

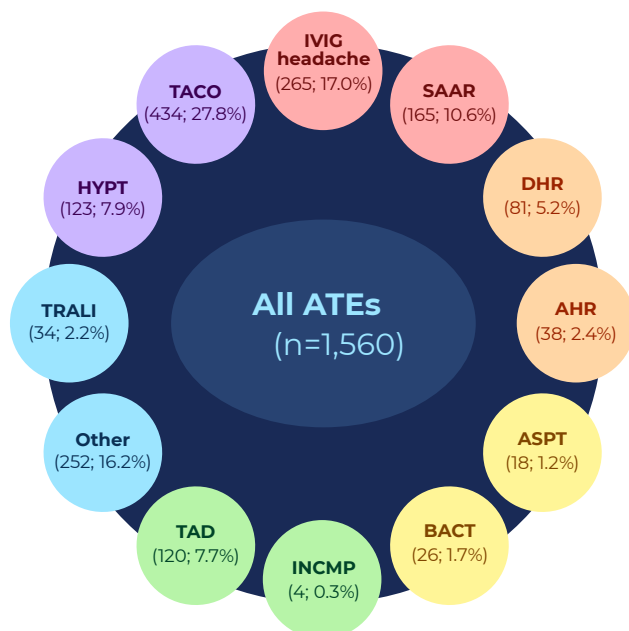
# Transfusion Transmitted Injuries Surveillance System (TTISS), 2018-2019

## TTISS

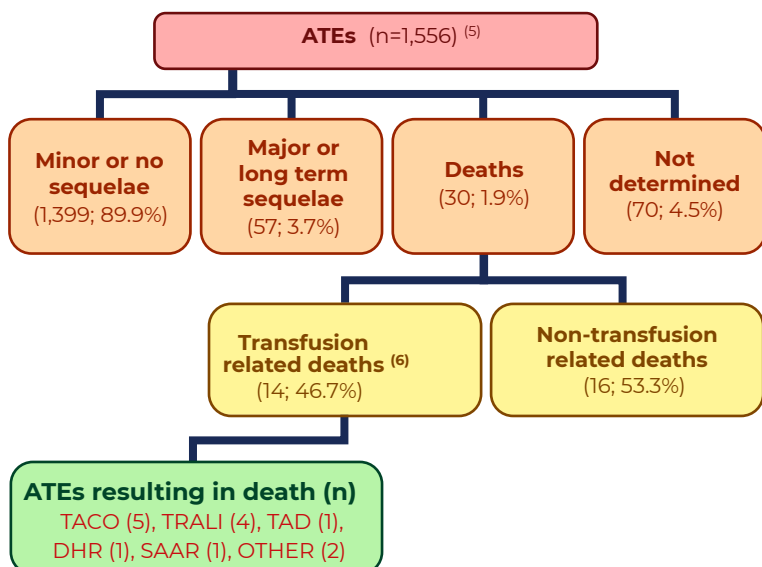
- ◆ Launched in 2001 to capture adverse transfusion events (ATEs) during the transfusion of blood, blood components and plasma derivatives<sup>(1)</sup>
- ◆ Covers over 95% of all transfusion activities in Canada
- ◆ **1,560 ATEs** reported during 2018-2019
- ◆ **4.8% ATEs** were grade 3 (life-threatening)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

Note: Rates for plasma derivatives transfused are not provided due to unavailability of denominator data

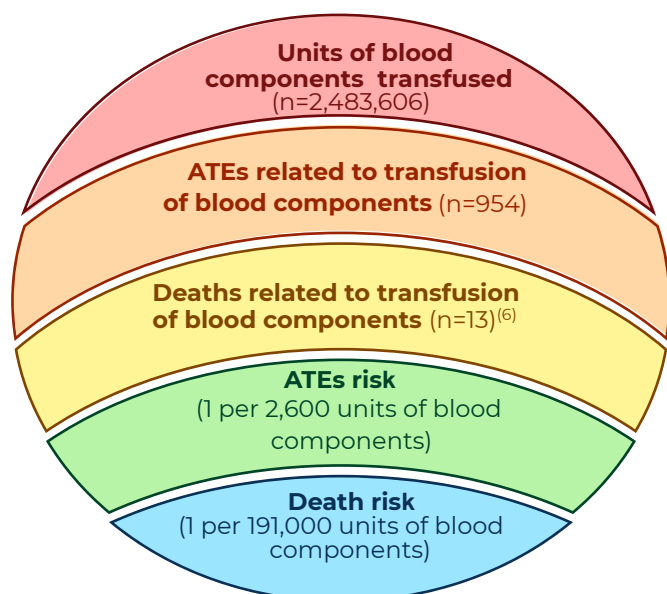
## ATEs by type reported, TTISS 2018-2019<sup>(3)</sup>



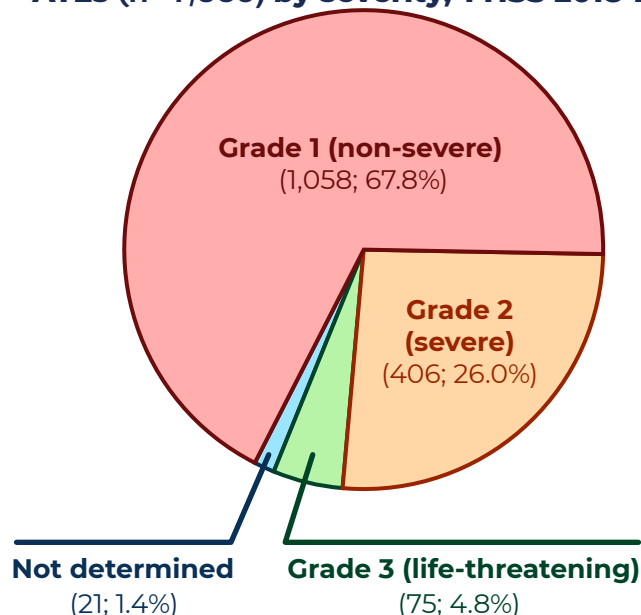
## ATEs by outcome, TTISS 2018-2019<sup>(4)</sup>



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



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



## SUMMARY

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

## ABBREVIATIONS

<b>TACO:</b> Transfusion Associated Circulatory Overload	<b>DHR:</b> Delayed Hemolytic Reaction
<b>TRALI:</b> Transfusion Related Acute Lung injury	<b>SAAR:</b> Severe Anaphylactic /Anaphylactoid Reaction
<b>TAD:</b> Transfusion Associated Dyspnea	<b>ASPT:</b> Aseptic Meningitis
<b>AHR:</b> Acute Hemolytic Reaction	<b>BACT:</b> Bacterial Infection
<b>HYPT:</b> Hypotensive reaction	<b>INCMP:</b> Incompatible Transfusion

## References

- 1) Commission of Inquiry on the Blood System in Canada – Krever 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

