

## IMMEDIATE ACTIONS!

1. STOP the transfusion
2. Maintain IV access
3. Check vital signs
4. Re-check patient ID band and product label
5. Notify patient's physician
6. Notify Blood Bank - Send Reaction Slip

# REACT

SIGNS & SYMPTOMS		USUAL TIMING	POSSIBLE ETIOLOGY	RECOMMENDED INVESTIGATIONS	SUGGESTED TREATMENT AND ACTIONS
Fever (at least 38°C and an increase of at least 1°C from baseline)  <b>and/or</b> Shaking Chills/ Rigors	38°C to 38.9°C but <b>NO</b> other symptoms	During or up to 4 hours post transfusion	Febrile non-hemolytic transfusion reaction	Reaction slip only No testing required	<ul style="list-style-type: none"> <li>▲ Antipyretic</li> <li>▲ With physician approval transfusion may be resumed cautiously if product still viable</li> </ul>
	Less than 39°C but with other symptoms (e.g. rigors, hypotension) <b>or</b> 39° C or more	Usually within first 15 minutes but may be later	Febrile non-hemolytic transfusion reaction  Bacterial contamination  Acute hemolytic transfusion reaction	<ul style="list-style-type: none"> <li>▲ Group &amp; Screen, DAT</li> <li>▲ Patient blood culture(s)</li> <li>▲ Urinalysis</li> </ul> If hemolysis suspected (e.g. red urine or plasma) <ul style="list-style-type: none"> <li>▲ CBC, electrolytes, creatinine, bilirubin, LDH, aPTT, INR, fibrinogen, haptoglobin, plasma Hb</li> </ul>	<p><b>Do not restart transfusion</b></p> <ul style="list-style-type: none"> <li>▲ Antipyretic</li> <li>▲ Consider Meperidine (Demerol®) for significant rigors</li> <li>▲ If bacterial contamination suspected, antibiotics should be started immediately</li> <li>▲ Monitor for hypotension, renal failure and DIC</li> <li>▲ Return blood product to Blood Bank</li> <li>▲ For additional assistance, contact Transfusion Medicine Physician on call</li> </ul>
Urticaria (hives)  Itching  <b>or</b>  Rash	Less than 2/3 body but <b>NO</b> other symptoms	During or up to 4 hours post transfusion	Minor allergic	Reaction slip only No testing required	<ul style="list-style-type: none"> <li>▲ Antihistamine</li> <li>▲ With physician approval transfusion may be resumed cautiously if product still viable</li> </ul>
	2/3 body or more but <b>NO</b> other symptoms	Usually early in transfusion	Minor allergic (extensive)	Reaction slip only No testing required	<p><b>Do not restart transfusion</b></p> <ul style="list-style-type: none"> <li>▲ Antihistamine</li> <li>▲ May require steroid</li> </ul>
	Accompanied by other symptoms (e.g. dyspnea, hypotension)	Usually early in transfusion	Anaphylactoid reaction/ Anaphylaxis	<ul style="list-style-type: none"> <li>▲ Group &amp; Screen, DAT</li> <li>▲ Chest X-Ray (if dyspneic)</li> <li>▲ Blood gases (if dyspneic)</li> <li>▲ Haptoglobin</li> <li>▲ Anti-IgA testing</li> </ul>	<p><b>Do not restart transfusion</b></p> <ul style="list-style-type: none"> <li>▲ Epinephrine</li> <li>▲ Washed/plasma depleted blood products pending investigation</li> <li>▲ Return blood product to Blood Bank</li> <li>▲ For additional assistance, contact Transfusion Medicine Physician on call</li> </ul>
Dyspnea  <b>or</b>  Decrease in SpO <sub>2</sub> % to 90% or less (and a change of at least 5% from baseline)	Typically with Hypertension	Within several hours of transfusion	Transfusion associated circulatory overload (TACO)	<ul style="list-style-type: none"> <li>▲ Group &amp; Screen, DAT</li> <li>▲ Chest X-Ray</li> <li>▲ Blood gases</li> <li>▲ Urinalysis</li> </ul>	<p><b>Do not restart transfusion</b></p> <ul style="list-style-type: none"> <li>▲ IV diuretics, oxygen, High Fowler's position</li> <li>▲ Return blood product to Blood Bank</li> <li>▲ Slow transfusion rate with diuretics for future transfusions</li> </ul>
	Typically with Hypotension	Within 6 hours of transfusion	Transfusion related acute lung injury (TRALI)	If sepsis suspected: <ul style="list-style-type: none"> <li>▲ Patient blood culture(s)</li> </ul> If hemolysis suspected: <ul style="list-style-type: none"> <li>▲ CBC, electrolytes, creatinine, bilirubin, LDH, aPTT, INR, fibrinogen, haptoglobin, plasma Hb</li> </ul> If anaphylaxis suspected: <ul style="list-style-type: none"> <li>▲ Haptoglobin, Anti-IgA</li> </ul>	<p><b>Do not restart transfusion</b></p> <ul style="list-style-type: none"> <li>▲ Assess chest X-Ray for bilateral pulmonary infiltrates</li> <li>▲ If TRALI, may require vasopressors and respiratory support</li> <li>▲ If bacterial contamination suspected, antibiotics should be started immediately</li> <li>▲ Monitor for hypotension, renal failure and DIC</li> <li>▲ If anaphylaxis suspected, epinephrine</li> <li>▲ Return blood product to Blood Bank</li> <li>▲ For additional assistance, contact Transfusion Medicine Physician on call</li> </ul>
		Usually within first 15 minutes but may be later	Bacterial contamination  Acute hemolytic transfusion reaction  Anaphylaxis		