

## Transfusion-related Adverse Reaction Notification Form

### Patient Details

Patient NHI:	DOB:	Gender:	Hospital:
Surname:			Ward:
Given Names:			Consultant:

### Transfusion Details & Clinical History

Date of transfusion	/ /	Time transfusion started	am / pm
Time adverse reaction noticed	am / pm	Volume transfused	mL
Reaction occurred during/following: (please circle)	Red Cells	Platelets	Fresh Frozen Plasma
	Other*	* Please contact Blood Bank for advice. A Fractionated Product Reaction form is required.	
Donation number(s) of unit(s) transfused.			
Patient's diagnosis & other relevant medical/surgical history.			
Will further blood component support be required in the next 24 hours?			

### Signs and Symptoms

Observations prior to transfusion:	Temp:	Pulse:	BP:	RR:	O <sub>2</sub> sat <sup>n</sup> :
Observations at time of reaction:	Temp:	Pulse:	BP:	RR:	O <sub>2</sub> sat <sup>n</sup> :

Please circle **relevant symptoms** listed below & provide details

Febrile: Chills / Rigors / Flushing	Temperature rise: °C
Allergic: Urticaria Isolated / Extensive	Non-urticarial rash Anaphylaxis
Respiratory: Dyspnoea / Wheeze / Stridor / Pulmonary oedema / Cough / Hypoxaemia	
Circulatory: Raised JVP / Hypertension / Arrhythmia / Hypotension	
Pain: Chest / Loin / Abdominal / Infusion site / Other:	
Restlessness / Anxiety	Red urine: Yes / No / Unknown
Patient under anaesthesia: Yes / No	No symptoms
Chest X-ray changes:	
Comments/other signs and symptoms:	

Please record any investigations undertaken at the bedside: (see overleaf for indications and guidance)

<input type="checkbox"/> Unit/infusion set to Blood Bank	<input type="checkbox"/> EDTA to Blood Bank	<input type="checkbox"/> FBC, Film, Coag screen to Haem	<input type="checkbox"/> Other:
<input type="checkbox"/> U&E, haptoglobin, bilirubin, LDH +/- ABGs to Biochem	<input type="checkbox"/> Blood cultures to Micro	<input type="checkbox"/> Ward urinalysis for Hb	

Reported by: Date: Contact Number/Pager:

Clinical advice is available when adverse transfusion reactions occur. Contact numbers can be obtained via blood bank.

# Adverse Transfusion Reactions Management Guideline

## Mild Reactions:

### First mild reaction:

#### Symptoms:

#### ♦ Mild febrile reaction

- Temperature increase  $< 1.5^{\circ}\text{C}$  from baseline
- Stable haemodynamics
- No respiratory distress & no other symptoms

OR

#### ♦ Mild allergic reaction

- Occasional urticarial spots & no other symptoms

#### Action:

1. **Check** swing label & recipient identity.
2. **Slow** transfusion.
3. **Call** for medical assessment.
4. Medical staff may consider the need to prescribe paracetamol for pyrexia or antihistamines for urticaria.
5. **Continue** transfusion at a **slower rate** with **increased monitoring**, e.g. TPR/BP at 15-30 minute intervals.
6. **Send** 1 x group & screen (EDTA) tube to blood bank + this completed form.
7. **Document** in patients clinical notes.

**If symptoms increase treat as a moderate or severe reaction.**



### Subsequent transfusion and

#### ♦ Recurrence of mild febrile reactions

OR

#### ♦ Recurrence of mild allergic reactions

#### Action:

1. **Febrile reaction:** consider giving premedication of an antipyretic (e.g. paracetamol).
2. **Urticarial/allergic reaction:** consider giving premedication of an antihistamine (e.g. oral Phenergan). Slow transfusion administration rate.

**Note: Hydrocortisone is not usually indicated.**

## Moderate and Severe Reactions:

### Symptoms: may include:

- ♦ Fever  $\geq 1.5^{\circ}\text{C}$  from baseline with or without rigors / chills
- ♦ Unexpected tachycardia or change in blood pressure
- ♦ Acute breathlessness, desaturation, wheeze, stridor or cyanosis
- ♦ Facial oedema + / - pharyngeal or laryngeal oedema
- ♦ Extensive erythematous or urticarial rash
- ♦ Acute pain up transfusion arm
- ♦ Chest or loin pain
- ♦ Severe apprehension
- ♦ JVP acutely elevated, onset of crepitations in lung
- ♦ Haemoglobinuria

### Action:

#### 1. Stop transfusion. **THEN** :

- Check swing label and recipient identity information is correct.
- Call for help: urgent medical review required.
- Maintain ABC and monitor vital signs.
- Comfort and keep patient informed.

2. **Replace** infusion set; administer saline to keep vein open and, or maintain blood pressure.
3. **Treat and stabilise** patient as per medical directives.
4. **Obtain** specimens based on **clinical signs/symptoms** (collect away from site of cannula):

- ♦ Blood group serology: 1 x group & screen (EDTA) tube: send ASAP to **blood bank** with this completed form + infusion set + attached blood bag (sealed in a plastic bag).
- ♦ If **haemolysis** suspected: send full blood count, blood film, coag screen to **Haematology**; U&E, haptoglobin, bilirubin, LDH to **biochemistry** and complete a ward urinalysis.
- ♦ If **sepsis** is suspected: send blood cultures to **microbiology**.
- ♦ If **respiratory distress** present: send blood gases to **biochemistry**.

5. Notify Blood Bank promptly by phone: Discuss further transfusion needs and/or any special requirements.
6. **For all severe transfusion reactions:** inform the NZBS Transfusion Medicine Specialist (TMS) or Clinical Haematologist **immediately**. They will provide clinical advice and support.
7. **Document** in patients clinical notes.

**Adjunct treatment:** depends on cause, clinical state, test results and TMS or Clinical Haematologist consultation:

- ♦ **Sepsis** likely: broad spectrum antibiotics as per local DHB severe sepsis antibiotic guidelines.
- ♦ **Anaphylaxis/anaphylactoid** reaction: as per local DHB anaphylaxis guidelines; depending on severity can include adrenaline IM & antihistamines IV.
- ♦ **Transfusion associated circulatory overload (TACO):** diuretics and oxygen, positive airway pressure.
- ♦ **Transfusion related acute lung injury (TRALI):** respiratory support. NZBS will initiate blood donor investigation.
- ♦ If **HLA antibodies** suspected: The TMS or Clinical Haematologist will advise.
- ♦ **Recurrent severe allergic reactions:** Discuss with TMS or Clinical Haematologist. Use of washed cellular components may be required.
- ♦ **Acute haemolysis:** Discuss with TMS or Clinical Haematologist. Maintain blood pressure, force diuresis and alkalise urine.

**Please report all transfusion reactions to Blood Bank. For all severe transfusion reactions contact the Transfusion Medicine Specialist (TMS) or Clinical Haematologist immediately.**