SHOT news item:

Amber alert declared in England for Group O stocks on 25 July 2024

NHSBT have declared an amber alert effective immediately for O group stocks. Following the cyber-attacks on London hospitals and after several days of low O neg stocks, NHS Blood and Transplant (NHSBT) has issued **an Amber level alert for O group stocks** asking hospitals to restrict the use of O type blood to essential cases and use substitutions where clinically safe to do so.

The alert come into force yesterday (Thursday 25 July) and will be kept under constant review. This is different to the previous Amber alert issued by NHSBT in 2022 which was across all blood groups and was due to a lack of capacity. This time they are seeing hospitals needing more blood components than expected and high numbers of unfilled appointments at blood donor centres and O negative and O positive donors are asked to urgently book and fill appointments at donor centres.

Guidelines for use and shortage plans for blood components in an amber alert are available on the National Blood Transfusion Committee website: Recommendations | National Blood Transfusion Committee

An Amber Alert is an important part of the NHS's business continuity plan for blood stocks. It triggers hospitals being able to:

- implement their emergency measures to minimise usage;
- move staff to laboratories to vet the use of all O type blood; and
- use patient blood management systems to minimise use of O type blood.

For more information and updates, please visit NHS Blood and Transplant Blood Stock Status webpage.

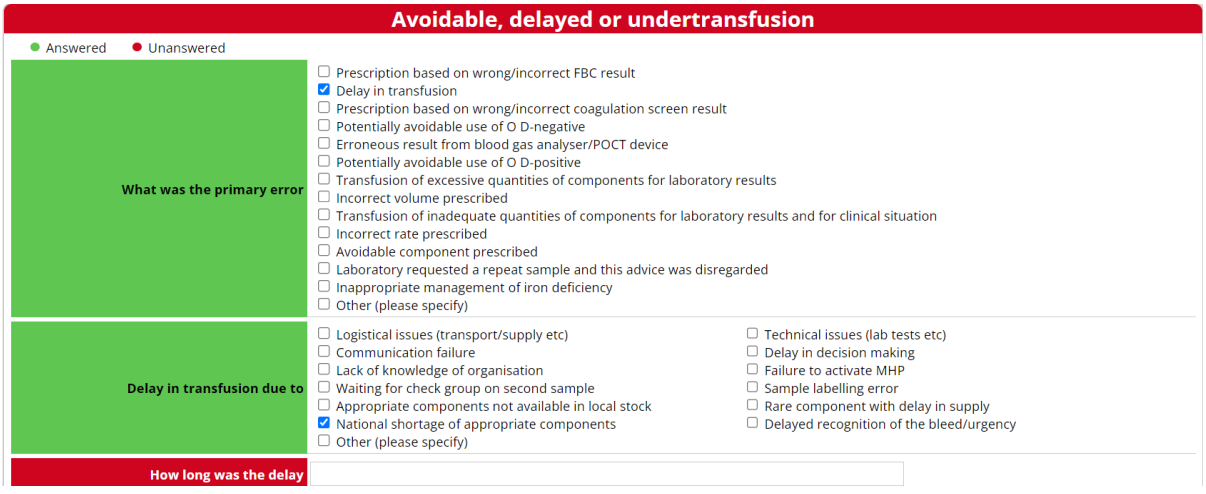
Hospitals should report adverse incidents in patients through local governance systems, SHOT, SABRE and also with NHSBT as appropriate.

The SHOT reporting definitions document can be found at this link: https://www.shotuk.org/reporting/ This provides guidance for reporting instances where transfusion would have been clinically appropriate but could not be given due to lack of availability of a suitable component during recognised blood shortages. A screenshot of the relevant page is shown below:

ADVERSE EVENTS		
TERM	**DEFINITION**	**WHAT TO REPORT**

ADU
 	
(Avoidable transfusion, Delayed transfusion or Under- or Over-transfusion, including PCC)
	Failure to transfuse when indicated, under or over-transfusion, avoidable transfusion, and significant delays in transfusion, whether caused by the laboratory or the clinical area. This includes all errors relating to the order, issue, or administration of prothrombin complex concentrate (PCC).
	
	AVOIDABLE: Where the intended transfusion is carried out, and the blood component itself is suitable for transfusion and compatible with the patient, but where the decision leading to the transfusion is flawed. Every unit transfused should be an individual decision, so this might include transfusion of multiple units where not all were appropriate/ necessary
	
	Do NOT report instances where to avoid significant transfusion delays, Group O components are transfused until a more appropriate group can be remotely allocated from a remote release refrigerator system
	
	DELAYED: Where a transfusion of a blood component was clinically indicated but was not undertaken or non-availability of blood components led to a significant delay (e.g., that caused patient harm, resulted in admission to ward, or return on another occasion for transfusion).
	
	UNDER (OR OVER) TRANSFUSION: A dose inappropriate for the patient's needs, excluding those cases which result in TACO (see TACO section) and usually resulting in a haemoglobin or platelet level significantly outside the intended target range. Infusion pump errors leading to under or over transfusion with clinical consequences (if no clinical consequences please report as HSE)
		Avoidable:
		• Components that are not required or are inappropriate because of erroneous laboratory results, transcription errors, miscommunication, or faulty clinical judgement
		• Components that are for an inappropriate indication
		• Transfusion of asymptomatic patient with haematinic deficiency
		• Avoidable use of emergency group O blood (O D-negative or positive) where group-specific or crossmatched blood was **readily** available for the patient or the laboratory could have supplied a more suitable component without delay
		Under (or over) transfusion:
		• Inappropriate volume transfused for patient's weight
		• Blood component support in major haemorrhage failing to meet or overshooting targets.
		• Incidents where a single unit of reduced dose platelets were issued and administered to a bleeding patient
		Delays
		• Situations where transfusion would have been clinically appropriate but could not be given due to lack of availability of a suitable component (e.g., rare component, recognised blood shortage)
		• Delays in provision of blood components in an emergency, including delays in clinical recognition of major haemorrhage or need for blood components (e.g., transfusion in sickle cell patients)
		• Delays where specialist testing is required (e.g., monoclonal antibody therapy, complex antibodies)
		• Cases where a delay in transfusion affected the patient's health/wellbeing, for example:
		  ○ An out-patient who must return to hospital the next day as components were not available at the allotted time
		  ○ Delayed treatment

