

Hemovigilance Module Adverse Reaction Investigation Form

***Required fields**

***Facility ID#:** _____ ***Reporter Name:** _____ NHSN Adverse Reaction #: _____ ***Medical Record #:** _____

Recipient Information

Last Name: _____ First Name: _____ Middle Name: _____

***Patient ID:** _____ ***Date of Birth:** ___/___/___ ***State of Residence:** _____

***Sex:** M F Not Available/Missing

Ethnicity: Hispanic or Latino Not Hispanic or Not Latino Unknown Declined to Respond

Race (check all that apply): American Indian/Alaska Native Asian Black or African American
 Middle Eastern/North African Native Hawaiian/Other Pacific Islander
 White Unknown Declined to Respond

Blood Group: A- A+ B- B+ AB- AB+ O- O+
 Indeterminate ABO / Rh + Indeterminate ABO / Rh - Indeterminate ABO/Indeterminate Rh
 Group A/ Indeterminate Rh Group B/ Indeterminate Rh Group O/ Indeterminate Rh
 Group AB/ Indeterminate Rh Blood Group Not Tested

Recipient Medical History

***Did the recipient have any of the following comorbid conditions present at the time of transfusion?**

Sickle cell disease Yes No Unknown
 Thalassemia Yes No Unknown

Recipient Adverse Reaction Details

***Date reaction occurred (Onset Date):** ___/___/___ Unknown Time reaction occurred: ___:___ Unknown

***Did the transfusion occur at your facility?** Yes No

***If no, facility name:** _____ ***If no, facility address:** _____

Facility location where patient was transfused: [CDC Location Dropdown]

Is this reaction associated with an incident? Yes No

If Yes, Incident Type (select all that apply): _____ [Multiselect Incident Code Dropdown]

*** Was this reaction reported following a massive transfusion protocol?** Yes No Unknown

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS H21-8, Atlanta, GA 30333, ATTN: PRA (0920-0666).

Recipient Clinical Presentation¹

Signs and symptoms: (check all that apply): Asymptomatic

- Generalized: Fever Headache Chills/rigors
- Cardiovascular: Hypotension Tachycardia Jugular venous distension (JVD)
 Hypertension Evidence of left heart failure Peripheral edema
 No evidence of left arterial hypertension Widened pulse pressure Enlarged cardiac silhouette
- Cutaneous: Flushing Bleeding at IV site
 Jaundice Rash Pruritus (itching)
 Oozing at IV site Urticaria (hives)
 Cyanosis
- Pain: Back pain Abdominal pain Flank pain
- Gastrointestinal: Nausea/vomiting Diarrhea
- Renal: Oliguria/anuria Renal failure Hematuria (gross visual hemolysis)
 Hemoglobinuria
- Respiratory: Bilateral infiltrates on chest x-ray Bronchospasm Cough Dyspnea
 Hypoxemia Orthopnea Pulmonary edema on chest x-ray
 No evidence of acute lung injury prior to transfusion Acute lung injury during or within 6 hours of cessation or transfusion
 Tachypnea Acute or worsening pulmonary edema
- Hematological: Epistaxis Disseminated intravascular coagulation (DIC) Hemoglobinemia
 Plasma discoloration c/w hemolysis
- Laboratory: Decreased fibrinogen Decreased haptoglobin Elevated bilirubin
 Positive direct antiglobulin test (DAT) for anti-IgG or anti-C3 Elevated LDH
 Positive elution test with alloantibody present on the transfused red blood cells
 Serologic testing is negative and physical cause (e.g., thermal, osmotic, mechanical, chemical) is confirmed.
 Elevated NT-pro BNP relevant biomarker Elevated brain natriuretic peptide (BNP)
 Spherocytes on blood film Elevated central venous pressure (CVP)
 Positive antibody screen Decreased oxygen saturation values in absence of other specific causes
- Other: (specify) _____

¹Please refer to the NHSN Biovigilance Component Hemovigilance Module Surveillance Protocol glossary for clinical definitions and case definition criteria (i.e. signs/symptom onset within 12 hours for TACO or 24 hours for AHTR). For example, only report back/flank pain if onset within 24 hours of cessation of transfusion for AHTR reactions.

