



Hemovigilance Module Adverse Reaction Transfusion Related Acute Lung Injury

*Required for saving

*Facility ID#: _____ NHSN Adverse Reaction #: _____

Patient Information

*Patient ID: _____ *Gender: M F Other *Date of Birth: ___/___/___
 Social Security #: _____ Secondary ID: _____ Medicare #: _____
 Last Name: _____ First Name: _____ Middle Name: _____
 Ethnicity Hispanic or Latino Not Hispanic or Not Latino
 Race American Indian/Alaska Native Asian Black or African American
 Native Hawaiian/Other Pacific Islander White
 *Blood Group: A- A+ B- B+ AB- AB+ O- O+ Blood type not done

Patient Medical History (Use worksheet on page 4 for additional codes and descriptions.)

(part 1) List the patient's admitting diagnosis. (Use ICD-10 Diagnostic codes/descriptions)

Code: _____ Description: _____
 Code: _____ Description: _____
 Code: _____ Description: _____

(part 2) List the patient's underlying indication for transfusion. (Use ICD-10 Diagnostic codes/descriptions)

Code: _____ Description: _____
 Code: _____ Description: _____
 Code: _____ Description: _____

(part 3) List the patient's comorbid conditions at the time of the transfusion related to the adverse reaction. (Use ICD-10 Diagnostic codes/descriptions)

UNKNOWN
 NONE

Code: _____ Description: _____
 Code: _____ Description: _____
 Code: _____ Description: _____

Continued >>

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 D-74, Atlanta, GA 30333 ATTN: PRA (0920-0666).

CDC 57.317 (Front) Rev1, v8.8

Transfusion Related Acute Lung Injury

Patient Medical History (Use worksheet on page 4 for additional codes and descriptions.)

(part 4) List the patient's relevant medical procedure including past procedures and procedures to be performed during the current hospital or outpatient stay. (Use ICD-10 Procedure codes/descriptions) UNKNOWN
 NONE

Code: _____ Description: _____
 Code: _____ Description: _____
 Code: _____ Description: _____

(part 5) Additional Information _____

Transfusion History (Use worksheet on page 4 for additional transfusion history.)

*Has the patient received a previous transfusion? YES NO UNKNOWN

****If yes, provide information about the transfusion event. If not, skip to Reaction Details section.**

Blood Product: WB RBC Platelet Plasma Cryoprecipitate Granulocyte

Date of Transfusion: ___/___/___ UNKNOWN

Did the patient experience a transfusion adverse reaction? YES NO

If yes, provide information about the transfusion adverse reaction.

Type of transfusion adverse reaction: Allergic AHTR DHTR DSTR FNHTR
 HTR TTI PTP TACO TAD TA-GVHD TRALI UNKNOWN
 OTHER Specify _____

Reaction Details

*Date reaction occurred: ___/___/___ *Time reaction occurred: ___:___ Time unknown

*Facility location where patient was transfused: _____

*Is this reaction associated with an incident? Yes No If Yes, Incident #: _____

After recognition of the transfusion reaction, was the current transfusion:
 Continued Stopped and restarted Stopped indefinitely

Continued >>

Transfusion Related Acute Lung Injury

Investigation Results						
* <input type="checkbox"/> Transfusion related acute lung injury (TRALI)						
				Test result positive		
				Cognate or cross reacting antigen present	No cognate or cross reacting antigen present	Not tested for cognate antigen
	Not Done	Negative				
Donor or unit HLA specificity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Donor or unit HNA specificity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recipient HLA specificity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recipient HNA specificity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***Case Definition**

Check all that apply:

- NO evidence of acute lung injury (ALI) prior to transfusion.
- ALI onset during or within 6 hours of cessation of transfusion
- Hypoxemia – defined as PaO₂/F_iO₂ less than or equal to 300 mm Hg
- Hypoxemia – defined as Oxygen saturation less than 90% on room air
- Hypoxemia – defined as Other clinical evidence
- Radiographic evidence of bilateral infiltrates
- No evidence of left atrial hypertension (i.e., circulatory overload)
- None of the above

