

SHOT

Serious Hazards
of Transfusion

December 2024 Newsletter





As the year ends, the SHOT team would like to take this opportunity to look back on the last 12 months. 2024 was a year full of challenges, accomplishments, and amazing national and international collaborations with many healthcare professionals.

There were so many special moments throughout the year worth remembering and celebrating again. The key highlights from 2024 are presented below.

Let's dive in, shall we?



Annual SHOT Symposium 2024

More than 300 attendees joined a diverse range of interesting sessions. The rapid-fire posters and the panel discussion were some of the highlights of the day which focussed on sharing the learning widely across healthcare professionals and organisations.



Preparations for the 2025 Annual SHOT Symposium are already in progress! Hope you are all able to join us!

SAVE THE DATE: Friday 11 July 2025 at the Hilton Birmingham Metropole Hotel
<https://www.shotuk.org/annual-shot-symposium-2025/>



2023 Annual SHOT Report



The 2023 Annual SHOT Report was released at the Annual SHOT Symposium. This collaborative report, co-written by the SHOT team and the SHOT Working Expert Group focused on the key recommendations to enhance transfusion safety based on the incidents reported to SHOT in 2023. The full report and related resources can be accessed on the SHOT website:

[Report, Summary and Supplement 2023 - Serious Hazards of Transfusion](#)

If you want a printed copy, contact SHOT on shot@nhsbt.nhs.uk to purchase your order.



The latest cumulative SHOT data page: Transfusion-Transmitted Infections

An overview of the reports submitted to SHOT, since reporting began in the category, definitions, relevant resources and recent recommendations can be accessed via this link:

<https://www.shotuk.org/resources/current-resources/data-drawers/>



Meet the Experts webinars

<https://www.shotuk.org/meet-the-experts-webinars/>

Meet the Experts webinar

- Your microphone is muted by the host and will remain muted throughout the session
- Please type any questions into the Q&A box below, do not use the chat facility for questions
- Questions will either receive a response through Q&A or will be answered live
- Live captioning now available during the webinar, attendees can switch it off if not needed
- The session will finish with a poll for your immediate feedback
- Attendees are encouraged to record their learning from this session and can enter 1 CPD point for this webinar.

Thank you for attending!

Meet the Experts webinar: Avoid

- Your microphone is muted by the host and will remain muted throughout the session
- Please type any questions into the Q&A box below, do not use the chat facility for questions
- Questions will either receive a response through Q&A or will be answered live
- Live captioning now available during the webinar, attendees can switch it off if not needed
- The session will finish with a poll for your immediate feedback
- Attendees are encouraged to record their learning from this session and can enter 1 CPD point for this webinar.

Thank you for attending!

Meet the Experts webinar: Information Technology (IT)

- Your microphone is muted by the host and will remain muted throughout the session
- Please type any questions into the Q&A box below, do not use the chat facility for questions
- Questions will either receive a response through Q&A or will be answered live
- Live captioning now available during the webinar, attendees can switch it off if not needed
- The session will finish with a poll for your immediate feedback
- Attendees are encouraged to record their learning from this session and can enter 1 CPD point for this webinar.

Thank you for attending!

Music: <https://www.bensound.com>

In 2024 the Meet the Experts session changed to interactive virtual webinars to allow wider participation. 4 webinars, 4 chapters, 4 opportunities for discussion. All webinars are available on the SHOT website, and more are coming in 2025.

Upcoming webinar on Human Factors and Ergonomics in SHOT Error Incidents
[Click here to register to this event](#) to be held on Monday 20th January 2025

SHOT Bites

<https://www.shotuk.org/resources/current-resources/shot-bites/>

SHOT Bite No. 29: Differences of reporting errors related to anti-D Ig and immune anti-D

Background: The category was introduced in 2017 as a separate track from the standard SHOT reporting categories. SHOT has been reviewing cases where errors which have been detected for the first time, which could potentially improve understanding of the impact of changing D components. The category covers errors from the category and the first number of SHOT reports analysed in the Annual SHOT Report.

