEDING - Blood donation is generally contraindicated during pregnancy and while breastfeeding. Refer queries to the ARCBS Medical Officer.
- QUANTITATIVE CRITERIA - The frequency of venesection will be determined by the ARCBS. This decision will be taken according to the donor Haemoglobin level and the anticipated blood requirements detailed by the clinician. It is recommended that donations are made one (1) week apart for a maximum of four (4) donations, with the last donation being not less than five (5) working days prior to the expected date of transfusion. A Directed Donor must not give more than five (5) donations within a twelve (12) month period.

PROCEDURE

The clinician will:
- Discuss the request with the donor and ensure that the donor meets the ARCBS donor selection criteria and confirm the high likelihood that the intended recipient will need a transfusion.
The clinician and patient/legal guardian must complete the ARCBS Directed Donation Request Form (available from Blood Bank) and a copy must be filed in the patient’s medical record.

The clinician must also complete a Transfusion Request Form for Directed Donation, Group & Hold and K phenotype, and a Pathology Request Form for Full Blood Count and CMV (when appropriate). The Transfusion Request Form must be clearly marked “Directed Donor for - Recipient’s full name UMRN, DOB and clinical details” including the estimated day of transfusion or surgery.

The Blood Bank will:
• Perform the preliminary Group and Hold, Full Blood Count and K phenotype and refer a sample to ARCBS for CMV testing when appropriate.
• Inform the clinician or nurse coordinator of the donor’s suitability when testing is complete.

The donor must be:
• ABO, Rh D and K compatible with the recipient and compatible with any atypical antibodies in the recipient.
• CMV negative when this is a requirement.

For donors assessed as suitable, the clinician will refer the donor to the ARCBS Autologous Clerk (Telephone: 9421-2857 or 9325-3333 Extension 857) for a blood donation appointment. Blood can be donated at the ARCBS donor centre at 290 Wellington Street, Perth or at Fremantle or one of the regional centres. The donor is responsible for attending the ARCBS with the completed ARCBS request form.

The ARCBS is responsible for assessing donor eligibility and for blood collection and testing. Upon receipt, the Blood Bank will perform the necessary compatibility testing and advise the clinician of blood availability.

All directed donations will be irradiated to prevent Graft Versus Host Disease (GvHD). For donors assessed as unsuitable, the clinician will inform the donor and discuss alternative options.

DEFINITION OF TERMS

Directed Donation
A donation collected on the basis of patient preference from a selected donor who is known to the intended recipient. The most frequent scenario is that of a parent or close relative wishing to donate for a child.

Anonymous Volunteer Donation
A donation collected for the purpose of transfusion to unrelated patients as determined by the Australian Red Cross Blood Service (ARCBS).

Autologous Blood Transfusion
The collection of an individual’s own blood for his or her transfusion needs.

Homologous Blood Transfusion
The collection of blood from one individual for the transfusion needs of another (this includes both Directed Donations and Anonymous Volunteer Donations).

REFERENCES
ARCBS Blood Transfusion Resources
HTTP://WWW.TRANSFUSION.COM.AU/BLOOD_BASICS/COLLECTION/DIRECTED_DONATION/REQUIREMENTS