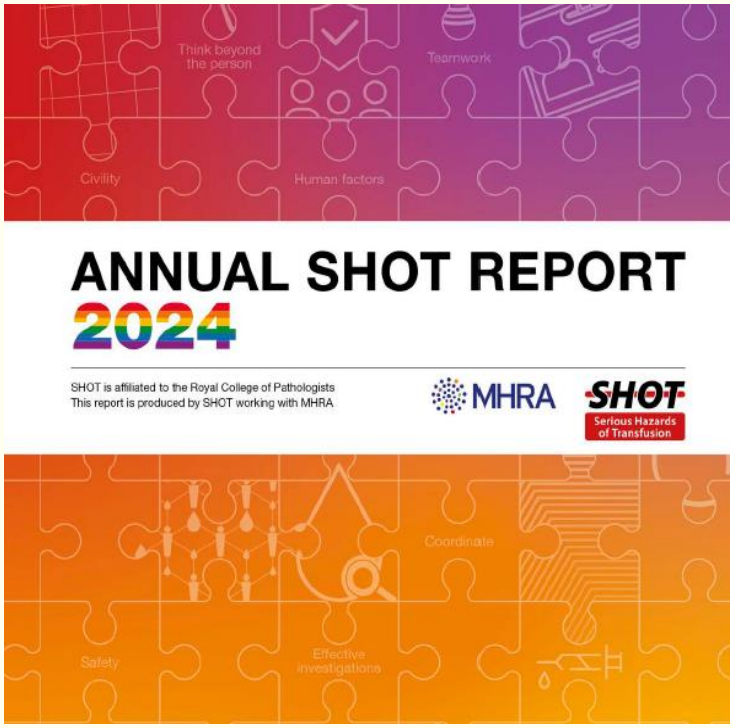
SHOT Newsletter: Resources from the 2024 Annual SHOT Report

Overview

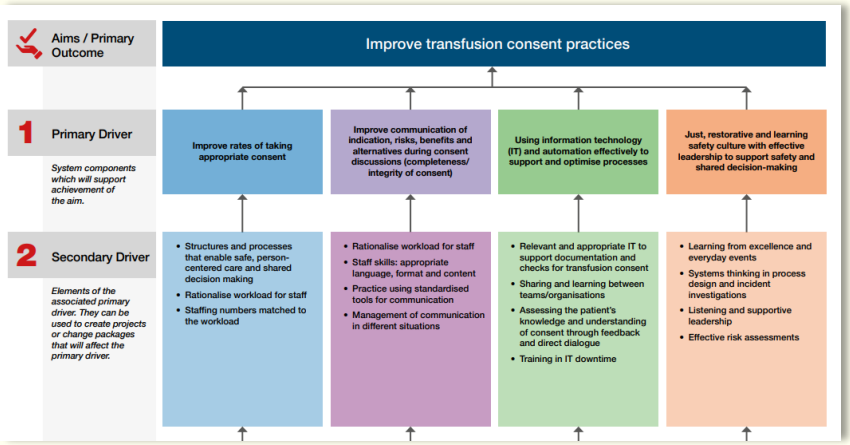
To help develop and support safety improvements, SHOT have launched numerous resources to accompany the 2024 Annual SHOT Report. This special edition newsletter will highlight these resources.

The resources are all referenced in the 2024 Annual SHOT Report. **Click here** to view the full report, individual chapters, collated key insights from individual chapters, cases and figures from the report, and supplementary information.



Driver diagram: Consent

Suboptimal consent practices for transfusion is evident, with inadequate documentation. A driver diagram has been created to helps support staff to systematically plan and structure improvement projects. Click **here** to access.



Guidance for consent for blood transfusion

The United Kingdom (UK) and Ireland Blood Transfusion Network has produced resources to support consent for blood transfusion for both patients and healthcare teams to ensure patients are able to make an informed decision about their transfusion. All documents can be found **here** on the SHOT website and include:

- Consent for blood transfusion
- Guidance for Healthcare Practitioners in the UK
- Transfusion information for patients
- Risk and benefits of blood transfusion

The SaBTO transfusion consent and shared decision-making guideline has also been updated and will be released soon

