TRANSFUSION-RELATED ACUTE LUNG INJURY (TRALI)

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REPORTING INFORMATION
(To be completed by the CPSP Senior Coordinator)

Report number:	
Month of reporting:	
Province:	
Today's date:	

Please complete the following sections for the case identified above.
Strict confidentiality of information will be assured.

CASE DEFINITION FOR TRANSFUSION-RELATED ACUTE LUNG INJURY (TRALI)

The diagnosis of TRALI is a clinical and radiological diagnosis and is not dependent on the results of laboratory tests or any proposed pathophysiologic mechanism. Report any child up to and including 18 years of age with TRALI **or** possible TRALI:

TRALI

Inclusion criteria (all three criteria must be present)

- New onset of acute lung injury (ALI) during or within six hours of transfusion
- Hypoxemia: $PaO_2/FiO_2 \leq 300$ or $SpO_2 < 90\%$ on room air
- Bilateral infiltrates on frontal chest radiograph

Exclusion criteria

- Evidence of left atrial hypertension (i.e., circulatory overload)
- Pre-existing **acute** lung injury before transfusion
- Temporal relationship to an alternative risk factor for ALI

Possible TRALI

Same TRALI inclusion criteria and same TRALI exclusion criteria, except that a clear temporal relationship to an alternative risk factor for ALI is **present**, such as:

Direct lung injury	**Indirect lung injury**
Aspiration	Severe sepsis
Pneumonia	Shock
Toxic inhalation	Multiple trauma
Lung contusion	Burn injury
Near drowning	Acute pancreatitis
	Cardiopulmonary bypass
	Drug overdose

SECTION 1 – DEMOGRAPHIC INFORMATION

1.1 Date of birth: _____ /_____ /_____ (DD / MM / YYYY) 1.2 Sex: Male ___ Female ___

SECTION 2 – PATIENT BASELINE DATA

2.1 Weight: _____ kg

2.2 Underlying condition (check all that apply):

___ Chronic lung disease (including bronchopulmonary dysplasia)
specify: _____

___ Prematurity — specify gestational age: _____

___ Transplantation — specify: _____

___ Neurologic disease/encephalopathy — specify: _____

___ Haematologic disease — specify: _____

___ Cardiac disease/congenital heart defect — specify: _____

___ Neoplasic disease — specify: _____

SECTION 2 – PATIENT BASELINE DATA (cont'd)

___ Hepatic/gastro-intestinal disease specify: _____
___ Inflammatory disease specify: _____
___ Renal failure specify: _____
___ Immunossuppression specify: _____
___ Other (specify) _____
___ None

2.3 Primary admission diagnosis: (check all that apply):

___ Infection specify: _____
___ Respiratory insufficiency specify: _____
___ Multiple trauma specify: _____
___ Metabolic/genetic disorder specify: _____
___ Transplantation specify: _____
___ Poisoning/drug overdose specify: _____
___ Elective surgery specify: _____
___ Seizure/encephalopathy specify: _____
___ Neoplastic disease specify: _____
___ Shock/cardiac insufficiency specify: _____
___ Inflammatory disease specify: _____
___ Haematologic disease specify: _____
___ Acute deterioration of chronic disease specify: _____
___ Other (specify) _____

2.4 Previous transfusion(s): No ___
Yes ___ specify: Single ___ Multiple ___ Unknown ___

SECTION 3 – TRANSFUSION DATA (most of this information can be easily obtained by calling your blood bank, if not available in the chart)

3.1 Date of transfusion: _____ /_____ /_____
DD MM YYYY

3.2 Time at beginning of transfusion: _____ Time at end of transfusion: _____

3.3 Indication for transfusion: _____

3.4 Type of blood donation: Allogeneic ___ Autologous ___
Directed donation ___ specify: mother ___ father ___ other ___

3.5 Type of blood product: Red blood cell ___ Frozen plasma ___
Platelets ___ specify: apheresis ___ Whole-blood derived ___
Cryoprecipitate ___ Other (specify) _____

3.6 Volume of blood product given: _____ (approximation in mL)

3.7 Was the TRALI reaction reported to the blood bank? Yes ___ No ___ Unknown ___

SECTION 4 – PATIENT CLINICAL DATA (limit data to the first 96 hours after TRALI onset)

4.1 Date of onset of symptoms: _____ /_____ /_____ Time: _____
DD MM YYYY

4.2 Clinical data (check all possible)
Tachypnea, dyspnea ___ Hypotension ___ Fever ___ Tachycardia ___
Other (specify): _____

SECTION 4 – PATIENT CLINICAL DATA (limit data to the first 96 hours after TRALI onset) (cont'd)

4.3 Paraclinical data (if available)

Central venous pressure (maximal): _____

Wedge pressure if pulmonary artery catheter present (maximal): _____

Cardiac dysfunction on cardiac ultrasound: Yes ___ No ___

Worst PaO_2/FiO_2 ratio: _____ or worst O_2 saturation level: _____

SECTION 5 – PATIENT MANAGEMENT (limit data to the first 96 hours after TRALI onset)

5.1 Transfer to Intensive Care Unit: Yes ___ No ___ Was in ICU before TRALI ___

5.2 Supplemental FiO_2*: maximum level_____

5.3 Mechanical ventilation*: Non-invasive ___ Invasive ___

5.4 Inotropes/vasopressors*: Yes ___ No ___

5.5 Fluid resuscitation (bolus ≥10cc/kg): Yes ___ No ___

5.6 Diuretics: Yes ___ No ___

5.7 Other (specify): _____

* If patient was already on such therapy before TRALI, please indicate if there was an increase in therapy and specify maximal level of increase:

FiO_2: _____

Ventilator parameters: _____

Inotropes/vasopressors: _____

SECTION 6 – PATIENT OUTCOME FOLLOWING TRALI

6.1 Resolution of symptoms after TRALI reaction:

<24 hours ___ 24h-48h ___ 48-96h ___ >96h (specify: _____ days)

6.2 Mechanical ventilation after TRALI reaction: number of days _____

6.3 ICU stay after TRALI reaction: number of days _____

6.4 Hospital stay after TRALI reaction: number of days _____

6.5 Complications after TRALI reaction:

Pneumothorax/barotraumas ___ Cardiac insufficiency ___ Shock ___

Cerebral anoxia/encephalopathy ___ Acute renal failure ___ Neuro/myopathy ___

Others (specify): _____

Death: specify number of days after TRALI: _____

6.6 Outcome attributable to TRALI reaction (as judged by attending physician):

Immediate life threat: No ___ Yes ___

Long-term morbidity: No ___ Yes ___ (specify) _____

Death ___ Unknown ___

SECTION 7 – REPORTING PHYSICIAN

First name_____ Surname_____

Address_____

City_____ Province_____ Postal code_____

Telephone number_____ Fax number_____

E-mail_____ Date completed_____

Thank you for completing this form.

(TRALI 2005-09)