NORTHWEST TERRITORIES Health and Social Services Authority	**Document Name: Transfusion Reaction Chart** **Distribution: Transfusion Medicine Manual**	**Document Number: TMM110000** **Date Issued: Aug 4, 2021** **Version: 1.0**

Suspected Transfusion Reaction Signs and Symptoms		Timing of Symptoms	Immediate Actions	Investigation Send to Lab	Suggested Treatment and Further Investigations	Possible Etiology
Fever > 38°C **And** ↑ of at least 1°C from baseline	38°C to <39°C **and** **NO** other symptoms	During transfusion. up to 4 hours post transfusion	1. **STOP** the Transfusion (do not disconnect product) 2. Maintain IV access – Run 0.9% Saline at KVO rate in different IV tubing 3. **CHECK vital signs** or start continuous monitoring if severe reaction 4. **RE-CHECK** patient ID band vs. blood bank number and blood label 5. **NOTIFY** physician or ordering clinician 6. **NOTIFY** the Lab	Complete Transfusion Reaction Investigation Form	1. Consider Acetaminophen 2. **Restart Transfusion Cautiously** if product still viable with physician approval & order (<4 hours from start of transfusion)	Febrile non-hemolytic transfusion reaction
	Less than 39°C but with other symptoms (rigors, hypotension, chills, nausea, vomiting, headache)	Usually in first 15 mins, may be later	• Complete Transfusion Reaction Investigation Form • Collect EDTA (pink top):Type and Screen, Direct Antigen Test • Return product/unit Hemolysis suspected: Order CBC, electrolytes, creatinine, bilirubin, INR, PTT, Fibrinogen & LDH	1. **DO NOT RESTART TRANSFUSION** 2. Monitor patient closely 3. consider Acetaminophen 4. if bacterial contamination suspected – start antibiotics immediately; order blood cultures and routine urinalysis 5. Consider Meperidine for shaking/chills 6. Monitor for hypotension, renal failure by measuring urine output/hour and DIC 7. Consult with Transfusion Medicine Physician on call @ AHS	Febrile non-hemolytic transfusion reaction Bacterial Contamination
	39°C or greater	Within 24 hours of transfusion				Acute hemolytic transfusion reaction
Urticaria (hives) Itching or Rash	Less than 2/3 of body and NO other symptoms	During or up to 4 hours post transfusion		Complete Transfusion Reaction Investigation Form	1. Consider Antihistamine 2. **Restart Transfusion Cautiously** if product still viable with physician approval & order (<4 hours from start of transfusion)	Minor Allergic
	2/3 or more of body and NO other symptoms	Usually early in transfusion	• Complete Transfusion Reaction Investigation Form • Collect EDTA (pink top): Type and Screen, Direct Antigen Test • Return product/unit	1. **DO NOT RESTART TRANSFUSION** 2. **If respiratory difficulty, activate Code Blue/respiratory** 3. **Mild to moderate reaction with stable V/S:** corticosteroids, antihistamines 4. **Severe anaphylactoid reaction and/or unstable V/S:** Epinephrine, Bolus Normal Saline 5. **Continuous monitoring (pulse, BP, resps, O_2 sats)** 6. Chest x-ray & urinalysis 7. May require special blood products in future – consult with Transfusion Medicine Physician on call @ AHS	Severe allergic/ Anaphylactic/ Anaphylactoid
	Accompanied by other symptoms: hypotension, loss of consciousness, circulatory collapse, death	Usually early in transfusion				Anaphylactic Shock
Dyspnea (SOB, ↓ O_2 sats)	Typically with Hypertension Congestive heart failure, orthopenea, cyanosis, tachycardia, jugular venous distension, pulmonary edema, pedal edema, headache	Within several hours of transfusion	• Complete Transfusion Reaction Investigation Form • Collect EDTA (pink top) blood sample • Return product/unit	1. DO NOT RESTART TRANSFUSION 2. If respiratory difficulty, activate Code Blue/respiratory 3. Continuous monitoring (pulse, BP, resps O2 sats) 4. Give diuretics (Furosemide), O2, place in high Fowler's if condition allows 5. Subsequent transfusions: ↓ infusion rate (1 ml/kg/hr- max 4 hr/bag) 6. Consider preload with diuretic or between transfusions	**TACO** (Circulatory overload) Transfusion associated Dyspnea
	Typically with Hypotension	Within 6 hours of transfusion	• Complete Transfusion Reaction Investigation Form • Collect EDTA (pink top): Type and Screen, Direct Antigen Test, and Red top sample • Return product/unit Hemolysis suspected: Order CBC, electrolytes, creatinine, bilirubin, INR, PTT, Fibrinogen & LDH	1. **DO NOT RESTART TRANSFUSION** 2. If respiratory difficulty, activate Code Blue/respiratory 3. Continuous monitoring (pulse, BP, resps, O2 sats) 4. O2, possible intubation, ventilation or vasopressors 5. If bacterial contamination suspected → start antibiotics immediately – draw blood cultures 6. Monitor for hypotension, renal failure by measuring urine output/hour and DIC 7. Start IV infusion of Normal Saline prevent renal failure 8. Assess chest X-ray for bilateral pulmonary infiltrates. 9. Consult with Transfusion Medicine Physician on call @ AHS	**TRALI** Transfusion related acute lung injury
		Usually first 15 mins but may be later				• Bacterial Contamination • Acute hemolytic transfusion reaction • Anaphylaxis

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