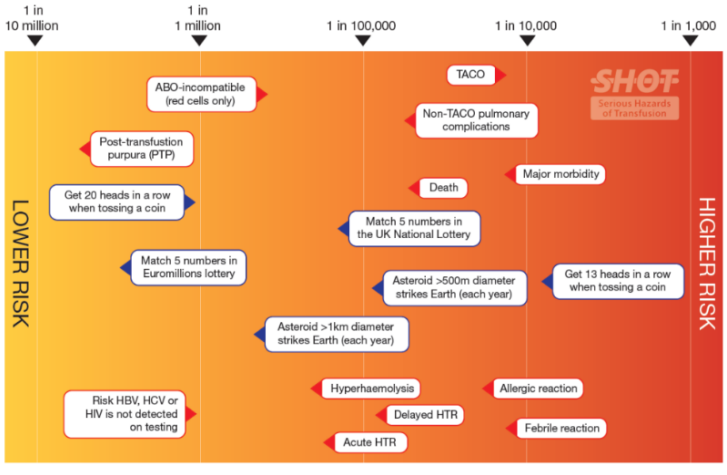
CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org
SHOT Serious Hazards of Transfusion

Video: Regulatory bodies in blood transfusion

View here

A new video 'Introduction to regulatory and professional bodies in blood transfusion' has been launched to provide an overview of the key regulatory and professional bodies overseeing transfusion practice – both clinical and laboratory, highlighting their roles in ensuring safety, quality and accountability across the system.

Transfusion safety and risks in UK



TACO= Transfusion-associated circulatory overload, HTR= Haemolytic transfusion reaction, HBV= hepatitis B virus, HCV= hepatitis C Virus and HIV= human immunodeficiency virus

Based on the UK data 2021-2023, the estimated risk that a potentially infectious HBV, HCV or HIV donation is made in the window period and not detected on testing is up to 1 in 1million donations tested, highest for HBV and as low as 1 in 100 million for HCV

Click here to view

A clear understanding of transfusion risks is essential for informed decision-making, effective risk mitigation strategies and maintaining trust in the safety of transfusions. The key risks associated with transfusion based on the UK haemovigilance data from SHOT 2020-2024 are listed in this new resource.

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org

Laboratory communication toolkit

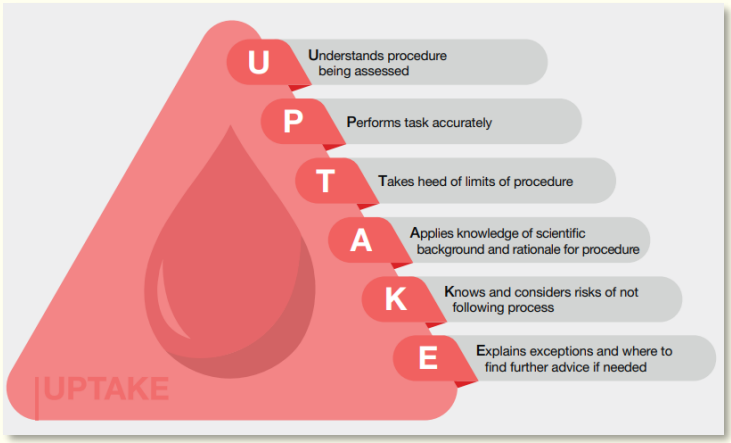
Incomplete communication can contribute to transfusion safety events. The SHOT team have developed a communication toolkit in collaboration with Royal Cornwall hospital, Countess of Chester Hospital NHS Foundation Trust, UKNEQAS, UK Transfusion Laboratory Collaborative and transfusion laboratory managers group to help address gaps in communication. The toolkit includes:

- Blood component communication guide: A template to help clarify clinical expectations regarding product availability, storage conditions and nomenclature
- An updated handover form first provided in the supplementary material of the 2019 Annual SHOT Report
- A telephone request form which includes key questions for laboratory staff to ask to identify transfusion priorities (e.g., emergency, urgent etc.)
- SHOT Bite No. 34: Switching to group-specific red blood cells in major haemorrhage (coming soon)

These are all contained within the 'Laboratory communication toolkit', available **here**.