Recipient Treatment

Did the patient receive treatment for the transfusion reaction? Yes No Unknown

If yes, select treatment(s):

- Medication (Select the type of medication)
- Antipyretics Antihistamines Epinephrine Other Inotropes Vasopressors Bronchodilator
 Diuretics Intravenous steroids Oral steroids Antibiotics Aspirin
 Ascorbic acid Other: (specify) _____
- Volume resuscitation (select type of therapy)
- Intravenous colloids Intravenous crystalloids
- Respiratory support (Select the type of support)

- Intubation and mechanical ventilation ECMO Oxygen Noninvasive positive pressure ventilation
 Non-Rebreather Mask Nasal Cannula Increased oxygen concentration
 Renal replacement therapy (*Select the type of therapy*)
 Hemodialysis Peritoneal dialysis Continuous Veno-Venous Hemofiltration
 Phlebotomy (to decrease blood volume)
 Other: (specify) _____

Recipient Outcome

- *Outcome:** Death Intensive care unit (ICU)
 Hospitalization directly attributable to adverse reaction, including prolonged hospitalization
 Life-threatening reaction Disability and/or incapacitation Symptomatic treatment

***If Death, Date of Death:** ___/___/___ ***If Death, Cause of death:** [ICD-10 code dropdown]

***If recipient died, relationship of transfusion to death:**

- Definite Probable Possible Doubtful Ruled Out Not Determined

Transfused Component Details (recipient)² (report all transfused components within 24 hours of reaction onset)

*Transfusion Start and End Date/Time	*ISBT-128 Component code	Amount transfused at reaction onset	*Donation Identification Number (DIN)	*Unit expiration Date/Time ³	*Unit Blood group	*Implicated Unit?
___/___/___ ___:___:___ ___/___/___ ___:___:___	_____	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____ mL	W _____ _____ _____ ____	___/___/___ ___:___:___	<input type="checkbox"/> A- <input type="checkbox"/> A+ <input type="checkbox"/> B- <input type="checkbox"/> B+ <input type="checkbox"/> AB- <input type="checkbox"/> AB+ <input type="checkbox"/> O- <input type="checkbox"/> O+ <input type="checkbox"/> N/A	Y/N/U
___/___/___ ___:___:___ ___/___/___ ___:___:___	_____	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____ mL	W _____ _____ _____ ____	___/___/___ ___:___:___	<input type="checkbox"/> A- <input type="checkbox"/> A+ <input type="checkbox"/> B- <input type="checkbox"/> B+ <input type="checkbox"/> AB- <input type="checkbox"/> AB+ <input type="checkbox"/> O- <input type="checkbox"/> O+ <input type="checkbox"/> N/A	Y/N/U

²NHSN Hemovigilance module will generate Blood Collection Organization from the DIN. Module will generate pathogen reduction technology status based on ISBT-128 code. ³Enter the expiration date/time of the unit(s) based on unit label.

Laboratory Results (donor and recipient)

Test results relevant to this investigation (Coombs, Direct Antiglobulin Test [DAT], Elution, HLA/HNA antibody testing, Alloantibody):

Donor or Recipient Test name: _____ Collection date: ___/___/___ Test result: _____
 Donor or Recipient Test name: _____ Collection date: ___/___/___ Test result: _____

Investigation Findings

*Adverse Reaction:

- Transfusion-associated circulatory overload (TACO) Transfusion-related acute lung injury (TRALI)
 Acute hemolytic transfusion reaction (AHTR) Other: _____

If AHTR: Immune: Antibodies (select all that apply):

- anti-A anti-A,B anti-B anti-c anti-C anti-D anti-e
 anti-E anti-Fy^a anti-Fy^b anti-JK^a anti-JK^b anti-k
 anti-K anti-M anti-S Other: _____

Physical cause is excluded but serologic evidence is not sufficient to meet definitive criteria

Non-Immune:

- Serologic testing is negative, and physical cause (e.g. thermal, osmotic, mechanical, chemical) is confirmed.
 Physical cause is suspected and serologic testing is negative.

Please refer to the NHSN Hemovigilance Module Protocol for CDC-defined transfusion-associated adverse reactions case definition, severity, and imputability classifications.

*Case Definition

Please select the appropriate Case Definition classification for the adverse reaction:

- Definitive
 Probable [DO NOT SELECT FOR TACO OR TRALI]
 Possible [DO NOT SELECT FOR TACO OR TRALI]

*Severity

Please select the appropriate Severity classification for the adverse reaction:

- Non-severe
 Severe
 Life-threatening
 Death
 Not Determined

*Imputability

Please select the appropriate Imputability classification for the adverse reaction:

- Definite
 Probable [DO NOT SELECT FOR TRALI]
 Possible
 Doubtful
 Ruled Out
 Not Determined

Facility Investigation Notes

*Facility Investigation Status: Ongoing Complete⁴

⁴If report is missing required fields please include reason in Facility Investigation Notes.

CDC Case Management (to be completed by CDC Staff)

CDC Case Manager ID: _____

Report status: Open Closed⁵

⁵Report will be locked. Requests for reports to be unlocked should be sent to nhsn@cdc.gov with "Hemovigilance" in subject line.

CDC Case Management Notes (to be completed by CDC staff)