RCH Policy and Procedure Manual

Blood Transfusion Policy

1. Policy Statement

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Sub category	Implementation
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Author	• **Blood Transfusion Steering Committee**
Please remember to read the disclaimer.	

A blood transfusion has the potential to be a hazardous procedure. Blood transfusion should only be given if the potential clinical benefits outweigh the potential risks to the patients. The most common risks include haemolytic reactions and bacteria contamination. Strict checking to match the patient to the donor unit must be followed prior to blood administration. The patient should be monitored for adverse reactions which should be managed appropriately.

The responsibility for policy content rests with the Hospital Transfusion Committee and Patient Safety Committee. Adherence to the requirements of this policy will be monitored by the Hospital Transfusion Committee via an auditing process.

This policy should be read in conjunction with the Blood Transfusion Clinical Practice Guidelines (to be published).

Please refer to the Blood transfusion, consent and documentation Clinical Practice Guidelines for information regarding:

- Medical prescribing of blood /blood product transfusion
- Medical documentation of blood/blood product transfusion
- Information and consent

Please refer to the Administration of Fresh Blood Products Hospital Clinical Guidelines for information regarding to:

- Transfusion reactions
- Issue of blood products
- Equipment used for blood transfusions
- Patient and blood product identification

Compatible fluids and medications

- Maximum infusion time
- Care and monitoring of transfused patients

2. Definition of Terms

Fresh blood products: refers to red cell products (including autologous and directed donations), platelet products, fresh frozen plasma (FFP) and cryoprecipitate.

Processed blood products: refers to products such as Intragam P, albumin and coagulation factors.

Clinicians include medical practitioners, nurses, perfusionist and anaesthetic technicians involved with blood transfusion procedures whom are employed at RCH.

3. Responsibility

Blood and blood products are viewed as prescribed intravenous medication. It is the responsibility of **all clinicians** to understand the significance of the correct procedures in relation to checking and administering blood products at RCH. All blood and blood products must be checked by two clinicians prior to administration.

3.2 All clinicians involved with any transfusion procedures (e.g. prescribing, checking or administration)

- Are responsible for maintaining and updating their knowledge and practice.

3.3 Staff administering blood and blood products

- Have the responsibility to observe and treat adverse reactions to blood products. All errors, 'near-misses' and suspected adverse reactions are to be documented in the patient medical record and reported via the mechanisms described.

3.4 Medical Officers

- Are responsible for ensuring the appropriateness of each blood/blood product they prescribe for an individual patient.
- Are responsible for obtaining consent for non-emergency transfusion and documenting the indication for and outcome of transfusion in the patient's medical notes.
- Are responsible for prescribing blood and blood products.
- May administer blood and blood products in accordance with this policy.

3.5 Division of Laboratory Services staff

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Are responsible for issuing prescribed blood and blood products.

3.6 Director of anaesthesia

- Is responsible for ensuring anaesthetic technicians receive appropriate education in relation to the handling and use of blood products.

3.7 Anaesthetic technicians

- Are permitted to check blood and blood products and set up the blood administration set and attach to the patient under the direct supervision of the anaesthetist in charge of the case.

3.8 Division 1 Registered Nurses and Perfusionists

- Are responsible for the correct and safe administration of blood and blood products in accordance with this policy.

3.9 Medical officers, Division 1 Registered Nurses and Perfusionists

- Are responsible for the monitoring of the patient during blood transfusion.

4. Process

- All patients having blood transfusions must have an identification wristband in place which includes patient's first name, surname, date of birth and unit record number.
- All blood transfusions must be supervised by a Division 1 Registered Nurse, Perfusionist or Medical Officer and occur within ward areas and other internal departments.

5. The pathology Request Form (link to specimen collection website)

The request form must contain sufficient clinical information to ensure safe and timely blood provision. This includes :

- Name, date of birth and UR of the patient
- Name and contact details of the requesting doctor
- Number of units and type of blood product required
- Procedure or patient diagnosis
- Theatre date and time for elective surgical cases or time blood is required (if appropriate).
- Any special requirements such as irradiation or leucocyte depletion (if appropriate).

For unknown patients please refer to the "Unknown Patients - Identification and Blood Provision Policy").

6. Samples For Pre-transfusion Testing

Correctly identifying the patient during collection of the pretransfusion sample is vital in avoiding 'wrong blood to wrong patient' episodes.

