**WHC (2024) 039**

# WELSH HEALTH CIRCULAR

**Status:** Action/ Information

**Category:** Public Health Quality and Care

**Title: Pre-Transfusion Sample taking Compliance with the confirmatory sample rule**

**Date of Expiry / Review:** 31 September 2026

**Action by:** **Required by: Immediately**

Medical Directors Health Boards, Trusts and Strategic Health Authorities
Directors of Nursing, Health Boards, Trusts and Strategic Health Authorities
CMO, CNO Welsh Government
Postgraduate Medical Dean, HEIW
Director of Nurse and Health Professional Education, HEIW
Deans of the Schools of Nursing
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**Sender:**

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**Enclosures:** Pre-Transfusion Sample taking, compliance with the confirmatory sample rule

Pushpinder Singh Mangat,
Dirprwy Brif Swyddog Meddygol /Deputy Chief Medical Officer – Health Services

Dear Colleagues,

**RE: Pre-Transfusion Sample taking**
**Compliance with the confirmatory sample rule**

## BACKGROUND

In 2018 we wrote to the service regarding a risk raised by the Blood Health National Oversight Group (BHNOG) in Wales relating to pre-transfusion sample taking and the erroneous practice of taking two samples from a patient at the same phlebotomy episode.

Despite extensive education by Transfusion Professionals and clear communication within the 2018 letter instructing against this practice, it still appears to be widespread across NHS Wales.

The Administration of Blood Components Guidelines (2017)[1] published by the British Society for Haematology (BSH) (formerly British Committee for Standards in Haematology (BCSH)) state that:

*'The collection of the blood sample from the patient and the subsequent completion of details on the blood sample tube must be performed as one continuous, uninterrupted event at the patient's (bed)side involving one patient and one trained, competent and locally designated member of staff.* '

Additionally, BCSH Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories (2012)[2] state:

*'Unless secure electronic patient identification systems are in place, a second sample should be requested for confirmation of the ABO group of a* ***first-time*** *patient prior to transfusion, where this does not impede the delivery of urgent red cells or other components.'*

The rationale for these recommendations is:

*'Safety of transfusion begins with collection of the sample. It has been estimated that 1 in 2000 samples is from the wrong patient, commonly known as 'wrong blood in tube' [WBIT] (Dzik et al., 2003; Murphy et al., 2004). SHOT [serious hazards of transfusion - haemovigilance scheme] near miss data confirm that this continues to be a serious problem (SHOT)[3].'*

The Serious Hazards of Transfusion (SHOT) 2022 report highlighted that continual failure to adhere to basic safe procedures remains the major cause of WBIT in over 70% of cases reported. A SHOT survey undertaken in the UK of Emergency Department doctors demonstrated deliberate deviation from safe practice with 65% of respondents reporting having taken two group and save samples at the same time and labelling them with different times[4].

In 2018 (following the issue of the CMO letter) a Health Board survey of junior doctors in Wales confirmed that 83% were aware of why a confirmatory sample was required

but 91% said that the confirmatory sample procedure was sometimes ignored. Additionally, 80% stated that better education/ information would NOT achieve full compliance as the practice was endemic.

In March 2023 a junior doctor was suspended for 3 months following fraudulent completion of two Blood Transfusion Request Forms by allegedly amending the times on the form and signing under another doctor's name. **This occurred in NHS Wales**.

During the hearing (which is a redacted public document) the taking of two samples was referred to as *"just an admin thing"* and that it was acceptable to take two samples at the same time and label them as being taken 30 minutes apart.

The ABO confirmatory sample (previously known as second sample) is only required if there is no historic blood group testing for the patient. It is possible to identify a WBIT in the transfusion laboratory if a current patient sample has a different ABO or D group to a historic record on a hospital's Laboratory Information Management System (LIMS). A historic blood group maybe available on clinically accessible IT systems, or it can be determined by contacting the transfusion laboratory.

Where a historic blood group is available, only a single sample is therefore required to 'confirm' the ABO group of the patient prior to any transfusion. **It is essential that where there is no historic blood group, the ABO confirmatory sample must be taken at a separate phlebotomy episode to the first sample, with all correct patient identification checks being performed for both phlebotomy episodes.**

**CONCERN**

Each Health Board (HB) in Wales that provides transfusion laboratory services has a policy regarding ABO confirmation and the requirement for a confirmatory sample if needed is taken at a separate phlebotomy episode, prior to the issue of ABO and D grouped or cross-matched blood components for transfusion.

Despite this policy, we are aware that a significant number of sample takers across all HBs appear to be circumventing this policy thereby undermining the safeguard this was designed to introduce.

**ACTION**

In light of the above concerns, I ask that all health boards and trusts ensure they are complying with their policies and procedures in relation to pre-transfusion sample taking, to ensure that risk assessments, policies and procedures are being reviewed, updated, and appropriately applied. Failure to do so could result in significant harm to patients and even death. As you can see from the example above, practitioners who do not comply with this aspect of the policy can be subject to regulatory action. I also ask that you assure yourselves that all staff (including supplementary staff and managers) are familiar with these policies and procedures.

**Yours sincerely,**

Pushpinder Singh Mangat,
Dirprwy Brif Swyddog Meddygol Deputy Chief Medical Officer – Health Services

## References


1. *BSH Guideline: Administration of Blood Components (2017): https://onlinelibrary.wiley.com/doi/10.1111/tme.12481*

2. *BCSH Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories (2012): https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-3148.2012.01199.x*

3. *Serious Hazards of Transfusion: https://www.shotuk.org*