Japanese Red Cross Society

Transfusion Information

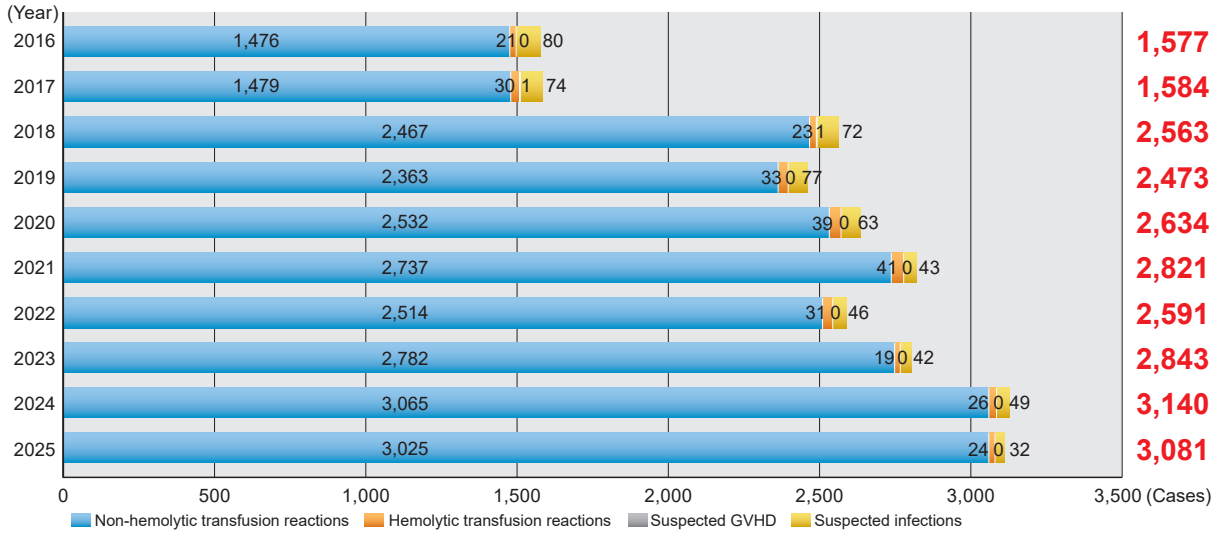
2609-193

Non-hemolytic Transfusion Reactions Reported to JRC Blood Centers (2025)

Among cases of suspected transfusion-related adverse reactions and infections reported by medical institutions to the JRC Blood Centers during 2025, this report focuses on non-hemolytic transfusion reactions, the most frequently reported category.

Annual number of reported adverse reactions and infections, and types of adverse reactions

(Note: Cases assessed as “unrelated to transfusion” are also included in the counts.)



A total of 3,025 cases of non-hemolytic transfusion reactions were reported in 2025. These accounted for approximately 98% of the 3,081 cases reported as transfusion-related adverse reactions and infections.
The increase in the number of reports from 2018 is due to a change in the survey method.

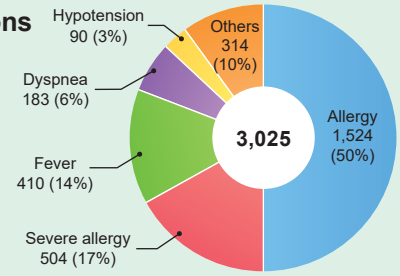
Non-hemolytic transfusion reactions (2025)

Number of reported cases of non-hemolytic transfusion reactions

Allergy was reported most frequently, accounting for 1,524 cases (50%).

Allergy and severe allergy accounted for approximately 70% of the reported adverse reactions.

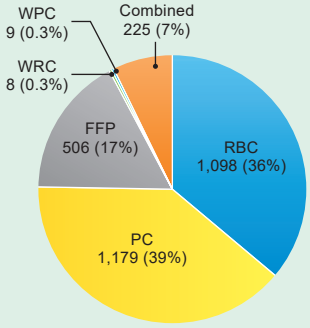
Dyspnea includes TRALI and TACO: 13 cases of TRALI, 80 cases of TACO, and 90 cases of dyspnea.

