## Transfusion-related Adverse Reaction Notification Form

### Patient Details

<table>
<thead>
<tr>
<th>Patient NHI:</th>
<th>DOB:</th>
<th>Gender:</th>
<th>Hospital:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Surname:                |  | Gender: | Hospital: |
|-------------------------| |---------|-----------|
|                         | |         |           |

<table>
<thead>
<tr>
<th>Given Names:</th>
<th>Hospital:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ward:</th>
<th>Consultant:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

### Transfusion Details & Clinical History

<table>
<thead>
<tr>
<th>Date of transfusion</th>
<th>Time transfusion started</th>
<th>Time adverse reaction noticed</th>
<th>Volume transfused</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>am / pm</td>
<td>am / pm</td>
<td>mL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reaction occurred during/following:</th>
<th>Red Cells</th>
<th>Platelets</th>
<th>Fresh Frozen Plasma</th>
<th>Cryoprecipitate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(please circle)

<table>
<thead>
<tr>
<th>Donation number(s) of unit(s) transfused.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

| 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:**

<table>
<thead>
<tr>
<th>Temp:</th>
<th>Pulse:</th>
<th>BP:</th>
<th>RR:</th>
<th>O₂ sat:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Observations at time of reaction:**

<table>
<thead>
<tr>
<th>Temp:</th>
<th>Pulse:</th>
<th>BP:</th>
<th>RR:</th>
<th>O₂ sat:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**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)

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

**Reported by:**

<table>
<thead>
<tr>
<th>Date:</th>
<th>Contact Number/Pager:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**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˚C from baseline
  - Stable haemodynamics
  - No respiratory distress & no other symptoms
- **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.

If symptoms increase treat as a moderate or severe reaction.

### Subsequent transfusion and

1. **Recurrence of mild febrile reactions**
2. **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 ≥1.5˚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.

**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 alkalinise urine.

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