

Blood Matters fresh frozen plasma audit 2023

Introduction and audit instructions

OFFICIAL

Background:

The Blood Matters program assists health services meet the accreditation requirements of the Blood Management Standard (7) of the National Safety and Quality Health Service Standards, by supporting use of blood components in accordance with best practice guidelines.

Regular auditing is undertaken with health services to evaluate if policies, procedures, and practices align with current national guidelines and benchmark with other (like) health services.

The 2023 audit is the appropriate use of fresh frozen plasma (FFP), in accordance with the National Blood Authority Patient Blood Management Guidelines and indications for use published at: [Lifeblood](#). The audit has been developed in conjunction with Australian Red Cross Lifeblood (Lifeblood), the National Blood Transfusion Committee and Blood Matters. Audit data submission will be using the Lifeblood Audit tool.

Appropriate use of fresh frozen plasma (FFP)

- FFP is used for patients with a coagulopathy (as detected by abnormal laboratory tests such as international normalised ratio (INR)) who are bleeding or at risk of bleeding, and where a specific therapy or factor concentrate is not appropriate or is unavailable.
- The prophylactic use of FFP for medical patients with a coagulopathy is not supported in current patient blood management (PBM) guidelines.
- Recent Evolve recommendations state FFP may be considered at an INR threshold >1.8 in the perioperative period. Higher thresholds should be considered in patients with end stage liver disease, where there is balanced haemostasis, as conventional coagulation studies correlate poorly with bleeding.
- Plasma exchange with FFP is an accepted treatment for patients with thrombotic thrombocytopenic purpura (TTP).
- FFP use in massive transfusion is an accepted treatment.
- It is appropriate to use FFP in cases of warfarin overdose with life-threatening bleeding in addition to Prothrombin Complex Concentrates (PCC), e.g. Prothrombinex-VF. Where PCCs are not available, FFP is suggested in patients with life-threatening or clinically significant bleeding, and for urgent preoperative warfarin reversal.

FFP is not indicated in the following circumstances:

- when you can correct coagulopathy effectively with specific therapy, such as vitamin K, cryoprecipitate, factor VIII or other specific factor concentrates
- in plasma exchange procedures except for treatment in thrombotic thrombocytopenic purpura (TTP), or

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- treatment of immunodeficiency states.

Dosage: consider 15-20 mL/kg for adults.

Aim:

To gain further understanding of FFP use in adult patients across health services and assess if use is in accordance with current guidelines.

Objectives:

- To assess the use of FFP in Australian hospitals against current guidelines, ([Warfarin reversal](#), [NBA PBM modules](#), [Evolve 5](#)).
- Provide the auditor with a snapshot of the current use of FFP in their organisation and to identify patient blood management improvement opportunities.
- To benchmark practice against other health services.
- To inform the National Blood Transfusion Committee of practice gaps and opportunities for improved practice.

Method:

The audit has been developed in conjunction with Australian Red Cross Lifeblood (Lifeblood), the National Blood Transfusion Committee and Blood Matters.


Data submission will be using the Lifeblood Audit tool [Lifeblood audit site](#).

This is a retrospective audit of the medical records of up to 30 FFP transfusion episodes (or all transfusion episodes if less than 30) occurring between 1 April 2022 and 31 March 2023.

Data collected contains no patient identifiers, except age and gender.

Inclusions: all adult patients (≥ 18 years of age) receiving FFP transfusion between 1 April 2022 and 31 March 2023.

Exclusions: neonatal and paediatric patients (< 18 years of age)

The audit tool contains  information buttons throughout to indicate when further information is available for the auditor, please click on these to read information.

Data return to Blood Matters:

Data collectors are encouraged to use and keep the data collection tool provided for their records should there be any queries related to the data. The collection tool will allow the auditor to record the patient medical record number (MRN) along with the audit entry identification number, please DO NOT submit MRNs when entering data – this is for your information only.

The Lifeblood Audit tool allows for individual audits entered to be printed as well as the generation of a summary report.

When data entry for health services in Victoria, Tasmania, Northern Territory and Australian Capital Territory (contributors to the Blood Matters program) is complete please:

1. Export and save your data as a CSV file
2. Email this file to Blood Matters bloodmatters@redcrossblood.org.au
 - with subject “FFP audit 2023”

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- include health service name and contact details.

If you would prefer your data to be sent and received in an encrypted manner, please email bloodmatters@redcrossblood.org.au to request a SecureSend link be sent to you for data transfer.

No FFP transfusions: If no FFP transfusions have occurred during this period at your health service please email Blood Matters at bloodmatters@redcrossblood.org.au with subject "FFP audit 2023", to state this, and be sure to include health service name and contact details.

Please complete the audit and email the data to Blood Matters by 1 July 2023.

Should you choose to conduct further audits using the Lifeblood Audit tool you may do so. The additional data will not be part of the Blood Matters audit, however this could be useful information for your health service and Lifeblood for auditing and reporting purposes.

Should you have any concerns please contact Blood Matters on 03 9694 0102 or email bloodmatters@redcrossblood.org.au

Definitions

Fresh Frozen Plasma (FFP) - Plasma is the liquid part of blood and contains antibodies, clotting proteins and albumin. It is processed to make FFP, which can be derived from either a collection of whole blood or apheresis plasma.

International Normalised Ratio (INR) - is a standardised measurement of the time it takes for blood to clot.

References:

Australian Red Cross Lifeblood - Blood Book Australian Blood Administration Handbook First edition, March 2020 [bloodbook_firstedition_june2020revised.pdf \(transfusion.com.au\)](#)

Australian Red Cross Lifeblood – Use of fresh frozen plasma [Use of fresh frozen plasma \(FFP\) | Lifeblood](#)

Health Direct - International normalised ratio (INR) test – measures blood clotting if you take warfarin [International normalised ratio \(INR\) test – measures blood clotting if you take warfarin | healthdirect](#)

National Blood Authority Patient Blood Management Guidelines [Patient Blood Management Guidelines | National Blood Authority](#)

National Blood Authority Patient Blood Management Guidelines : Companion 26 [companion-26-pbm-guidelines.pdf \(blood.gov.au\)](#)

Royal College of Pathologists and Australian and New Zealand Society of Blood Transfusion Evolve recommendations (point number 5 relates to FFP) [FINAL-evolve_top-five_anzsbt.pdf](#)

To receive this document in another format, phone 03 9694 0102, using the National Relay Service 13 36 77 if required, or email Blood Matters, [email <bloodmatters@redcrossblood.com.au >](mailto:bloodmatters@redcrossblood.com.au).

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