Here is the snip from the Dendrite questionnaire for ADU categories showing the question that needs to be answered in relation to the stock situation. There are 2 possible answers that cover the situation, and the closest fit to the situation should be selected by ticking one answer only please.



Avoidable, delayed or undertransfusion

● Answered ● Unanswered

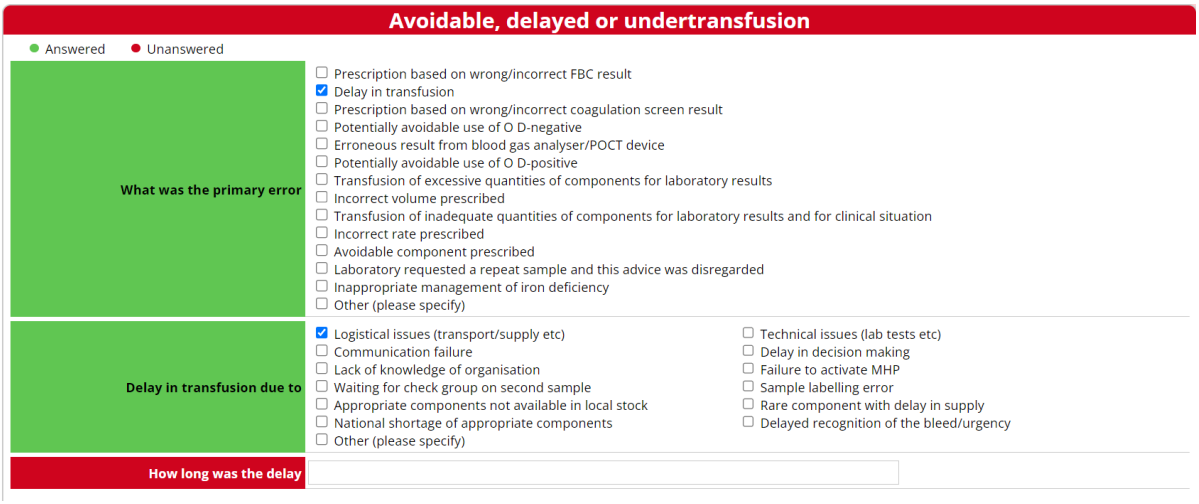
What was the primary error

- ☐ Prescription based on wrong/incorrect FBC result
- ☑ Delay in transfusion
- ☐ Prescription based on wrong/incorrect coagulation screen result
- ☐ Potentially avoidable use of O D-negative
- ☐ Erroneous result from blood gas analyser/POCT device
- ☐ Potentially avoidable use of O D-positive
- ☐ Transfusion of excessive quantities of components for laboratory results
- ☐ Incorrect volume prescribed
- ☐ Transfusion of inadequate quantities of components for laboratory results and for clinical situation
- ☐ Incorrect rate prescribed
- ☐ Avoidable component prescribed
- ☐ Laboratory requested a repeat sample and this advice was disregarded
- ☐ Inappropriate management of iron deficiency
- ☐ Other (please specify)

Delay in transfusion due to

- ☐ Logistical issues (transport/supply etc)
- ☐ Communication failure
- ☐ Lack of knowledge of organisation
- ☐ Waiting for check group on second sample
- ☐ Appropriate components not available in local stock
- ☑ National shortage of appropriate components
- ☐ Other (please specify)
- ☐ Technical issues (lab tests etc)
- ☐ Delay in decision making
- ☐ Failure to activate MHP
- ☐ Sample labelling error
- ☐ Rare component with delay in supply
- ☐ Delayed recognition of the bleed/urgency

How long was the delay



Avoidable, delayed or undertransfusion

● Answered ● Unanswered

What was the primary error	☐ Prescription based on wrong/incorrect FBC result ☑ Delay in transfusion ☐ Prescription based on wrong/incorrect coagulation screen result ☐ Potentially avoidable use of O D-negative ☐ Erroneous result from blood gas analyser/POCT device ☐ Potentially avoidable use of O D-positive ☐ Transfusion of excessive quantities of components for laboratory results ☐ Incorrect volume prescribed ☐ Transfusion of inadequate quantities of components for laboratory results and for clinical situation ☐ Incorrect rate prescribed ☐ Avoidable component prescribed ☐ Laboratory requested a repeat sample and this advice was disregarded ☐ Inappropriate management of iron deficiency ☐ Other (please specify)
Delay in transfusion due to	☑ Logistical issues (transport/supply etc) ☐ Communication failure ☐ Lack of knowledge of organisation ☐ Waiting for check group on second sample ☐ Appropriate components not available in local stock ☐ National shortage of appropriate components ☐ Other (please specify) ☐ Technical issues (lab tests etc) ☐ Delay in decision making ☐ Failure to activate MHP ☐ Sample labelling error ☐ Rare component with delay in supply ☐ Delayed recognition of the bleed/urgency
How long was the delay	

Please contact us at SHOT@nhsbt.nhs@uk if you have any queries.

Kind regards,

The SHOT Team