Other signs and symptoms: (check all that apply)

Generalized:	<input type="checkbox"/> Chills/rigors	<input type="checkbox"/> Fever	<input type="checkbox"/> Nausea/vomiting
Cardiovascular:	<input type="checkbox"/> Blood pressure decrease	<input type="checkbox"/> Shock	
Cutaneous:	<input type="checkbox"/> Edema	<input type="checkbox"/> Flushing	<input type="checkbox"/> Jaundice
	<input type="checkbox"/> Other rash	<input type="checkbox"/> Pruritus (itching)	<input type="checkbox"/> Urticaria (hives)
Hemolysis/Hemorrhage:	<input type="checkbox"/> Disseminated intravascular coagulation	<input type="checkbox"/> Hemoglobinemia	
	<input type="checkbox"/> Positive antibody screen		
Pain:	<input type="checkbox"/> Abdominal pain	<input type="checkbox"/> Back pain	<input type="checkbox"/> Flank pain
			<input type="checkbox"/> Infusion site pain
Renal:	<input type="checkbox"/> Hematuria	<input type="checkbox"/> Hemoglobinuria	<input type="checkbox"/> Oliguria
Respiratory:	<input type="checkbox"/> Bilateral infiltrates on chest x-ray	<input type="checkbox"/> Bronchospasm	<input type="checkbox"/> Cough
	<input type="checkbox"/> Hypoxemia	<input type="checkbox"/> Shortness of breath	

Other: (specify) _____

Continued >>

Transfusion Related Acute Lung Injury

Investigation Results (continued)

***Severity**

Did the patient receive or experience any of the following? *(Response definitions listed in protocol)*

- | | |
|---|---|
| <input type="checkbox"/> Symptomatic treatment only | <input type="checkbox"/> Hospitalization, including prolonged hospitalization |
| <input type="checkbox"/> Life-threatening reaction | <input type="checkbox"/> Disability and/or incapacitation |
| <input type="checkbox"/> Congenital anomaly or birth defect(s) of the fetus | <input type="checkbox"/> Death |
| <input type="checkbox"/> Other medically important conditions | <input type="checkbox"/> Unknown or not stated |

***Imputability**

Which best describes the relationship between the transfusion and the reaction?

- There are no alternative risk factors for ALI present.
- There is evidence of other causes for acute lung injury.
- Alternative explanations are more likely (e.g., solid organ transplantation).
- Evidence is clearly in favor of a cause other than the transfusion, but transfusion cannot be excluded.
- There is conclusive evidence beyond reasonable doubt of a cause other than the transfusion
- The relationship between the adverse reaction and the transfusion is unknown or not stated.

Did the transfusion occur at your facility? YES NO

Designations for case definition, severity, and imputability will be automatically assigned in the NHSN application based on responses in the corresponding investigation results section above.