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org

UPTAKE competency assessment example

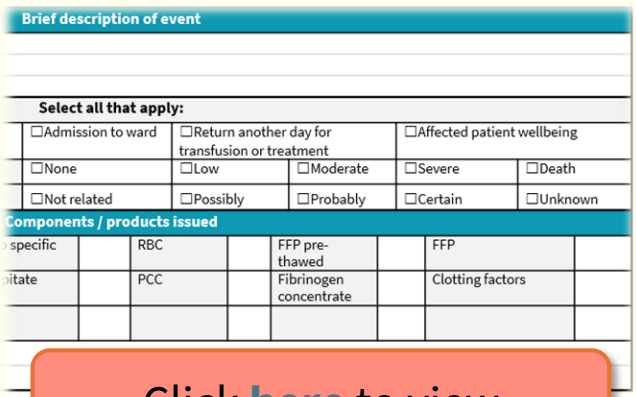


Click here to view

SHOT reports show evidence of gaps in knowledge, incomplete training and insufficient competency assessments. A worked example of how to apply the UPTAKE competency assessment model first shown in the 2019 Annual SHOT Report has been created. This adapts a competency kindly provided by Liverpool Clinical Laboratories.

Transfusion delays investigation tool

This document contains a set of tools that can be used during the investigation following a transfusion delay to identify contributory factors. The tables are provided in an editable format and can be adapted to local practices to ensure all aspects are covered, issues identified, and preventative actions implemented.



Brief description of event					
Select all that apply:					
☐Admission to ward	☐Return another day for transfusion or treatment		☐Affected patient wellbeing		
☐None	☐Low	☐Moderate	☐Severe	☐Death	
☐Not related	☐Possibly	☐Probably	☐Certain	☐Unknown	
Components / products issued					
specific		RBC		FFP pre-thawed		FFP	
itate		PCC		Fibrinogen concentrate		Clotting factors	

Click here to view

Updated TACO pre-transfusion risk assessment

The Transfusion-Associated Circulatory Overload (TACO) pre-transfusion risk assessment has been updated in the 2024 Annual SHOT report and is available **here**. Changes include:

- Appropriate indication and volume of red cell transfusion included within mitigation actions
- Inclusion of recently updated National Blood Transfusion Committee (NBTC) indication codes
- Inclusion of all heart valve disease as a risk factor
- 'Hypoalbuminaemia' simplified to 'a low serum albumin level'

TACO Risk Assessment		YES	NO
	Does the patient have any of the following?: diagnosis of 'heart failure', congestive cardiac failure (CCF), left ventricular dysfunction, aortic stenosis, or any other heart valve disease		
	Is the patient on a regular diuretic?		
	Does the patient have severe anaemia?		
	Is the patient known to have pulmonary oedema?		
	Does the patient have respiratory symptoms of undiagnosed cause?		
	Is the fluid balance clinically significantly positive?		
	Is the patient receiving intravenous fluids (or received them in the previous 24 hours)?		
	Is there any peripheral oedema?		
	Does the patient have a low serum albumin level?		
	Does the patient have significant renal impairment?		

If risks identified	YES	NO
Review the need for transfusion (do the benefits outweigh the risks)?		
Can the transfusion be safely deferred until the issue is investigated, treated or resolved?		

If proceeding with red cell transfusion: ensure appropriate indication and volume is prescribed (adults)

Indication code for transfusion	Target Hb	Dosing advice
Acute anaemia (R2)	Post-transfusion target Hb 70 - 90g/L	Body weight dosing (max 2 units)
Acute anaemia (R3: with acute MI/ACS)	Post-transfusion target Hb 80 - 100g/L	Body weight dosing (max 2 units)
Severe symptomatic chronic anaemia (R7)	No target Hb - minimum transfusion	Usually single unit only
Regular transfusion programme (R4)	Individualised target Hb	Body weight dosing (max 2 units)

Other measures to mitigate TACO: ASSIGN ACTION AS APPROPRIATE	TICK
Review patient after each unit (red cells) and review symptoms of anaemia. Is further transfusion necessary?	
Measure the fluid balance	
Consider a prophylactic diuretic (where appropriate/not contraindicated)	
Monitor the vital signs closely, including oxygen saturation	

Name (PRINT):	**Due to the differences in adult and neonatal physiology, babies may have a different risk for TACO. Calculate the dose by weight and observe the notes above.**
Role:	
Date: **Time (24hr):**	
Signature:	

TACO=transfusion-associated circulatory overload; MI=myocardial infarction; ACS=acute coronary syndrome; Hb=haemoglobin

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org

Acknowledging continuing excellence: IDEAS framework

I – Identify excellence, report locally and consider reporting to SHOT as acknowledging continuing excellence (ACE)

D – Debrief or team review following excellent events to identify themes and transferrable learning

E – Engage with all staff members, patients/blood donors to share learning

A – Apply transferrable learning to other processes in clinical and laboratory areas

S – Surveillance by monitoring trends, improvements and recognising further excellent events

An example framework for embedding learning from excellence into everyday practice is here.