Key messages:

- Events relating to administration of anti-D immunoglobulin (Ig) were included since the 2019/20 annual SHOT Report. In general, the category includes where errors relating to the reporting, rather than administration of anti-D Ig, to transfusion patients with underlying potential including, following transfusion of Coombs test components and testing of crossmatch-related transfusions.
- There are cases where the adverse event could be reported to both categories (see SHOT reports which include error type).
- Continuing to improve error administration of anti-D Ig transfusions to transfusion patients, a common error is to administer wrong dose Ig.
- Administrative documentation requirements for SHOT.

Key messages of the webinar:

- Anti-D Ig transfusion errors are common and can be prevented.
- Errors with anti-D Ig transfusion can be prevented.
- Errors with anti-D Ig transfusion can be prevented.
- Errors with anti-D Ig transfusion can be prevented.

Key messages of the webinar:

- Errors with anti-D Ig transfusion can be prevented.
- Errors with anti-D Ig transfusion can be prevented.
- Errors with anti-D Ig transfusion can be prevented.
- Errors with anti-D Ig transfusion can be prevented.

New SHOT Bites

[SHOT Bite No. 29:](#) Differences of reporting errors related to anti-D Ig and immune anti-D

[SHOT Bite No. 30:](#) Post-Transfusion Purpura

[SHOT Bite No. 31:](#) The role of Sp-ICE in preventing Haemolytic Transfusion Reactions

[SHOT Bite No. 32:](#) SCRIPT

SHOT Bite No. 32: The role of Sp-ICE in preventing Haemolytic Transfusion Reactions

Background: The role of Sp-ICE in preventing Haemolytic Transfusion Reactions.

Key messages:

- Sp-ICE is a protein that is found on the surface of red blood cells.
- Sp-ICE is involved in the regulation of the immune system.
- Sp-ICE is involved in the regulation of the immune system.

Key messages of the webinar:

- Sp-ICE is a protein that is found on the surface of red blood cells.
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SHOT Human Factors and Ergonomics course



SHOT were delighted to run two Human Factors and Ergonomics (HFE) in Transfusion Training Courses in November and December 2024. These were delivered by members of the SHOT team and Working Expert Group.

We welcomed UK and international delegates to the sessions which were interactive and incorporated breakout rooms to facilitate discussions on the importance of HFE in incident investigations and design scenarios.

The feedback received has been excellent with all attendees rating the overall content of the course as good or very good. Some comments received included:

“Very good course! We are already using Human Factors in our organisation, but I still learned a lot from the course”

“Very good course. liked how as well as the incident, there was a design case - highlighting how HFE can be used proactively”

“As a new member of staff to my role I found it very useful to attend this course and expand my knowledge further. I really enjoyed and benefited mostly from the breakout sessions in the second half of the course. I also liked the use of Vevox as it allowed participants to give answers anonymously providing them with the confidence to speak”

We will be running more HFE courses in Autumn 2025, and details will be released in due course.

There is another resource coming up soon with... Join us for the webinar in Human Factors and Ergonomics in SHOT Error Incidents

[Click here to register for this event](#) to be held on Monday 20th January 2025



SCRIPT

SHOT UK Collaborative Reviewing and reforming IT Processes in Transfusion

SCRIPT

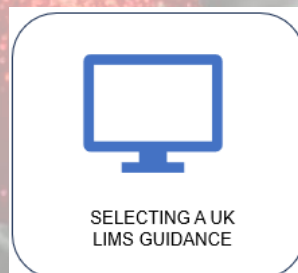
SHOT UK Collaborative Reviewing and reforming IT Processes in Transfusion

RESOURCES RELEASED in 2024
Click on the images below to see what's new

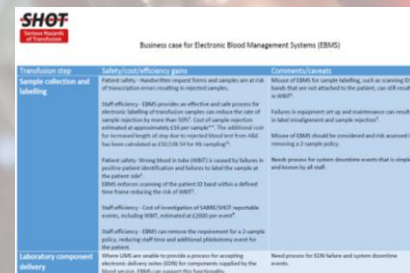
SCRIPT Community Guidance: Lessons learnt from implementation of transfusion IT systems



IT DOWNTIME: AIDE MEMOIR



SELECTING A UK LIMS GUIDANCE



[Lessons learnt](#)

[IT downtime](#)

[LIMS guidance](#)

[Business case example](#)





New look for Dendrite reporting pages



The SHOT incident reporting pages were updated to easier reflect when questions on the Dendrite system have been completed.