- Samples may be collected by an appropriately trained Pathology Collector, Medical Officer, Division 1 Registered Nurse or Perfusionist. An Anaesthetic Technician or a trainee can collect samples in direct supervision of one of the above. The collector or trainee's supervisor is directly responsible for ensuring the accuracy of each specimen submitted for testing.
- Specimens must be collected in accordance with the Specimen Collection Policy and Patient Identification Policy. Specimens which do not meet laboratory acceptance criteria will be rejected and the collector will be notified to arrange collection of a new sample.

7. Release Quantities

For general wards, release will be limited to the following quantities at a time:

- One (1) unit of red blood cells
- Five (5) units of platelets (or one pooled or apheresis bag)
- Two (2) units of FFP
- Five (5) units of cryoprecipitate

Special arrangements are available to the Emergency Department, Critical Care areas and Operating Suites for release of greater quantities.

8. Blood Product Administration

8.1 Information and consent

- Informed consent should be obtained prior to any blood transfusion, except in emergency/life saving situations.
- Please refer to the Blood Transfusion, Consent and Documentation, Clinical Practice Guideline (to be published).

9. Documentation

Traceability

It is a legal requirement that all blood and blood products, including processed blood products, must be able to

be traced to the individual recipient by donation (pack) or batch number for a minimum of 20 years. This is important for patient safety in the event of a product recall.

Fresh blood products

- Are identified by a donation (pack) number. On completion of transfusion, file the completed Blood Transfusion Record in the patient's Medical Record.

Processed products

- Are identified by a batch number. Ensure that the batch number of processed products is recorded in the patient's Medical Record as these products are not issued with a Blood Transfusion Record. A batched product issue form accompanies processed products and should be completed, signed and dated after the product has been administered. The completed issue form is returned to blood bank to update the computer record for traceability.

10. Disposal of Waste

As per Clinical Waste and Sharps Management Policy.

Note that in the case of a transfusion reaction (see section 11.0) blood bags must be returned to blood bank.

11. Transfusion Reactions (link to Administration of Fresh Blood Guideline)

Transfusion reactions can be fatal. If a patient becomes unwell during a transfusion the possibility of a transfusion reaction must be considered.

If a transfusion reaction is suspected **stop the transfusion** and provide emergency patient care. Notify the medical officer promptly and report to blood bank. The on call haematologist is available for consultation about management & investigation of the reaction and further transfusion support. Contact the on call haematologist via switchboard (dial 91).

12. Special Provisions/referenced documents

- RCH "Blood transfusion" web site http://www.rch.org.au/bloodtrans/index.cfm?doc_id=5319
- Patient identification Policy
- Specimen Collection Policy
- Clinical Waste and Sharps Management Policy
- Unknown Patients - Identification and Blood Provision Policy

13. Bibliography:

- Alaris Medical Systems White Papers.
- American Association of Blood Banks. Primer of Blood Administration, 2002
- Australian & New Zealand Society of Blood Transfusion Inc. and the Royal College of Nursing Australia. Guidelines for the Administration of Blood Components. 1st Edition, October 2004
- Australian Red Cross Blood Service. Transfusion Medicine Manual, 2003. Blood transfusion and clinical use of blood in Australia.
- Bayside Health Guidelines - Blood Component Administration, June 2003.
- Birch C, Hogan C, Mahoney C. "Co-administration of drugs and blood products." Anaesthesia and Intensive Care. 2001 Apr;29(2):137-40
- Burch K J, Phelps SJ and Constance T D, "Effects of an infusion device on the integrity of whole blood and packed red blood cells." American Journal of Hospital Pharmacy. Vol.48, January, pp92-97.
- Handbook of Transfusion Medicine. Blood Transfusion Services of the United Kingdom, 3rd Edition 2001.
- Norville R, Hinds P, Wilimans J, Fairclough D, Fischl S, Kunkel k, 1994 "The effects of Infusion Methods on Platelet Count, Morphology, and Corrected Count Increment in Children with Cancer: In Vitro and In vivo Studies". Oncology Nursing Forum Vol 21, 10, pp 1669-1673.
- The Joanna Briggs Institute for Evidence Based Nursing and Midwifery - Administration of blood and blood products
- The Australian Council on Healthcare Standards EQuIP Update to 3rd Edition ACHS Standards No. 13/03 - April 2005.
- Wozniak E, Finley GAF, Dooley KC and Barnard DR. "Low-Concentration Morphine Infusion Does Not Compromise Packed Red Blood Cell Transfusion" Journal of Pain and Symptom Management. Vol. 22, No.2, August 2001

Last Updated 30-Aug-2006. Authorised by: Tony Cull. Enquiries: Peter Bunworth.