

PATIENT EXHIBITS SIGNS AND SYMPTOMS OF AN ADVERSE EVENT:

1. **STOP** the transfusion and maintain sterility / place sterile cap on blood tubing.
2. With **NEW IV line** maintain IV patency with appropriate fluid.
3. Contact the **AUTHORIZED PRESCRIBER (AP)** for medical assessment and the **TRANSFUSION MEDICINE (TM) lab** to notify them of an adverse event.
4. Check vital signs every 15 minutes, at minimum, until stable.
5. Recheck the component / product label, TM tag and patient ID to ensure they match and the expiry date and time has not passed to rule out a verification or clerical error.



What is a sign or symptom?

NEW onset of ANY of the following during or after the transfusion:

- Fever (38°C or above)
- Chills / Rigors
- Hypotension / shock
- Hypertension
- Unexplained anxiety
- Back / chest / flank pain
- Severe headache
- Dyspnea / respiratory distress
- Tea colored urine
- Bleeding / pain from IV site
- Nausea / vomiting
- Tachycardia / arrhythmias
- Generalized flushing
- Hives / rash
- Patient states they feel unwell

NOTE: Consider bacterial contamination if the patient exhibits any of the following during or within 4 hours post transfusion:

1. Temperature rise 1°C or more, to 38°C or above PLUS any of the following:
 - rigors
 - shock
 - hypotension
 - tachycardia
 - dyspnea
 - nausea/vomiting
2. Temperature rise over 39°C and of 1°C or more; with or without other signs or symptoms
3. Fever unresponsive to antipyretics and / or suspicion of sepsis in absence of fever

- Consult with AP on possible interventions
- Call TM lab to notify them of an adverse event
- Document clinical assessment and actions
- Resume transfusion cautiously ONLY as directed by AP
- Patient should be directly observed for the first 5 minutes after resuming transfusion then closely monitored for the next 10 minutes

If remainder of transfusion is uneventful, send the following to the TM lab:

- a. Blood work (if required – consult AP and TM) *
- b. Completed TM Tag (exception for CZ) †
- c. Component / product and administration set (if required –consult TM)
- d. Copy of TAR and / or progress notes, graphics sheet and medication record

IF THE TRANSFUSION MUST BE DISCONTINUED

Call TM lab to notify them and treat as per AP's orders

Send the following 4 items to TM lab:

- a. Blood work (1 Red top and 1 EDTA [Pink or Lavender top]) *
- b. Completed TM Tag (exception for CZ) †
- c. Component / product and administration set
- d. Copy of completed TAR and additional clinical information (progress notes, graphics sheet and medication records) as necessary

Patient may also require additional testing such as:

Blood cultures, chest x-ray, EKG, or urine specimen

FOR ALL ADVERSE EVENTS: ENSURE CLINICALLY SIGNIFICANT INFORMATION IS DOCUMENTED ON THE TRANSFUSION ADMINISTRATION RECORD (TAR) AND / OR PROGRESS NOTES, GRAPHIC SHEET AND MEDICATION RECORD AND SENT TO TM.

† Central Zone: Complete the front and back of the TAR and fax both sides to TM lab at (HI) 473-4285 (VG) 473-7422. The TM Tag and TAR (original) will remain in the patient's chart.

* Possible exception for pediatric patients: lab testing to be performed at discretion of Hematopathologist.

Investigation of Suspected Adverse Transfusion Events		
Signs and Symptoms	Testing Requirements	Suspected Reaction
Rash/hives over $\leq 1/4$ of body with no respiratory symptoms	None	Minor Allergic
Rash/hives with any one or more of the following: <ul style="list-style-type: none"> - Airway compromise (tightness in throat, hoarseness, stridor dyspnea, cough, wheezing, hypoxemia) - Profound hypotension (loss of consciousness, circulatory collapse, death) 	Tier Testing Consider: <ul style="list-style-type: none"> • Haptoglobin • Chido/Rogers • Serum IgA 	Severe Allergic/ Anaphylactic/ Anaphylactoid
Temperature rise $\geq 1^{\circ}\text{C}$ and $< 38^{\circ}\text{C}$ with no other signs or symptoms and onset greater than 15 minutes into transfusion	N/A unless requested by Medical Director/Designate	N/A
Temperature rise $\geq 1^{\circ}\text{C}$ and $\geq 38^{\circ}\text{C}$ with no other signs or symptoms	Tier Testing	Febrile Non-Hemolytic Reaction (FNHR)
Temperature rise $\geq 1^{\circ}\text{C}$ and $\geq 38^{\circ}\text{C}$ and/or any of the following: Rigors; Dyspnea; Hypotension; Shock; Nausea/vomiting; Tachycardia OR: Temperature rise $> 39^{\circ}\text{C}$ and $\geq 1^{\circ}\text{C}$ even in the absence of other signs or symptoms OR: Temperature rise not responding to antipyretics and/or suspicion of sepsis in absence of fever	Tier Testing <ul style="list-style-type: none"> • Blood Cultures from a different IV site • Component / Product Cultures (Include a Gram Stain) 	FNHR Acute Hemolytic Bacterial Contamination
Any one or more of the following: Chills/Rigors, sensation of cold, any pain, headache, bleeding from IV site, nausea/vomiting, jaundice, tea colored urine, unexplained anxiety, cardiac arrhythmias, tachycardia, generalized flushing, patient states feels unwell	Tier Testing	Acute Hemolytic IVIG Headache Other
Any one of the following: <ul style="list-style-type: none"> -Drop in systolic BP greater or equal to 30 mmHg -Systolic less than 80 mmHg -Signs of shock Advise BTS if patient on ACE Inhibitors **In Pediatrics look for any significant change in BP	Tier Testing	Hypotensive Reaction **<i>(Hypotension in Pediatrics is highly variable)</i>
Any one of the following: Shortness of breath, dyspnea, cyanosis, hypertension, respiratory distress, tachycardia, congestive heart failure during or within 6 hours of completion of transfusion	Tier Testing AND Chest X-Ray	Transfusion Associated Circulatory Overload (TACO) Transfusion Associated Dyspnea (TAD)
Acute onset of respiratory distress, during or within 6 hours of completion of transfusion, O ₂ Saturation less than 90% on room air, bilateral lung infiltrates confirmed by Chest X-Ray, No evidence of circulatory overload	Tier Testing AND Chest X-Ray Initiate TRALI Investigation	TRALI (Transfusion Related Acute Lung Injury)

Tier Testing Samples required: EDTA Tube (Pink or Lavender Top) and Red Top Tube

Note: Possible exception for pediatric patients -lab testing will be performed at discretion of Physician

Key: \geq : Greater than or equal to $<$: Less than $>$: Greater than