



# Safety Information 001/18

## ABO Compatibility for Blood Products in an Emergency

**19 June 2018**

**Distributed to:**

- Chief Executives
- Directors of Clinical Governance
- Regulation and Compliance Unit

**We recommend you also inform:**

- Directors of Emergency Departments
- Directors of ICU/HDUs
- Directors of Medical Services
- Directors of Nursing
- Directors of Operating Theatres
- Directors of Pathology Services

**Expert Reference Group**

Content reviewed by:

- NSW Health Pathology
- CEC Blood Watch
- Clinical Haematologist
- OCHO

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**Review date**  
June 2019

**Background**

There have been 3 incidents over the last 20 months of ABO incompatible plasma transfusions during emergency treatment: Group O plasma products were given when the patients' blood group was unknown.

This safety information seeks to raise awareness of the potential for error when issuing blood products to a patient of unknown blood group during an emergency.

**ABO Blood Group Rules for Different Blood Products**

In emergency situations the patient's blood group should be determined as soon as possible and once known the patient should receive ABO-matched blood products wherever possible.

When the blood group is unknown the table below outlines the correct blood groups for the 3 products likely to be given in an emergency:

Patient ABO Group Unknown			
	Red Cells	Plasma Products	Platelets
First Choice	O	AB	A or O
Second Choice		A (low titre anti-B)	

Ref: Australian Red Cross Blood Service  
[https://transfusion.com.au/blood\\_basics/compatibility](https://transfusion.com.au/blood_basics/compatibility)

**Note:** Group A Plasma Products may be issued as the second choice due to stock restrictions. These should have a low titre anti-B identified on the label

**Action for Blood Management Committees**

Review Massive Transfusion Protocols (MTP) to ensure that:

- One clinician has primary responsibility for liaison with the laboratory during an MTP or emergency.
- Clinical staff are informed that the ABO compatibility for Plasma Products is different to that of red cells
- The LIS rules and control checks are robust enough to ensure that incompatible ABO groups cannot be issued in error.
- Blood products issued in an emergency from the Laboratory are issued via the LIS prior to release as a checking process.
- An alternative safety check should be considered where there is a manual sign out process in an emergency from a satellite location.

**Suggested actions by Local Health Districts/Networks**

1. Distribute this Safety Information to all relevant laboratory and clinical staff to ensure they are aware of the potential for error to issue the wrong blood products during MTP.
2. Follow up the review instigated by this bulletin and any actions that are deemed necessary at the Blood Management Committee to ensure completion.

Made Obsolete September 2022