Answered questions will be coloured green, with unanswered questions coloured red.

Positive feedback was received from reporters. Let us know how we are doing!



Surveys

2023 SHOT and UKTLC Transfusion Laboratory Culture Survey (NHS, Independent hospitals and UK Blood Services) Summary

SHOT and UKTLC aimed to measure and understand the safety culture in laboratories in hospitals and Blood Services in the UK, with input from the NHS haemostasis team. In 2023, a survey found evidence of disciplinary action following single quality incidents and pressure from line management to prevent a false impression of safety within the laboratory. Further concerns have been raised regarding the safety culture within the laboratory and the SHOT and UKTLC laboratory culture survey 2023 was distributed to transfusion laboratory professionals to gain more information. A document with suggestions to improve safety culture has been created to support healthcare organisations.

1. Demographics

- 13 responses: 12 Laboratory, 1 Blood CL
- 20 responses: 17 Laboratory, 3 Blood CL
- 53 responses: 3 Laboratory, 50 Blood CL
- 117 responses: 10 Laboratory, 107 Blood CL
- 183 responses: 10 Laboratory, 173 Blood CL
- 233 responses: 10 Laboratory, 223 Blood CL

2. Psychological Safety and Civility

2a. Speaking up for safety

Q18: Do you feel empowered and safe to raise your concerns?

Q19: Do you feel safe to raise your concerns?

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Q100: Do you feel safe to raise your concerns?

Next implementation survey for the UK wide national patient safety alert on preventing transfusion errors

The purpose of the survey was to understand progress with implementing the actions outlined in the **Consensus Statement on Laboratory and Clinical Safety Alerts**, published in 17th January 2023, to gain understanding of any barriers to implementation, to share lessons and learning, and inform future alerts. The responses received were limited in number (n=46) but still provide a useful insight into progress and implementation of the alert across the UK.

Action 1: Local organisations must have reviewed and updated policies and procedures.

Responses relating to policies and procedures

Number of organisations that have reviewed and updated policies and procedures:

- 100% (46/46) reviewed and updated policies and procedures
- 0% (0/46) did not review and update policies and procedures

How often do you audit the effectiveness of these policies/OPPs?

Number of organisations that audit the effectiveness of these policies/OPPs:

- 100% (46/46) audit the effectiveness of these policies/OPPs
- 0% (0/46) do not audit the effectiveness of these policies/OPPs

The majority of organisations that responded to the survey had reviewed and updated relevant policies. Those who hadn't reported that the action was not deemed relevant due to the specialisation of internal processes in place. Some respondents (23/46) audited the effectiveness of policies every 2 years.

Safety alert & Safety notice

Reducing risks for transfusion-associated circulatory overload

This alert is for action by NHS and independent acute and specialist organisations when transfusion occurs.

Explication of identified safety issue

Transfusion-associated circulatory overload (TACO) is a life-threatening complication of transfusion that can occur in patients receiving transfusions. It is caused by an excessive volume of transfused blood, leading to fluid overload and pulmonary edema. TACO is a common complication of transfusion, particularly in patients with heart failure, renal impairment, and the elderly. It is often under-recognized and under-reported, leading to delayed diagnosis and treatment. This alert aims to raise awareness of the signs and symptoms of TACO and to provide guidance on how to prevent and manage this complication.

Actions required

1. All transfusion services should ensure that all transfusion orders are reviewed and approved by a qualified clinician.
2. All transfusion services should ensure that all transfusion orders are reviewed and approved by a qualified clinician.
3. All transfusion services should ensure that all transfusion orders are reviewed and approved by a qualified clinician.
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10. All transfusion services should ensure that all transfusion orders are reviewed and approved by a qualified clinician.

SHOT Safety Notice 03: Safe, appropriate, and timely administration of anti-D immunoglobulin during the perinatal period

This safety notice was reviewed and approved by the Royal College of Obstetricians & Gynaecologists (RCOG) and by the Royal College of Midwives (RCM).