Do you agree with the case definition designation? YES NO

Please indicate your designation _____

Do you agree with the severity designation? YES NO

Please indicate your designation _____

Do you agree with the imputability designation? YES NO

Please indicate your designation _____

Additional Information _____

Continued >>

Transfusion Related Acute Lung Injury

Patient Treatment	
*Did the patient receive treatment for the transfusion reaction?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
If yes, select treatment(s):	
<input type="checkbox"/> Medication <i>(Select the type of medication)</i>	
<input type="checkbox"/> Antipyretics	<input type="checkbox"/> Antihistamines
<input type="checkbox"/> Intravenous Immunoglobulin	<input type="checkbox"/> Inotropes/Vasopressors
<input type="checkbox"/> Antithymocyte globulin	<input type="checkbox"/> Cyclosporin
<input type="checkbox"/> Intravenous steroids	<input type="checkbox"/> H1 receptor blockers
<input type="checkbox"/> Corticosteroids	<input type="checkbox"/> Diuretics
<input type="checkbox"/> Antibiotics	<input type="checkbox"/> Other
<input type="checkbox"/> Volume resuscitation (Intravenous colloids or crystalloids)	
<input type="checkbox"/> Respiratory support <i>(Select the type of support)</i>	
<input type="checkbox"/> Mechanical ventilation	<input type="checkbox"/> Noninvasive ventilation
<input type="checkbox"/> Oxygen	
<input type="checkbox"/> Renal replacement therapy <i>(Select the type of therapy)</i>	
<input type="checkbox"/> Hemodialysis	<input type="checkbox"/> Peritoneal
<input type="checkbox"/> Continuous Veno-Venous Hemofiltration	
<input type="checkbox"/> Phlebotomy	
<input type="checkbox"/> Other	Specify: _____
<i>Continued >></i>	

Transfusion Related Acute Lung Injury

Outcome

*Outcome: Death Major or long-term sequelae Minor or no sequelae Not determined

Date of Death: ____/____/____

*If recipient died, relationship of transfusion to death:
 Definite Probable Possible Doubtful Ruled Out Not determined

Cause of death: _____

Was an autopsy performed? Yes No

Component Details (Use worksheet on page 4 for additional units.)

*Was a particular unit implicated in (i.e., responsible for) the adverse reaction? Yes No N/A

Transfusion Start and End Date/Time	*Component code (check system used)	Amount transfused at reaction onset	Unit number	*Unit expiration Date/Time	*Blood group of unit	Implicated Unit?
-------------------------------------	-------------------------------------	-------------------------------------	-------------	----------------------------	----------------------	------------------

^IMPLICATED UNIT

____/____/____ ____:____:____ ____/____/____ ____:____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit mL	____-____-____ ____-____-____	____/____/____ ____:____:____	<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
____/____/____ ____:____:____ ____/____/____ ____:____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit mL	____-____-____ ____-____-____	____/____/____ ____:____:____	<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	N
____/____/____ ____:____:____ ____/____/____ ____:____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit mL	____-____-____ ____-____-____	____/____/____ ____:____:____	<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	N

Custom Fields

Label	Label
_____	_____
_____	_____

Comments

Hemovigilance Module Additional Worksheet

Patient Medical History

(part 1) List the patient's admitting diagnosis. *(Use ICD-10 Diagnostic codes/descriptions)*

Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____

(part 2) List the patient's underlying indication for transfusion. *(Use ICD-10 Diagnostic codes/descriptions)*

Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____

(part 3) List the patient's comorbid conditions at the time of the transfusion related to the adverse reaction. *(Use ICD-10 Diagnostic codes/descriptions)*

UNKNOWN
 NONE

Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____

(part 4) List the patient's relevant medical procedure including past procedures and procedures to be performed during the current hospital or outpatient stay. *(Use ICD-10 Procedure codes/descriptions)*

UNKNOWN
 NONE

Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____
Code: _____	Description: _____

