



## Blood Products taken on Retrieval (Collection, Storage, and Transporting)

<b>Scope (Staff):</b>	Nursing and Medical Staff
<b>Scope (Area):</b>	NETS WA

### Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this [disclaimer](#)

### Aim

To describe the process for NETS to follow for ordering and prescribing blood products that will be taken on a NETS retrieval.

This includes storage and transportation requirements to maintain the integrity and viability of blood products (cold chain) and minimise blood product wastage.

### Risk

Non-adherence to this guideline may lead to wastage of blood products and adverse patient outcomes from loss of integrity of the blood products.

### Key Points

- Only certain blood products are considered essential to take on a retrieval and need to be authorised by the NETS Consultant. The NETS Consultant will discuss with the haematologist on call, where appropriate.
- Most regional hospitals will have a supply of leucodepleted O Rh D Negative Red Cells for use in acute major blood loss situations. This may not be CMV Negative, which is preferred for babies, but if the only O Rh D blood available is not CMV Negative it is acceptable to use in the event of acute blood loss. See [Appendix 1](#) for regional centres that hold stock.

## Ordering Blood Products for transfer

Gather the following information prior to calling PathWest QEII Transfusion Medicine Unit (TMU), Pathology Building, Ground Floor (PP Block).

- Maternal FULL NAME, DOB, UMRN (if public hospital), address if not public patient
- The hospital where the mother and infant are currently located so TMU can check for any previous laboratory records
- Maternal group and antibody status, i.e., any pre-existing antibodies (if known)
- For mothers who are Rh D Negative when they last received Rh D I-g
- Infant's SURNAME, DOB, Time of birth. The infant also needs to have a public hospital UMRN before any blood product can be issued. If the infant is in a private hospital, they need to be preadmitted to 3B so a UMRN can be generated prior to issue.
- Infant's blood group and DAT status wherever available.
- Authorising NETS Consultant
- Important to communicate to TMU about the referral location, anticipated transfer duration, mode of transport and timeframes to depart (max time cold chain needed)
- Product required and volume
- If there is an indication (either clinical or laboratory parameters) to transfuse FFP or platelets, it is essential to carry them with NETS-WA team from TMU as these products are not routinely available in other hospitals

### QEII TMU Contact details

- Phone: PCH 34015
- VOCERA: Transfusion Medicine
- Outside Line 08 6383 4015
- TMU will notify 3B Shift Coordinator (VOCERA) when the product is ready
- Arrange PCA to collect

## Procedure to follow by the NETS team on receipt of the blood products from QEII

Blood products MUST be packed in a SHIPPER to transport. Transfusion Medicine Unit (TMU) will pack the blood products into the shipper and seal with a data logger. A shipper is a specialised insulated container that ensures the blood products remain within the required temperature specification during transportation.

The below table lists the recommended storage conditions for blood products during neonatal retrievals:

Blood product	Transport temperature range	Comments
Red blood cells	2-10° C	Ensure cold chain is maintained to achieve the recommended temperature range
Fresh Frozen Plasma, Cryoprecipitate	At or below -25° C	Ensure cold chain is maintained to achieve the recommended temperature range
Platelets	20-24° C	Discontinuation of agitation of platelets during transportation should not exceed 24 hours

*Adapted from the Australian Red Cross Blood Service (2012). Blood Component Information, circular of information. This is in accordance with the policies mentioned in the Australian Red Cross Society recommendations 2022. (accessible at [Lifblood-Shippers-Receipt-and-Use-by-External-Institutions-WI-00635-v10.pdf](#) )*

Ensure that the cold chain is appropriately maintained during the entire transport. If any breach in the cold chain, to discuss with NETS-WA consultant and blood bank at QE11 site about the blood product storage and its further usage.

## On arrival at the referring centre

Prior to breaking the SHIPPER seal confirm that the product is needed. There is a blood transfusion pack in the NETS Orange bag containing all the forms and the necessary resources for blood product administration as well as the Transfusion Reaction reporting form MR120.01.

Follow [Blood and Blood Products: Administration \(health.wa.gov.au\)](#):

- Parental consent should be sought before starting blood products MR417.00.
- Newborn Blood Spot screening is to be completed prior to the administration of any red blood cells.
- Documentation - ensure all blood products and volumes given are prescribed and the administration is documented on the Blood Product Administration Record MR828.03 and NETS Transport MR forms.

## On arrival back to PCH

Shipper to be returned to TMU with logger

## Immunoglobulin Infusion (IVIg) in Isoimmune Haemolytic Jaundice

Haemolytic disease of the fetus and newborn (HDFN) is caused by the destruction of red blood cells (RBC) of the neonate or fetus by maternal immunoglobulin G (IgG) antibodies. This is in context of Rh or ABO blood group incompatibility.

