

Transfusion Transmitted Injuries Surveillance System (TTISS), 2018-2019

TTISS

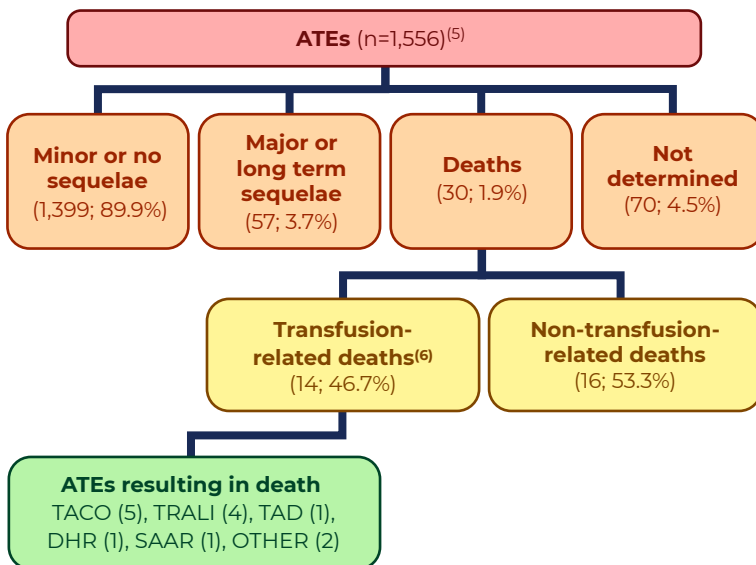
- ◆ Launched in 2001 to capture adverse transfusion events (ATEs) during the transfusion of blood, blood components and plasma derivatives⁽¹⁾
- ◆ Monitors over 95% of all transfusion activities in Canada
- ◆ **1,560 ATEs** reported during 2018-2019
- ◆ **4.8% of ATEs** were grade 3 (life threatening) severity⁽²⁾
- ◆ **0.9% of ATEs** resulted in transfusion-related death
- ◆ **Five deaths** per million units of blood components transfused per year

Note: Rates for plasma derivatives transfusion are not provided due to non-availability of denominator data

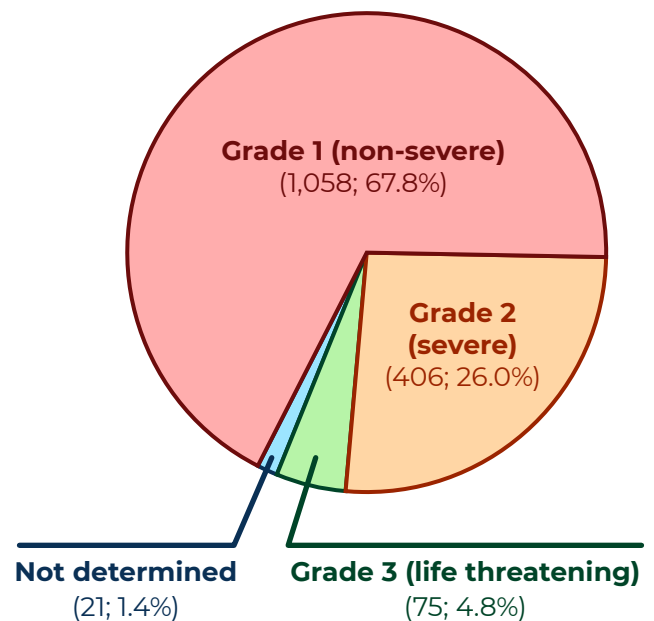
ATEs by type, TTISS 2018-2019⁽³⁾



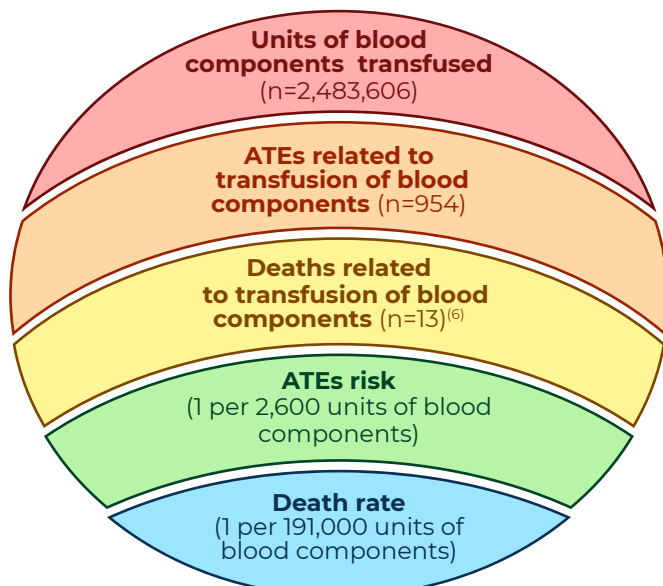
ATEs by outcome, TTISS 2018-2019⁽⁴⁾



ATEs (n=1,560) by severity, TTISS 2018-2019



Risks of ATEs and death from blood components transfused, TTISS 2018-2019



SUMMARY

- ◆ TACO and TRALI are the leading causes of deaths.
- ◆ Risk of transfusion-related death is very low in Canada

ABBREVIATIONS

TACO: Transfusion Associated Circulatory Overload
TRALI: Transfusion Related Acute Lung injury
TAD: Transfusion Associated Dyspnea
AHR: Acute Hemolytic Reaction
HYPT: Hypotensive reaction

DHR: Delayed Hemolytic Reaction
SAAR: Severe Anaphylactic /Anaphylactoid Reaction
ASPT: Aseptic Meningitis
BACT: Bacterial Infection
INCMP: Incompatible Transfusion
IVIG-HD: IVIG Headache

References

- 1) Commission of Inquiry on the Blood System in Canada – Krevier Report [FREE Full Text]
- 2) The severity level of ATEs can be found here
- 3) Transfusion Transmitted Injuries Surveillance System 2011 - 2015 Summary Report [FREE Full Text]
- 4) Transfusion Transmitted Injuries Surveillance System, User's Manual Version 3.0 [FREE Full Text]
- 5) A total of 1,560 ATEs cases were reported: including 1,556 (99.7%) cases with the outcome information and 4 (0.3%) with no outcome information
- 6) Transfusion-related deaths (n=14): 13 related to transfusion of blood components and 1 related to plasma derivatives