(part 5) Additional Information _____

Hemovigilance Module Additional Worksheet

Transfusion History
<p>Has the patient received a previous transfusion? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><i>**If yes, provide information about the transfusion event. If not, skip to Reaction Details section.</i></p> <p>Blood Product: <input type="checkbox"/> WB <input type="checkbox"/> RBC <input type="checkbox"/> Platelet <input type="checkbox"/> Plasma <input type="checkbox"/> Cryoprecipitate <input type="checkbox"/> Granulocyte</p> <p>Date of Transfusion: ___/___/___ <input type="checkbox"/> UNKNOWN</p> <p>Did the patient experience a transfusion adverse reaction? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If yes, provide information about the transfusion adverse reaction.</p> <p>Type of transfusion adverse reaction: <input type="checkbox"/> Allergic <input type="checkbox"/> AHTR <input type="checkbox"/> DHTR <input type="checkbox"/> DSTTR <input type="checkbox"/> FNHTR</p> <p><input type="checkbox"/> HTR <input type="checkbox"/> TTI <input type="checkbox"/> PTP <input type="checkbox"/> TACO <input type="checkbox"/> TAD <input type="checkbox"/> TA-GVHD <input type="checkbox"/> TRALI <input type="checkbox"/> UNKNOWN</p> <p><input type="checkbox"/> OTHER Specify _____</p>
<p>Has the patient received a previous transfusion? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><i>**If yes, provide information about the transfusion event. If not, skip to Reaction Details section.</i></p> <p>Blood Product: <input type="checkbox"/> WB <input type="checkbox"/> RBC <input type="checkbox"/> Platelet <input type="checkbox"/> Plasma <input type="checkbox"/> Cryoprecipitate <input type="checkbox"/> Granulocyte</p> <p>Date of Transfusion: ___/___/___ <input type="checkbox"/> UNKNOWN</p> <p>Did the patient experience a transfusion adverse reaction? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If yes, provide information about the transfusion adverse reaction.</p> <p>Type of transfusion adverse reaction: <input type="checkbox"/> Allergic <input type="checkbox"/> AHTR <input type="checkbox"/> DHTR <input type="checkbox"/> DSTTR <input type="checkbox"/> FNHTR</p> <p><input type="checkbox"/> HTR <input type="checkbox"/> TTI <input type="checkbox"/> PTP <input type="checkbox"/> TACO <input type="checkbox"/> TAD <input type="checkbox"/> TA-GVHD <input type="checkbox"/> TRALI <input type="checkbox"/> UNKNOWN</p> <p><input type="checkbox"/> OTHER Specify _____</p>
<p>Has the patient received a previous transfusion? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><i>**If yes, provide information about the transfusion event. If not, skip to Reaction Details section.</i></p> <p>Blood Product: <input type="checkbox"/> WB <input type="checkbox"/> RBC <input type="checkbox"/> Platelet <input type="checkbox"/> Plasma <input type="checkbox"/> Cryoprecipitate <input type="checkbox"/> Granulocyte</p> <p>Date of Transfusion: ___/___/___ <input type="checkbox"/> UNKNOWN</p> <p>Did the patient experience a transfusion adverse reaction? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If yes, provide information about the transfusion adverse reaction.</p> <p>Type of transfusion adverse reaction: <input type="checkbox"/> Allergic <input type="checkbox"/> AHTR <input type="checkbox"/> DHTR <input type="checkbox"/> DSTTR <input type="checkbox"/> FNHTR</p> <p><input type="checkbox"/> HTR <input type="checkbox"/> TTI <input type="checkbox"/> PTP <input type="checkbox"/> TACO <input type="checkbox"/> TAD <input type="checkbox"/> TA-GVHD <input type="checkbox"/> TRALI <input type="checkbox"/> UNKNOWN</p> <p><input type="checkbox"/> OTHER Specify _____</p>

Hemovigilance Module Additional Worksheet

Component Details						
*Was a particular unit implicated in (i.e., responsible for) the adverse reaction? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A						
Transfusion Start and End Date/Time	*Component code (check system used)	Amount transfused at reaction onset	Unit number	*Unit expiration Date/Time	*Blood group of unit	Implicated Unit?
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____ ____/____/____ ____:____	<input type="checkbox"/> ISBT-128 <input type="checkbox"/> Codabar	<input type="checkbox"/> Entire unit <input type="checkbox"/> Partial unit _____mL	_____ ____	____/____/____ ____:____	<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	N
____/____/____ ____:____	<input type="checkbox"/> ISBT-128	<input type="checkbox"/> Entire	_____ ____	____/____/____ ____:____	<input type="checkbox"/> A- <input type="checkbox"/> A+ <input type="checkbox"/> B-	N



____ : ____	<input type="checkbox"/> Codabar	unit	____						
____ / ____ / ____	_____	<input type="checkbox"/> Partial unit	_____			<input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	
____ :		_____ mL				+	AB-	AB+	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
						O-	<input type="checkbox"/> O+	N/A	