

Acute Transfusion Reaction Chart

! IMMEDIATE ACTIONS

- ✓ **STOP** transfusion
- ✓ **RUN** 0.9% saline to maintain site patency using different IV tubing
- ✓ **CHECK** vital signs or start continuous monitoring if severe reaction
- ✓ **RE-CHECK** patient ID band, TSIN band, blood label, and transfusion tag

- ✓ **NOTIFY MRHP**
- ✓ **NOTIFY** Transfusion Medicine
- ✓ **ORDER** Transfusion Reaction Investigation

Information:

- For acute transfusion reaction assistance, call Transfusion Medicine / Laboratory and request the TM Physician on call
- For questions or comments on this document: Transfusion.SafetyTeam@aplabs.ca

Signs & Symptoms	Timing	Next Steps	Investigation & Procedures	Possible Etiology	Future Transfusions	
FEVER Adults and Peds: Higher than 38°C Neonates: higher than 37.6°C and increase of at least 1°C from baseline	38°C up to 39°C and no other symptoms	Usually near end of transfusion Order Transfusion Reaction Investigation Send to TM: printed CC flowsheet (see CC1942 *) or <i>Transfusion Reaction Report</i>	<ul style="list-style-type: none"> Consider Acetaminophen. May restart transfusion cautiously, if less than 4 hours from issue time. 	FNHTR (febrile non-hemolytic transfusion reaction)	Premed with antipyretic after two episodes.	
	Up to 39°C and chills, rigors, hypotension, shock nausea, vomiting, headache	Usually within first 15 minutes Order Transfusion Reaction Investigation		DO NOT RESTART TRANSFUSION <ul style="list-style-type: none"> Monitor patient closely. Consider Acetaminophen. Consider Meperidine (25-50 mg IV) for shaking/chills (contact pharmacy). If bacterial contamination suspected, order blood cultures then start antibiotics. Order urinalysis If symptoms include hemoglobinuria, flank pain, anxiety or plasma hemolysis is reported: <ul style="list-style-type: none"> Draw CBC, electrolytes, creatinine, bilirubin, INR, PTT, fibrinogen & LDH Monitor for hypotension, renal failure (measure urine output/hour), and DIC IV Normal Saline (Adults: 500 mL/hr) and furosemide (40mg IV). Consult nephrologist on call. 	BACT (bacterial contamination)	
	39°C or higher and chills, nausea, vomiting, pain, dyspnea, tachycardia, hypotension, bleeding, hemoglobinuria	Within 24 hours of transfusion Send to TM: printed CC flowsheet (see CC1942 *) or <i>Transfusion Reaction Report</i> <ol style="list-style-type: none"> EDTA (lavender top) blood sample Offending product 			AHTR (acute hemolytic transfusion reaction)	
URTICARIA hives or rash	Less than 2/3 of body and no other symptoms	Usually within 2-3 hours from start Order Transfusion Reaction Investigation Send to TM: printed CC flowsheet (see CC1942 *) or <i>Transfusion Reaction Report</i>	<ul style="list-style-type: none"> Consider diphenhydramine IV or PO (Adults: 50 mg, Peds: 1mg/kg). May restart transfusion cautiously, if less than 4 hours from issue time. 	Minor allergic	Premed with antihistamine after two episodes.	
	More than 2/3 of body and may have dyspnea, airway obstruction, SOB, decreased O2 sats, decreased BP	Usually early during transfusion Order Transfusion Reaction Investigation		Send to TM: <ol style="list-style-type: none"> Printed CC flowsheet (see CC1942 *) or <i>Transfusion Reaction Report</i> EDTA (lavender top) blood sample Offending product 	Severe allergic/ Anaphylactic/ Anaphylactoid	May require special blood components. Consult Transfusion Medicine Physician on call.
	With severe symptoms Profound hypotension, loss of consciousness, circulatory collapse, death	Usually early during transfusion			Anaphylactic Shock	
DYSPNEA SOB, decreased O2 sats	Congestive Heart Failure and may have hypertension, orthopnea, cyanosis, tachycardia, jugular venous distension, pulmonary edema, pedal edema, headache	During or within 6 hours of transfusion Order Transfusion Reaction Investigation Send to TM: <ol style="list-style-type: none"> Printed CC flowsheet (see CC1942 *) or <i>Transfusion Reaction Report</i> EDTA (lavender top) blood sample Offending product 	DO NOT RESTART TRANSFUSION <ul style="list-style-type: none"> If respiratory difficulty, activate Code Blue/respiratory. Continuous monitoring (pulse, BP, resps O2 sats). Give diuretics (Furosemide), O2, place in high Fowler's if condition allows. 	TACO (transfusion associated circulatory overload)	Decrease infusion rate (1 ml/kg/hr- max 4 hr/bag). Consider preload with diuretic or between transfusions.	
	Cyanosis, respiratory distress	Within 24 hours of transfusion		Transfusion Associated Dyspnea		
	and/or Hypotension, tachycardia, fever, cyanosis	Within 6 hours of transfusion; usually within first 15 minutes Order Transfusion Reaction Investigation, obtain chest x-ray results Send to TM: <ol style="list-style-type: none"> Printed CC flowsheet (see CC1942 *) or <i>Transfusion Reaction Report</i> EDTA (lavender top) blood sample Offending product 		DO NOT RESTART TRANSFUSION <ul style="list-style-type: none"> If respiratory difficulty, activate Code Blue/respiratory. Continuous monitoring (pulse, BP, resps, O2 sats). O2, possible intubation, ventilation or vasopressors. If bacterial contamination suspected, order blood cultures then start antibiotics immediately. If symptoms include hemoglobinuria, flank pain, anxiety or plasma hemolysis is reported: <ul style="list-style-type: none"> Draw CBC, electrolytes, creatinine, bilirubin, INR, PTT, fibrinogen & LDH. Monitor for hypotension, renal failure (measure urine output/hour) and DIC. IV Normal Saline (Adults: 500 mL/hr) and furosemide (40 mg IV). Consult nephrologist on call. Assess chest X-ray for bilateral pulmonary infiltrates 	TRALI (transfusion related acute lung injury) Differentiate from BACT or AHTR	