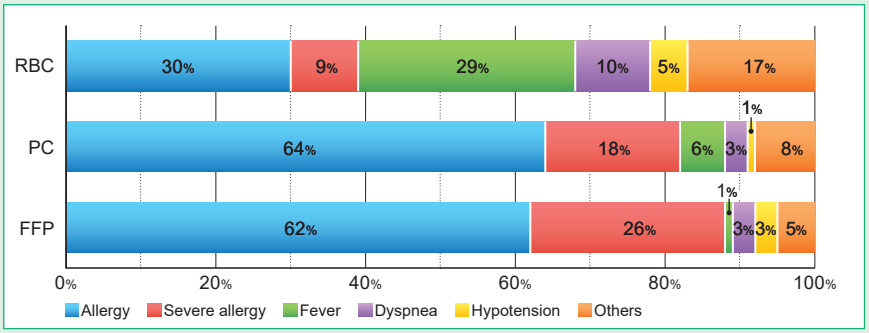


Implicated blood components and reported adverse reactions by blood component

Many transfusion reactions associated with RBCs and PCs were reported.

Fever and dyspnea accounted for a notably higher portion in RBCs than other components, as did allergy and severe allergy in fresh frozen plasma (FFP) and PCs.

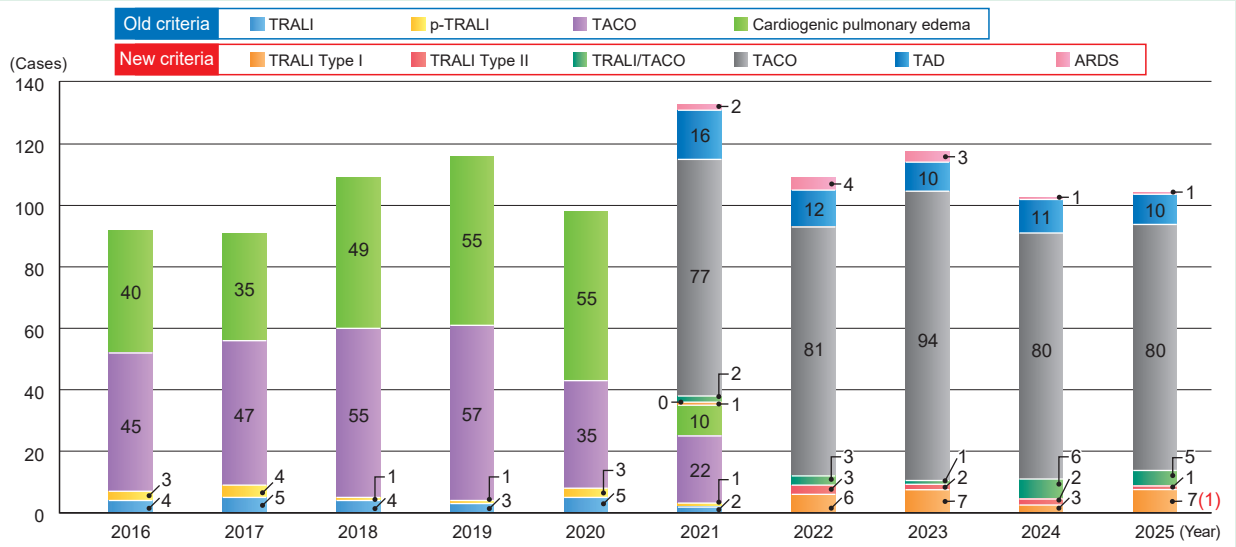




Percentages may not sum to 100% due to rounding.

Numbers of TRALI and TACO cases by year (2016-2025)

The revised criteria for TRALI and TACO have been applied to reports since April 2021.



