RhD Immunoglobulin (RhDIg): are we following the guidelines?

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Transformation: Making Waves

Introduction

Blood Matters Serious Transfusion Incident reporting (STIR) program has collected RhDIg administration errors since 2015 and isoimmunisations since 2020. An audit of adherence to the guidelines occurred in 2018. The Australian RhDIg guidelines were updated 2021.

Aim:

To increase safety and reduce risks, by understanding errors associated with RhDIg administration.

https://www.health.vic.gov.au/publications/rhd-immunoglobulin-ig-in-obstetrics-audit-report-2018

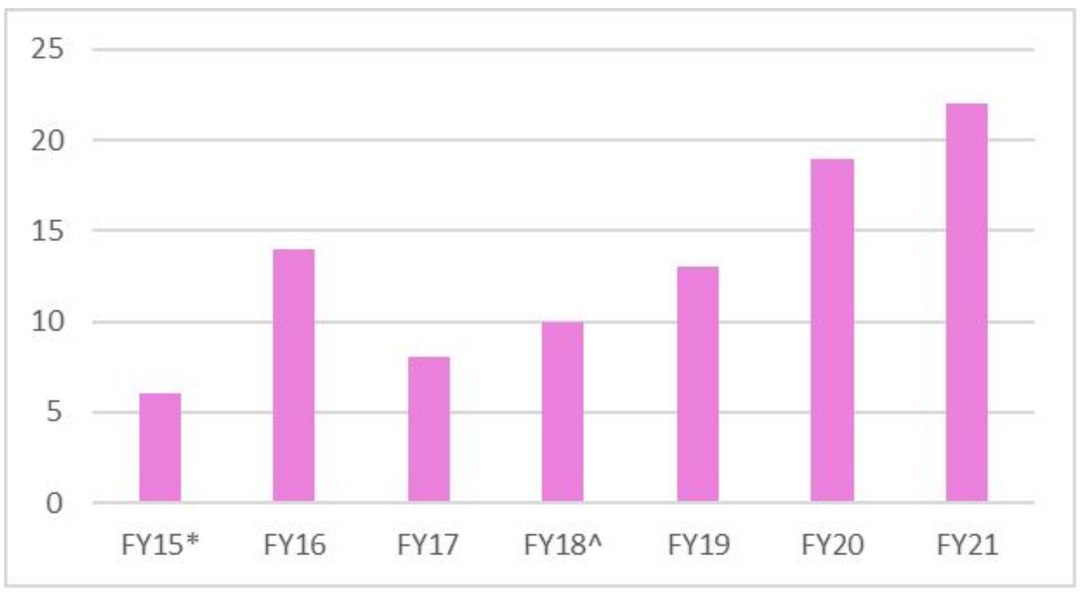
Methodology

- STIR receives de-identified reports, which are reviewed by an expert group for validation.
- An annual report of all validated reactions/incidents is published.
- De-identified information supports education and audit.

STIR reporting:
https://www.health.vic.gov.au/patient-care/serious-transfusion-incident-reporting-system

Results

Number of RhD Ig reports for each financial year



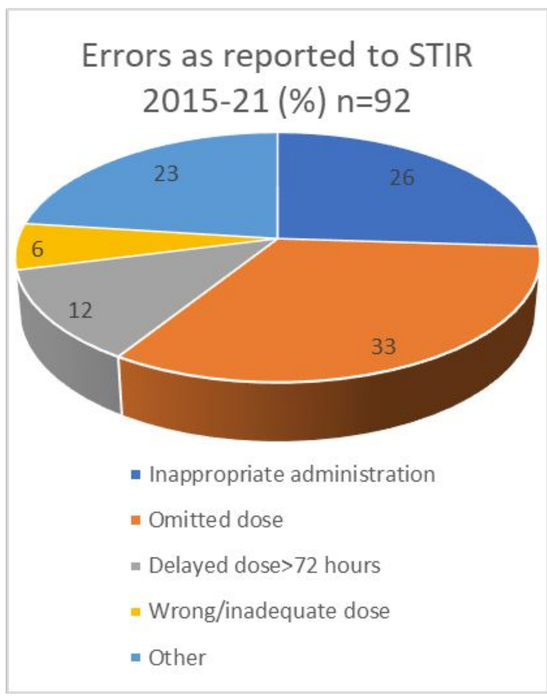
*FY15 six months data only
^FY18 RhD immunoglobulin audit performed

