

TRANSFUSION ERROR SURVEILLANCE SYSTEM (TESS), 2020-2021

TESS project

TESS collects non-nominal data on errors that occur during the transfusion process to support evidence-based policy making

2005 was when the surveillance system was initiated. Detailed methods of TESS can be found [here](#)

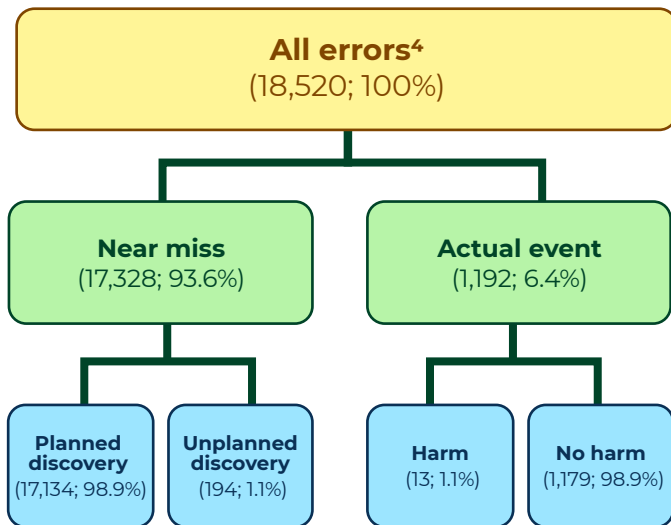
16% of blood transfusion activities are monitored through the four jurisdictions participating in TESS in Canada

Surveillance data summary

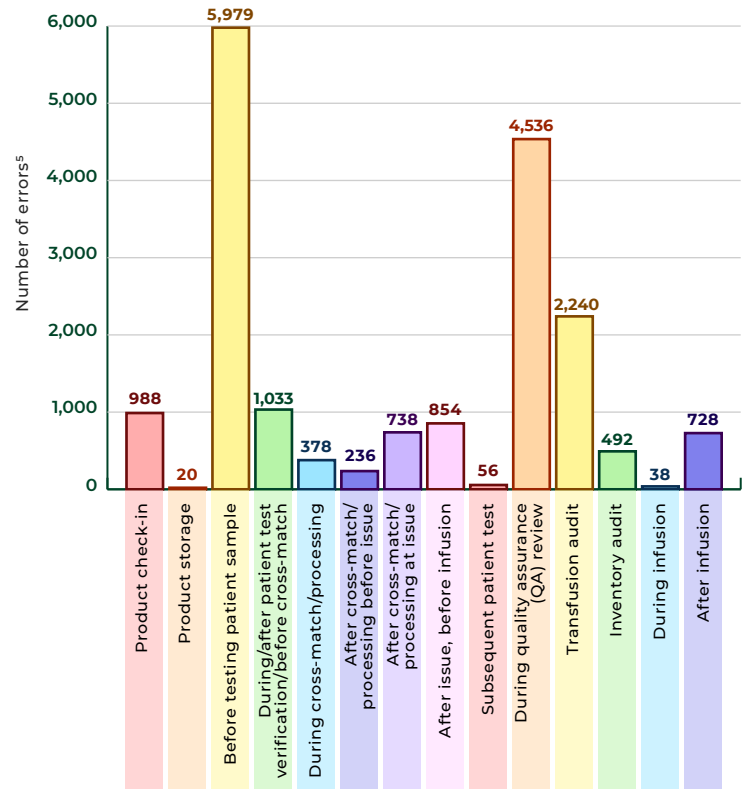
18,520¹ errors² (e.g. blood sample labelled with incorrect patient identification) were reported

0.1% of all reported errors resulted in harm³ to the patient

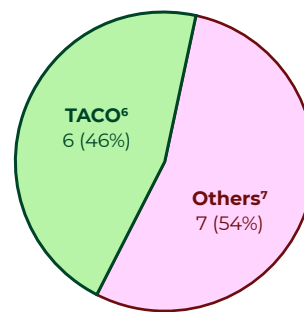
OVERALL COUNTS OF REPORTED ERRORS



ERRORS BY STAGE OF DISCOVERY IN THE TRANSFUSION PROCESS



HARM CAUSED BY ERRORS



The majority of errors were detected before blood infusion, and therefore did not cause harm to patients. This demonstrates that hospitals participating in TESS may be using standard verification procedures to intercept errors before they reach patients

LEARN MORE ABOUT TESS

Visit Canada.ca and search "Transfusion Error Surveillance System" and follow us on Twitter @GovCanHealth

- ¹ As a result of comparing dynamic data extracted from web-based databases, small discrepancies between PHAC and provincial or territorial numbers are expected
- ² The [Transfusion Error Surveillance System \(TESS\): 2012-2016 report](#) contains the definition of "error", "near miss", "actual event", "planned discovery", and "unplanned discovery"
- ³ "Harm": the patient had an unintended or inadequate response to transfusion or suffered a negative impact or adverse transfusion reaction as a result of the error
- ⁴ Due to rounding, percentages may not always add up to 100%
- ⁵ Error events that did not involve a product (n=139) and unspecified error occurrences (n=65) were excluded from the figure
- ⁶ TACO: transfusion-associated circulatory overload
- ⁷ Others (n=7) include: 2 delayed serological transfusion reactions, 1 febrile non-haemolytic reaction, 1 severe anaphylactic/anaphylactoid allergic reaction, 2 unspecified adverse reactions, and 1 case of harm was associated with transfusion delay