

Acute Transfusion Reaction (ATR) - Notification to Blood Bank

Patient NHI: _____ DOB: _____ Male / Female
Family Name: _____
Given Names: _____

Hospital: _____
Ward: _____
Was the patient under general anaesthesia and/or ventilated?
☐ Yes ☐ No

Transfusion Details

Date / time transfusion started: _____

Volume
transfused
(mL or units)

Date / time transfusion reaction detected: _____

Donation/unit number(s) on the implicated blood component(s): _____

Which blood component(s) were administered?

☐ Red Cells ☐ Fresh Frozen Plasma ☐ Platelets ☐ Cryoprecipitate ☐ Other *

*If the reaction was to a fractionated plasma product (e.g. IVIg), use the form **111F003** available from Blood Bank or www.nzblood.co.nz

Clinical History

Patient's diagnosis and reason for transfusion: _____

Will further blood component support be required in the next 24 hours? ☐ Yes ☐ No ☐ Unknown

Patient Vital Signs/Observations

Baseline (pre starting unit)	RR:	SpO ₂ :	% <input type="checkbox"/> R/A or <input type="checkbox"/> O ₂ _____ % or L	HR:	BP:	Temp:	°C
At time of reaction	RR:	SpO ₂ :	% <input type="checkbox"/> R/A or <input type="checkbox"/> O ₂ _____ % or L	HR:	BP:	Temp:	°C

See ATR management guidelines overleaf. Clinical advice is always available. Contact via your local Blood Bank.

Mild reaction

☐ Temperature > 38°C and < 1.5°C from baseline with no other symptoms

or

☐ Localised rash with no other symptoms

Select only one box above

If additional symptoms are present you **must** complete the moderate/severe reaction section

After medical review:
Send this form to Blood Bank. **No** blood tests are required.

Or

Moderate or severe or life-threatening reaction

Signs and Symptoms - tick all that apply.

<input type="checkbox"/> Pyrexia/fever	<input type="checkbox"/> Rigors / Chills	<input type="checkbox"/> Tachycardia	<input type="checkbox"/> Bradycardia
<input type="checkbox"/> Hypertension	<input type="checkbox"/> Hypotension	<input type="checkbox"/> Hypoxia	<input type="checkbox"/> Cough
<input type="checkbox"/> Restless/Anxiety	<input type="checkbox"/> Tachypnoea	<input type="checkbox"/> Dyspnoea	<input type="checkbox"/> Arrhythmia
<input type="checkbox"/> Extensive rash or urticaria	<input type="checkbox"/> Angioedema	<input type="checkbox"/> Wheeze +/- Stridor	
<input type="checkbox"/> Extensive flushing	<input type="checkbox"/> Elevated JVP	<input type="checkbox"/> Pulmonary oedema	
<input type="checkbox"/> LOC change	<input type="checkbox"/> Red/black urine	<input type="checkbox"/> Chest and /or Loin Pain	
<input type="checkbox"/> Pain at IV site	<input type="checkbox"/> Jaundice	<input type="checkbox"/> Abnormal bleeding	
<input type="checkbox"/> Diarrhoea	<input type="checkbox"/> Nausea	<input type="checkbox"/> Vomiting	

Other?

Clinical interventions/medications to manage reaction?

Send Standard ATR Investigations:

☐ TO BLOOD BANK: implicated unit/IV set, hand-labelled pink top sample & this form. Include a completed NZBS request form if further transfusion is likely.
☐ TO PATHOLOGY: FBC, blood film & UE ☐ WARD urinalysis

Additional Investigations?

☐ Haptoglobin, LDH, coagulation screen (if evidence of haemolysis)
☐ CXR, ABGs, BNP (if respiratory distress)
☐ Serum tryptase +/- anti-IgA antibodies (if severe allergy/anaphylaxis)
☐ Blood cultures (if sepsis / shock possible or present)

Reported by: _____ Date: _____ Contact No. _____

ACUTE TRANSFUSION REACTIONS

Recognise. Respond. Report.

PATIENT HAS SIGNS AND SYMPTOMS SUGGESTIVE OF POTENTIAL TRANSFUSION REACTION



Assess: rapid clinical assessment

Check: confirm patient ID band matches blood swing label details

Inspect: visual check of unit for turbidity, clots or abnormal appearance

Talk with the Patient: establish status, inform and comfort

**Are symptoms LIFE THREATENING? Airway/Breathing/Circulation?
OR Wrong Blood Given? OR Evidence of Abnormal Unit?**

YES

NO

Severe or Life Threatening Events

- ✓ **CALL** for **urgent** medical help and review
- ✓ **INITIATE** Resuscitation: ABC
- ✓ **DISCONNECT** IV infusion set/unit – do **NOT** discard/restart
- ✓ **MAINTAIN** venous access with saline via **NEW** infusion set
- ✓ **ADMINISTER** IV fluids/O₂ if clinically indicated
- ✓ **MONITOR** TPR/BP/SpO₂/urine output (q5-15 min)
- ✓ **TREAT** according to clinical status/symptoms, noting:
 - ? **anaphylaxis/severe allergy**: use NZRC Anaphylaxis Guide
 - ? **septic shock**: use DHB Sepsis Guidelines
 - ? **acute haemolysis**: maintain BP, force diuresis, alkalinise urine
 - ? **circulatory overload**: diuretics, O₂, positive airway pressure
 - ? **TRALI**: respiratory support, ask NZBS to start donor review

ALERT: Is haemorrhage a possible cause of the hypotension?
Resuscitate with fluids and consider further transfusion

INFORM your local clinical haematologist or TMS via Blood Bank ASAP or, contact directly if treatment advice needed

INFORM medical staff – seek PROMPT clinical review

Moderate Events

- ✓ All symptoms that are not classified as mild, severe or life threatening

Management

- ✓ Disconnect IV infusion set/unit – do **NOT** discard set/unit
- ✓ Replace IV infusion set
- ✓ Maintain venous access with saline
- ✓ Treat according to clinical status
- ✓ Do **NOT** restart transfusion

Mild Events

- ✓ Fever > 38°C and < 1.5°C above baseline with no other symptoms
- ✓ Localised rash with no other symptoms

Medical Review

- ? If fever – consider antipyrexial
- ? If localised rash – consider antihistamine

Management

- ✓ Consider restarting transfusion at slower rate. Directly observe for first 15 minutes
- ✓ Increase frequency of monitoring vital signs (TPR/BP/SpO₂) thereafter

Reporting

- ✓ Document in clinical notes
- ✓ Send NZBS ATR Notification Form (111F009) to Blood Bank
- ✓ No blood tests required

Investigations and Reporting

- ✓ **DO** – 'Standard ATR Investigations' and undertake 'Additional Investigations' as needed
- ✓ **COMPLETE** – NZBS ATR Notification Form (111F009)
- ✓ **SEND** – blood unit/IV set, ATR Notification Form and EDTA (pink) sample to BB and other samples to Pathology
- ✓ **RECORD** – in clinical notes

If symptoms worsen?

STOP transfusion and manage as per a **moderate** or **severe** event