IMMEDIATE ACTIONS!	SIGNS & SYMPTOMS		Usual Timing	Possible Etiology	Recommended investigations	Suggested Treatment and Actions
 STOP the transfusion Maintain IV access Check vital signs Re-check patient ID band and product label Notify physician Notify Transfusion Laboratory 	Fever (at least 38° C and an increase of at least 1° C from baseline) and/or Shaking Chills/ Rigors	38°C to 38.9°C but NO other symptoms	During or up to 4 hours post transfusion	Febrile non-hemolytic transfusion reaction	No testing required	 ▲ Antipyretic ▲ With physician approval transfusion may be resumed cautiously if product still viable
		Less than 39°C but with other symptoms (e.g. rigors, hypotension) or 39°C or more	Usually within first 15 minutes but may be later	Febrile non-hemolytic transfusion reaction Bacterial contamination Acute hemolytic transfusion reaction	If hemolysis suspected (e.g. red urine or plasma)	Do not restart transfusion ▲ Antipyretic ▲ Consider Meperidine (Demerol®) for significant rigors ▲ If bacterial contamination suspected, antibiotics should be started immediately ▲ Monitor for hypotension, renal failure and DIC ▲ Return blood product to Transfusion Laboratory ▲ For additional assistance, contact
	Urticaria (hives) Itching or Rash	Less than 2/3 body but NO other symptoms	During or up to 4 hours post transfusion	Minor allergic	No testing required	 ▲ Antihistamine ▲ With physician approval transfusion may be resumed cautiously if product still viable
		2/3 body or more but NO other symptoms	Usually early in transfusion	Severe allergic	No testing required	Do not restart transfusion ▲ Antihistamine ▲ May require steroid
		Accompanied by other symptoms (e.g. dyspnea hypotension)	Usually early in transfusion	Anaphylaxis		Do not restart transfusion ▲ Epinephrine ▲ Washed/plasma depleted blood products pending investigation ▲ Return blood product to Transfusion Laboratory ▲ For additional assistance, contact
	or Decrease in SpO ₂ %	Typically with Hypertension	Within several hours of transfusion	Transfusion associated circulatory overload (TACO)	If sepsis suspected: If hemolysis suspected: If anaphylaxis suspected:	Do not restart transfusion ▲ Diuretics, oxygen, High Fowler's position ▲ Return blood product to Transfusion Laboratory ▲ Slow transfusion rate with diuretics for future transfusions
		Typically with Hypotension	Within 6 hours of transfusion Usually within first 15 minutes but may be later	Transfusion related acute lung injury (TRALI) Bacterial contamination Acute hemolytic transfusion reaction Anaphylaxis		Do not restart transfusion ▲ Assess chest X-Ray for bilateral pulmonary infiltrates ▲ If TRALI may require vasopressors and respiratory support ▲ If bacterial contamination suspected, antibiotics should be started immediately ▲ Monitor for hypotension, renal failure and DIC ▲ If anaphylaxis suspected, epinephrine ▲ Return blood product to Transfusion Laboratory ▲ For additional assistance, contact

^{*} Adapted from the Ontario TTISS (Transfusion Transmitted Injuries Surveillance System) Transfusion Reaction Chart