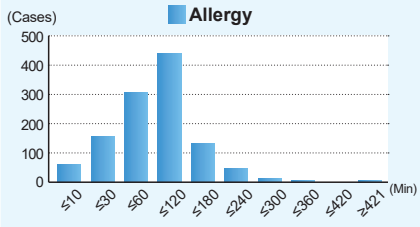
*( ): Cases of death in which TRALI could not be ruled out

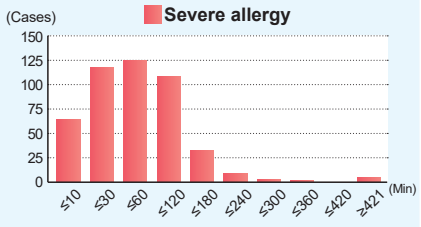
Like TRALI, TACO is one of the adverse reactions that exhibit serious symptoms, and several dozen TACO cases have been reported every year. When determining the transfusion volume and rate, it is important to consider factors such as the patient's cardiac and renal functions.

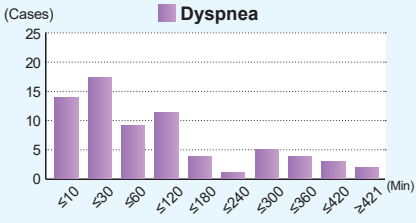
Time to onset of each adverse reaction in 2025 (excluding unknown cases)

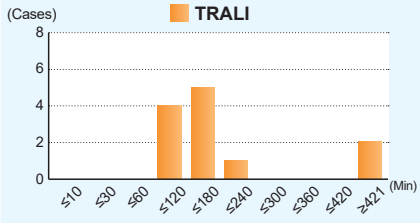
Time to onset of non-hemolytic reactions (after start of transfusion)

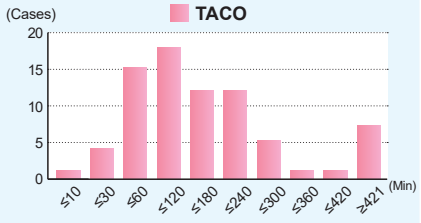
The figures show the time from the start of transfusion to the onset of the adverse reactions by adverse event symptom. Adverse reactions do not only occur immediately after the start of transfusion, but may also occur during the transfusion, and after the transfusion has been completed. Please make every effort to monitor patients' condition immediately after the start of transfusion, during the transfusion, and after its completion.

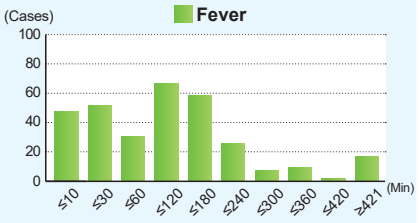


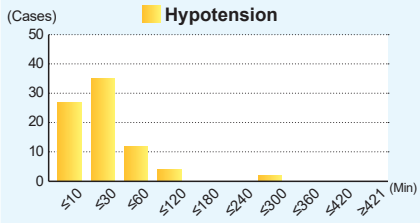












Trends in the time of onset of adverse reactions

- Most cases of allergic reactions tended to occur within 2 to 3 hours.
- TACO tended to occur within 4 hours after the start of transfusion.
- Fever showed variations in the time to onset.
- Hypotension tended to occur within 2 hours after the start of transfusion.

*If multiple components are suspected, the time to onset from the infusion of the first component is shown in the figures.

In case of any suspected adverse reactions or infections related to transfusion of blood components, please notify medical representatives of your local JRC blood center immediately. You may be asked to provide items such as the products used and the recipient's samples for investigation of causes. For the storage of the products used and the recipient samples, refer to the "Guidelines for Lookback Studies of Blood Products" and "Practical Guide for Blood Transfusion Therapy."

Japanese Red Cross Society's Haemovigilance Information website (English)

For blood products and transfusion information

Japanese Red Cross Society Haemovigilance Information Search

https://www.jrc.or.jp/mr/

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