Privigen (Immunoglobulin Normal 5g/50mLs) is included in the CAHS formulary. See [Intravenous Immunoglobulin \(IVIg\) \(health.wa.gov.au\)](http://health.wa.gov.au)

It is restricted to haemolytic disease of newborn in neonatal patients and is stored in the automated dispensing machine (ADM) under Immunoglobulin to enable immediate access for use in Priority 1 retrievals at the sole discretion of the NETS or 3B Consultant. The Haematologist on-call at PCH should be informed about the use of IVIg for this indication during working hours the following day.

Consultants must be registered as authorised prescribers via the [Special Access Scheme · Custom Portal \(health.gov.au\)](http://health.gov.au).

### Inclusion criteria

Indicated to prevent the need for first or repeat exchange transfusion in select cases of severe haemolytic disease of the newborn (HDN) undergoing intensive phototherapy. Specifically, it may be used when:

- Positive Direct Antiglobulin Test (DAT)
- Total serum bilirubin (TSB) continues to rise at 8-17mmol/L/hour despite intensive phototherapy
- TSB is within 35-50mmol/L of the threshold for exchange transfusion.
- Other isoimmune haemolytic disease
- Difficulties obtaining appropriate blood for exchange transfusion
- Parental refusal for exchange transfusion.

If necessary Privigen may be re-dosed 12 hours after first administration.

### Related CAHS internal policies, procedures, and guidelines

PCH Transfusion Protocols [Transfusion Medicine Protocols \(health.wa.gov.au\)](https://www.health.wa.gov.au/health-topics/transfusion-medicine-protocols)  
 Neonatology [Blood and Blood Products: Administration \(health.wa.gov.au\)](https://www.health.wa.gov.au/health-topics/blood-and-blood-products-administration)  
[Intravenous Immunoglobulin \(IVIg\) \(health.wa.gov.au\)](https://www.health.wa.gov.au/health-topics/intravenous-immunoglobulin-ivlg)


### References and related external legislation, policies, and guidelines

1. Australian Red Cross Blood Service Blood Component Information Circular of Information. (Melbourne, Victoria, 2012).at  
<<http://resources.transfusion.com.au/cdm/ref/collection/p16691coll1/id/18>(link is external)>
2. [Lifeblood-Shippers-Receipt-and-Use-by-External-Institutions-WI-00635-v10.pdf](#)
3. Australian Red Cross Society recommendations 2022. (accessible at [Lifeblood-Shippers-Receipt-and-Use-by-External-Institutions-WI-00635-v10.pdf](#) )

### Useful resources (including related forms)

CAHS Public Internet Consumer Information [Blood transfusion for your baby](#)

This document can be made available in alternative formats on request.

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## Healthy kids, healthy communities

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Excellence

Collaboration

Accountability

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## Appendix 1: Regional Centres that hold Emergency O Rh D Negative for maternal/neonatal resuscitation.

### Kimberley

- Derby Hospital – (10 x O Positive, 8 x O Negative)
- Broome Hospital – (8 x O Positive, 10 x O Negative, 6 x A Positive)
- Kununurra Hospital – 8 x O Positive, 4 x O Negative, 4 x A Positive)

### Pilbara

- Hedland Health Campus – (10 x O Positive, 6 x O Negative)
- Nickol Bay Hospital – 6 x O Positive, 6 x O Negative, 2 x A Positive)

### Goldfields

- Kalgoorlie Hospital – (13 x O Positive, 8 x O Negative, 13 x A Positive)
- Esperance Hospital – 10 x O Positive, 6 x O Negative, 6 x A Positive)

### Midwest

- Carnarvon Hospital – (6 x O Positive, 4 x O Negative)
- Geraldton Hospital – (12 x O Positive, 8 x O Negative, 8 x A Positive, 2 x A)

### Wheatbelt

- Narrogin Hospital – (6 x O Positive, 6 x O Negative)
- Northam Health Service – (8 x O Positive, 4 x O Negative)

### Great Southern

- Albany Health Campus – (16 x O Positive, 10 x O Negative, 8 x A Positive, 2 x A Negative)
- Katanning Health Service – (4 x O Positive, 4 x O Negative)

### South West

- Bridgetown Hospital – (2 x O Negative)
- Bunbury Regional Hospital – (20 x O Positive, 14 x O Negative, 10 x A Positive, 6 x A Negative)
- Busselton Hospital – (7 x O Positive, 6 x O Negative, 3 x A Negative)
- Collie Hospital – (4 x O Positive, 2 x O Negative, 2 x A Positive)
- Margaret River Hospital – (2 x O Negative)
- Warren/Manjimup Hospital – (6 x O Positive, 4 x O Negative)