1. The objective of this SHOT Safety Notice

This SHOT Safety Notice has been issued to highlight the importance of appropriate administration of anti-D immunoglobulin (Ig). This includes dose, route, and administration within the correct timeframe. The aim is to reduce the risk of alloimmunisation and its associated complications, such as haemolytic disease of the fetus and newborn (HDFN). Organisations must ensure that local policies and procedures support compliance with current RCOG guidelines for the safe and timely administration of anti-D Ig following potentially sensitising or sensitising events.

This safety notice should be used as a prompt to ensure compliance with current practice and implement improvement actions.

2. Anti-D Ig errors

Errors in the administration of anti-D Ig during pregnancy and after birth can lead to HDFN. This safety notice highlights the importance of ensuring that the correct dose and route of administration is used. It also provides guidance on how to manage potential complications, such as allergic reactions and local reactions.

3. Allergic reactions to anti-D Ig

Allergic reactions to anti-D Ig are rare but can be severe. These reactions can occur at any time during the course of treatment. It is important to be aware of the signs and symptoms of allergic reactions and to have a plan in place to manage them. This safety notice provides guidance on how to identify and manage allergic reactions to anti-D Ig.

The SHOT database and reporting criteria can be accessed using this link:

<https://shot.nhs.uk/reporting-criteria/>

Read more on page 7

Click on the images to access respective document

Other resources

Monitoring the safety of the blood supply

Watch later Share

New SHOT video
About the measures in place to ensure blood supply safety

COVID-19 - Get the latest information from the NHS about coronavirus.

Lessons from the Infected Blood Inquiry: blood services

Blood donation myth busters: 2

MYTH: 'I cannot donate blood if I am over 70 years old.'

FACT: There are regulations in place concerning the age at which donors can donate. Since 2009, UK donors over the age of 70 can donate as long as they have given a donation in the preceding two years.

MYTH: 'The minimum haemoglobin (Hb) level requirement is the same for all types of donations.'

FACT: The minimum Hb concentration requirement is different for different types of donations. The Hb level is estimated for every potential donor each time they present to do

When someone has donated prior to their 66th birthday, they can continue to donate provided they are eligible and donate regularly, or until they wish to stop donating. They will need to have a satisfactory health screening prior to each donation as is standard practice, to ensure the safety of both the donor as well the recipient.

[Want to know more... just click the link](#)

Minimum Hb requirements:
Whole blood/component donors: females

New Myth busters
Part 2 available on the SHOT website and on the SHOT app

Presentation by Dr Su Brailsford at the RCPATH & SHOT Joint Transfusion Symposium 2024





Safety is a team effort!



The SHOT team would like to take this opportunity to express our heartfelt gratitude to everyone in the transfusion community for all your amazing work this year. Your support and collaboration have been invaluable, and we sincerely appreciate your contributions. The SHOT team could not be prouder and more grateful for the achievements that 2024 delivered and are excited for the new year that fast approaches. Here's to a healthy and happy 2025 for all.

Coming soon

In 2025 the SHOT website will have a new look!

SHOT aims to improve users experience when using our website, finding our resources and the latest haemovigilance activities.

Also in 2025

MyTransfusion app

The My Transfusion App is the UK's first patient facing transfusion App. It was co-created with transfusion experts at SHOT and patient representatives. It contains information on the whole transfusion journey, from reasons why a blood transfusion might be needed to what to do following a transfusion.

A promotion pack will be sent closer to the release date



Look out

Haemovigilance workshops

In 2025 SHOT in collaboration with MHRA will coordinate haemovigilance workshops. In 2025 workshops will take place in Wales, Scotland and Northern Ireland. In 2026 haemovigilance workshops are expected to take place in England. These will be promoted by local teams!

Exciting opportunity to work as a Research Fellow/Officer

We are pleased to announce an exciting opportunity to work as a Research Fellow/Officer on an NHSBT funded project for 12 months based at the University of Leeds starting in Jan 2025. The research will focus on haemovigilance and working closely with SHOT and an international network of research collaborators, researcher will play an integral role in developing guidance for future haemovigilance systems based on systematic review of research evidence, synthesis of expert subject-matter knowledge and collaborative work with existing systems. Working with the NIHR Patient Safety Research Collaboration at the University of Leeds and the NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice at the University of Oxford, the work will draw upon Safety Science and Implementation Science to maximise learning from adverse event monitoring and implementation of recommendations from haemovigilance to enhance blood safety. The closing date for the applications is 6th January 2025.

For more information and to apply



[Jobs.leeds.ac.uk](https://jobs.leeds.ac.uk)

[Jobs.ac.uk](https://jobs.ac.uk)





Latest SHOT Resource

Safety Notice 03: Safe, appropriate, and timely administration of anti-D Immunoglobulin during the perinatal period

With anti-D Ig errors accounting for 22% to 24% of the total errors (excluding near misses) analysed by SHOT annually, we are reaching out to you with this safety notice to encourage a review of local policies, processes and practices in place and address gaps to enhance patient safety. This has been drafted by relevant SHOT Working Expert Group members and has been reviewed and approved by Royal College of Obstetricians & Gynaecologists and by the Royal College of Midwives.

We encourage you to liaise with relevant teams locally, carry out a gap analysis using the safety notice (also available as an Excel spreadsheet in an accessible format) and map out actions needed to address gaps identified and enhance safety. Safety notice and gap analysis are available at: [Safety Alerts and Safety Notices - Serious Hazards of Transfusion](#)



SHOT Safety Notice 03: Safe, appropriate, and timely administration of anti-D Immunoglobulin during the perinatal period

This safety notice was reviewed and approved by the Royal College of Obstetricians & Gynaecologists (RCOG) and by the Royal College of Midwives (RCM)

1. The objective of this SHOT Safety Notice

This SHOT Safety Notice has been issued to highlight the importance of appropriate administration of anti-D immunoglobulin (Ig). This includes dose, route, and administration within the correct timeframe. The aim is to reduce the risk of developing immune anti-D in mothers and birthing parents with D-negative blood type during pregnancy and following the birth of an infant with D-positive blood type. Immune anti-D can result in haemolytic disease of the fetus and newborn (HDFN). Organisations must ensure that local policies, procedures, and processes support compliance with current BSH guidelines for safe and appropriate administration of anti-D Ig following potentially sensitising events (PSE) and for routine antenatal anti-D Ig prophylaxis (RAADPI) (Qureshi, et al., 2014).

This safety notice should be used as a gap analysis tool to help identify gaps in current practice and implement improvement actions to enhance patient safety.

2. Anti-D Ig errors reportable for haemovigilance

Errors relating to the request and/or administration of anti-D during pregnancy and after birth are reportable to SHOT and are the focus of this safety notice. However, this reporting category (anti-D) also includes events relating to the administration of anti-D Ig following inadvertent transfusion of D-mismatched red cells or platelets or following a D-mismatched solid organ transplant (SOT).

Cases of pathological reactions to anti-D Ig such as severe allergy or local reactions are not reportable to SHOT, these are reportable via the MHRA 'Yellow Card' system for medicines using this link: <https://yellowcard.mhra.gov.uk/>

The SHOT definitions and reporting criteria can be accessed using this link: <https://www.shotuk.org/reporting/>



Upcoming events in 2025



British Society for Haematology
Listening • Learning • Leading

Chartered Institute of Ergonomics & Human Factors

nata
Network for the Advancement of Patient Blood Management, Haemostasis and Thrombosis

65th Annual Scientific Meeting
27th-29th April at the Scottish Event Campus, Glasgow

[Register here](#)

Ergonomics & Human Factors
2025
28th-30th April at the St George's Park, Burton on Trent

[Register here](#)

NATA25 Annual Symposium
24th-26th April at the Science Congress Centre, Munich, Germany

[Register here](#)

Season's greetings and wishing you all a very Happy New Year 2025

As the year draws to a close, the SHOT team wants to take a moment to thank you for your incredible support and contributions through the year. This season is a time for reflection and gratitude, and we are truly, fortunate to have you as part of our journey. Wishing you all a festive December filled with joy and a New Year ahead brimming with hope, prosperity and new beginning! We look forward to continuing our work together in the new year ahead.

A very Happy New Year 2025 to all from all of us at SHOT!