SHOT Transfusion Safety Standards

Supporting documents for the SHOT Transfusion Safety standards have been created and are available in the SHOT website. These include:

- Frequently asked questions
- Timeline
- Baseline assessment tool

All resources are available here.

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org

My Transfusion app

SHOT have recently launched a new patient-focused app designed to support safe and informed transfusion care. The app is titled: 'My Transfusion'. This resource has been co-created with patients, shaped by insights from incident reports submitted to SHOT, and aligned with the Independent Blood Inquiry recommendations for transparency, safety, and shared decision-making. A number of accompanying resources are available:

For patients

- Video with overview of app
- Navigation video
- Frequently asked questions

All available on the patient page accessed **here.**

For healthcare professionals:

- Promotion pack
- Leaflets
- Screensaver
- Summary slide set
- Links to patient materials

All available **here.**

Download on the App Store

GET IT ON Google Play

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org

Email signatures

A number of new email signatures with key safety messages have been produced reflecting the 2024 SHOT data. These can be accessed by clicking here or on the appropriate image below.

Patient involvement

Transfusion reactions

Transfusion errors

Anti-D Ig errors

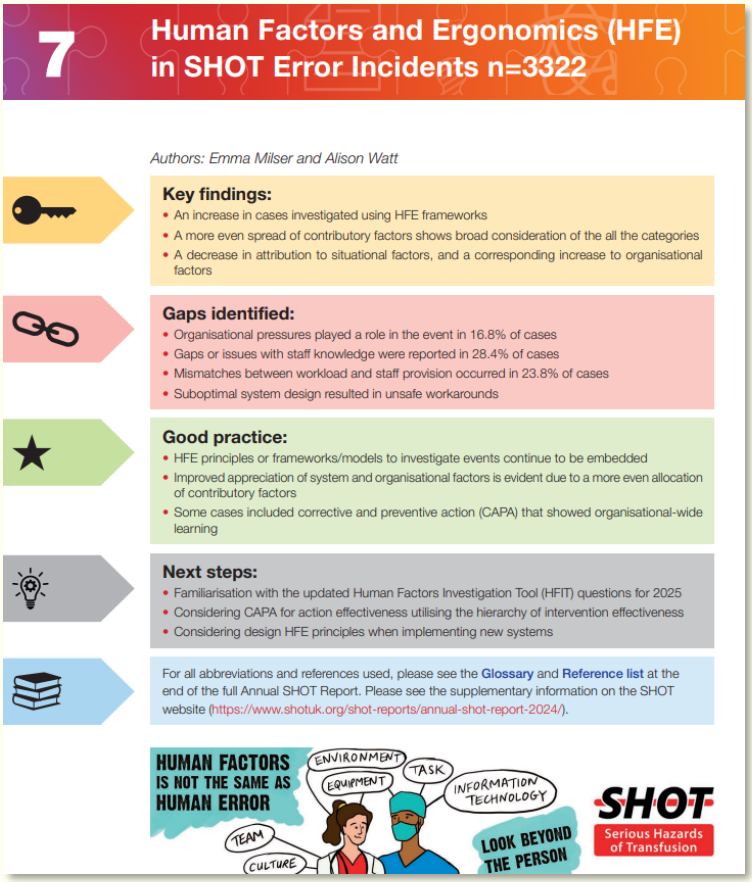
Human factors

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org

Key insights

For the first time in 2024 Annual SHOT Report, we have created a key insights page for each chapter. These reflect the essential learning points from each chapter and have been collated into one resource to provide a high-level overview of SHOT data.

Click here to view.



SHOT summaries

SHOT summaries will be available to order through the NHS leaflet service, using the stock code **BLC789.5.** Click here to sign in.

Use of SHOT resources

SHOT resources are produced to improve patient safety. We encourage use of all resources whilst maintaining recognition for the origin of data, and accuracy of data. Please refer to the SHOT terms of conditions and guidance regarding use of SHOT resources before reproducing SHOT data.

CONTACT DETAILS
SHOT Office, Manchester Blood Centre, Plymouth Grove, Manchester, M13 9LL
Tel: +44 (0) 161 423 4208 Enquiries: shot@nhsbt.nhs.uk www.shotuk.org