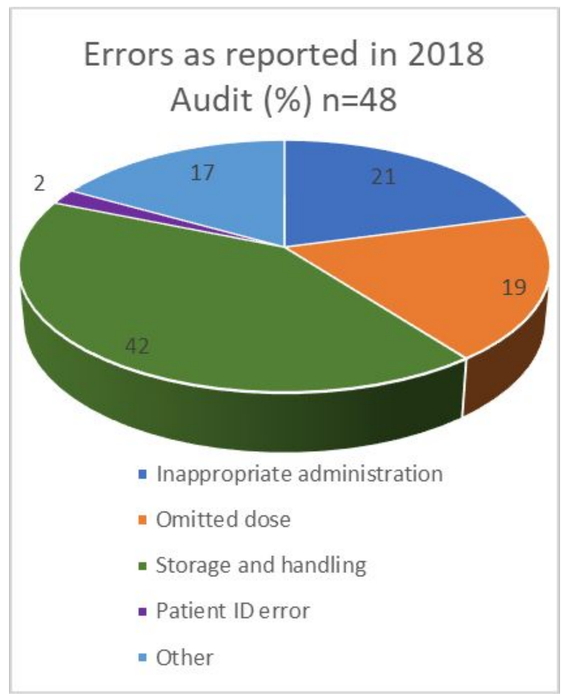
92 RhDIg validated reports to STIR since 2015, representing 10-31% (average 19%) of all procedural reports over time.

RhDIg reports to STIR are low compared to the number reported by health services in the 2018 audit and the potential errors found in the analysed practice audits (*See Types of errors reported (%)*).

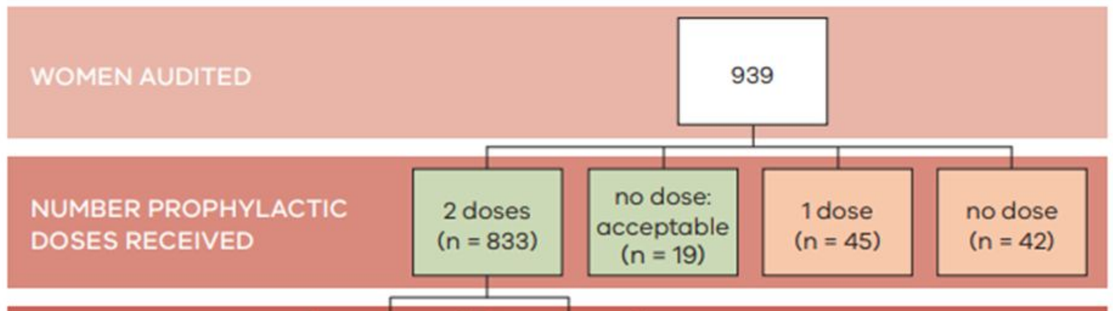
Results

Types of errors reported (%)





2018 RhDIg audit about timing of RhD Ig prophylaxis



The audit showed that only 73% (xx) of women were documented as receiving all appropriate routine RhDIg prophylaxis. At delivery 98% (xx) of women received appropriate RhDIg.

FMH quantification at delivery occurred for 85% (xx) of women with an RhD positive infant, and 26% (xx) of women where infant RhD status was unknown.

Number of unique women placed at risk throughout their pregnancy

Category of risk	Number (%)
Increased risk for alloimmunisation (poor routine prophylaxis, poor sensitising event response, poor postnatal administration of anti-D Ig)	262 (28%)
Increased risk for alloimmunisation (as above plus no FMH testing where appropriate)	323 (34%)
Unnecessary exposure to blood product/ unnecessary use of limited resource	26 (3%)

Note: A woman may have been exposed to multiple risks at various stages of pregnancy, but has only been counted once in each row of the above table.

Discussion & Conclusion

Both reports to STIR and the 2018 audit show there are areas for improvement to meet guidelines. Health services need good processes that support staff to ensure all appropriate women receive RhDIg as needed, including education on required testing and timing. Blood Matters continues to work with maternity care providers to improve practice.

References

1. NBA & RANZCOG, Guideline for the prophylactic use of Rh D immunoglobulin in pregnancy care, 2021.

Disclosure: NIl