Information for staff managing
Transfusion related notifications in ims+

Purpose

To assist NSW Health facilities to fulfil their obligations under The National Safety and Quality Health Service Blood Management Standard. Action 7.08 requires facilities to participate in the National Haemovigilance Program (the Program). This resource is not a clinical management guide and should not be used to determine the type of transfusion reaction. Please refer to NSW Policy Directive (PD2018_042) and locally endorsed resources for clinical management e.g: Lifeblood Acute transfusion reactions.

Notification and review of transfusion-related notifications

Under the Program, incidents that align with the Australian haemovigilance minimum data set are to be reported to the National Blood Authority (NBA). The Clinical Excellence Commission, via the Blood Watch Program is responsible for identifying, analysing and reporting collated incident data to the NBA. This process requires specific information to be recorded in **ims+** to facilitate this work**.** The guidance and templates (Appendix 1) support health services in providing the required incident details at the notification, investigation or review stages of incident management. Past *Annual Australian Haemovigilance Reports* can be found here.

Staff completing the review stage transfusion-related incidents are to liaise with staff who have transfusion expertise, where required. The use of the templates is not mandatory; however, they represent the minimum information required to facilitate haemovigilance at both facility and state levels. Additional information may be added to meet local requirements.

Using the templates

Templates for more common incidents are provided to minimise data entry requirements and prompt reviewing staff to gather the required information from the patient healthcare record and pathology records. Select the appropriate template and copy into an appropriate ims+ field. Information in *grey italics* can be either completed / deleted / modified as required. Please document any further information (beyond that in the original notification) that assists in understanding the incident. If able, please include an imputability rating (see table below).

Please note, information provided in attached documentation is not captured in the NSW data extraction.

Imputability[1] *refers to the likelihood or probability of the reaction being attributed to the transfusion and usually requires transfusion-related expertise to assess.*	
0	***Excluded:*** When there is conclusive evidence beyond reasonable doubt for attributing the reaction to causes other than blood or blood components.
1	***Unlikely:*** When the evidence is clearly in favour of attributing the adverse reaction to causes other than the transfusion.
2	***Possible:*** When the evidence is indeterminate for attributing the adverse reaction to the transfusion.
3	***Probable (likely):*** When the evidence is clearly in favour of attributing the adverse reaction to the transfusion.
4	***Definite (certain):*** When there is conclusive evidence beyond reasonable doubt for attributing the adverse reaction to the transfusion.
9	***Not Assessable:*** When there are insufficient data for assessment.

References

1. *National Blood Authority (2015) Australian Haemovigilance Minimum Data Set (Version 1)*
2. *Australian Red Cross Lifeblood (2022). Acute transfusion reactions - Poster, Lifeblood.*
3. *Blood Matters (2023). Blood Matters: Serious Transfusion Incident Reporting guide.*

Where can I find more information?

Information about the classification and incidence of adverse events is available at:

- Australian Red Cross Lifeblood Website
- Australian and New Zealand Society of Blood Transfusion Website

The Blood Watch Program assists local health districts and specialty networks in NSW to manage and monitor adverse events related to transfusion. CEC-Bloodwatch@health.nsw.gov.au

Appendix 1 [2,3]

All acute reactions: minimum information required	Febrile reactions
HAEMOVIGILANCE Blood product details: Transfusion reaction to *PRODUCT TYPE* Unit Number: xxxxxxxx Concomitant (within 6 hours) products: Modifications: *Nil / irradiated / washed* Signs and symptoms started *xxx mins/hours* into transfusion Vital signs: Baseline: RR= SpO_2= BP= HR= T= Peak/trough: RR= SpO_2= BP= HR= T= Other signs and symptoms:	Post transfusion reaction test results (if applicable): *Pre and post transfusion samples compatible with PRODUCT TYPE unit number xxxxx* *Patient blood cultures:* *Pack cultures:* Other relevant results: Clinical Outcome or Transfusion reaction type (if known): *Mild febrile non-haemolytic transfusion reaction* *Severe febrile non-haemolytic transfusion reaction* *Transfusion-transmitted bacterial infection* *Acute haemolytic transfusion reaction* Imputability (probability):
Urticaria or rash	**Dyspnoea reactions**
Other clinical findings: *(Delete those not evident)* *Dyspnoea (hoarseness, stridor, wheezing, chest pain, anxiety)* *severe hypotension, bronchospasm, cyanosis* *Nausea / vomiting* *Mucocutaneous signs and symptoms* e.g.,: *morbilliform rash with itching / urticarial /* *localised angioedema oedema of lips, tongue and uvula /* *periorbital pruritus erythema and oedema / conjunctival oedema* *Further relevant information if available* Post transfusion reaction test results (if known): *Tryptase level* *Haptoglobin* *IgA levels* Clinical Outcome or Transfusion reaction type (if known): Suspected / confirmed *Minor allergic reaction* *Severe allergic reaction* *Anaphylaxis* Imputability (probability):	Other clinical findings e.g: *Pulmonary oedema evident (suspect TACO)* *Bilateral infiltrates evident (suspect TRALI)* *Elevated JVP* *Fluid balance status* *Medications administered and response* (e.g: diuretics / steroids / GTN) Post transfusion reaction test results (if applicable): *Elevated / normal* BNP or N terminal-pro BNP levels *Other relevant test results* Lifeblood test results/feedback (if requested): Clinical Outcome or Transfusion reaction type (if known): Suspected / confirmed *Transfusion Associated Circulatory Overload (TACO)* *Transfusion Related Acute Lung Injury (TRALI)* *Transfusion-transmitted bacterial infection* *Anaphylaxis* Imputability (probability):
Delayed haemolytic transfusion reaction (DHTR)	**Delayed serological transfusion reactions (DSTR)**
HAEMOVIGILANCE - DHTR Blood product details: Transfusion reaction to *PRODUCT TYPE* Unit Number: xxxxxxxx Modifications: *Nil / irradiated / washed* Post transfusion test results: There is demonstrated clinically significant antibodies against red blood cells which were previously absent and there **ARE** clinical and laboratory features of haemolysis. Criteria evident: *(Delete those not evident)* • *a fall in Hb or failure to increment* • *rise in bilirubin and LDH* • *incompatible cross match not detectable pre-transfusion.* Outcome and Imputability/probability:	HAEMOVIGILANCE - DSTR Blood product details: Transfusion reaction to *PRODUCT TYPE* Unit Number: xxxxxxxx Modifications: *Nil / irradiated / washed* Post transfusion test results: There is demonstrated clinically significant antibodies against red blood cells which were previously absent and there **ARE NO** clinical or laboratory features of haemolysis. Outcome and Imputability/probability: