

## Providing 'Blood-to-Scene' to support Pre-hospital services in the Management of Major Trauma

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

### Introduction

The majority of Pre-hospital Enhanced Care Teams (ECT) in the West Midlands now carry blood products. Despite this there may be situations when clinical teams at scene require additional blood products for the resuscitation of critically ill or injured patients. Worcestershire Royal Hospital and Alexandra Hospital have joined the list of other hospitals in the region who can support pre-hospital services by supplying blood for pre-hospital teams at the request of the Regional Trauma Desk.

### This guideline is for use by the following staff groups :

This guideline is for use by emergency department teams (particularly senior nursing staff and senior clinicians) and blood bank team members involved in the provision of blood products in a major haemorrhage situation.

### Lead Clinician(s)

Dr Nick Turley	Emergency Medicine Consultant, WRH
Laura Walters	Lead Trust Transfusion Practitioner
Approved by Trust Transfusion Committee on:	6th July 2023
Review Date:	6 <sup>th</sup> July 2026

This is the most current document and should be used until a revised version is in place

### Key amendments to this guideline

Date	Amendment	Approved by:

## GUIDANCE

### Process within the Emergency Department

This guideline operates alongside the West Midlands Ambulance Service (WMAS) operational guideline 013 – 'Provision of Blood to Scene' which outlines the pre-hospital indications and requirements to make a request for blood to scene.

In general, 2 situations may occur:

- A. Request for blood to be prepared for collection to take to scene
- B. Request for blood to be prepared for collection by the conveying crew as a 'pit-stop' on the way to the Major Trauma Centre (MTC).

- 1) The Regional Trauma Desk (RTD) will contact the emergency department alert phone and request to speak to a senior doctor or Trauma Team Leader (TTL). If a senior doctor/TTL is not immediately available, the ED Nurse-in-Charge or other Band 6 or above nurse can take the details of the request. A specific proforma is available to complete which is kept next to the usual pre-alert forms. (See Appendix 1).

Information to be communicated from the RTD should include:

- Confirmation of request for blood to scene
- Approximate age and sex of the patient
- If available, the name and date of birth of the patient
- If known, whether it will be an ambulance crew making a 'pit-stop' collection or whether a member of ambulance service personnel will be coming to collect the blood products to take to scene.

- 2) The senior doctor/TTL or senior nurse should then contact blood bank on:

WRH ext 30635 or bleep 0848  
AGH ext 44719 or bleep 0255

- inform them of the blood to scene request details
- ask for 2 units PRBC (packed red blood cells) and 2 units FFP (fresh frozen plasma) This will be a **standard 'Blood to Scene pack'**. AGH does not hold pre-thawed FFP so the pack will only contain the 2 units of blood.
- Establish how long before blood products will arrive in the ED – the box of products should be brought to the ED resuscitation (Resus) room.

- 3) The senior doctor/TTL or senior nurse should then;

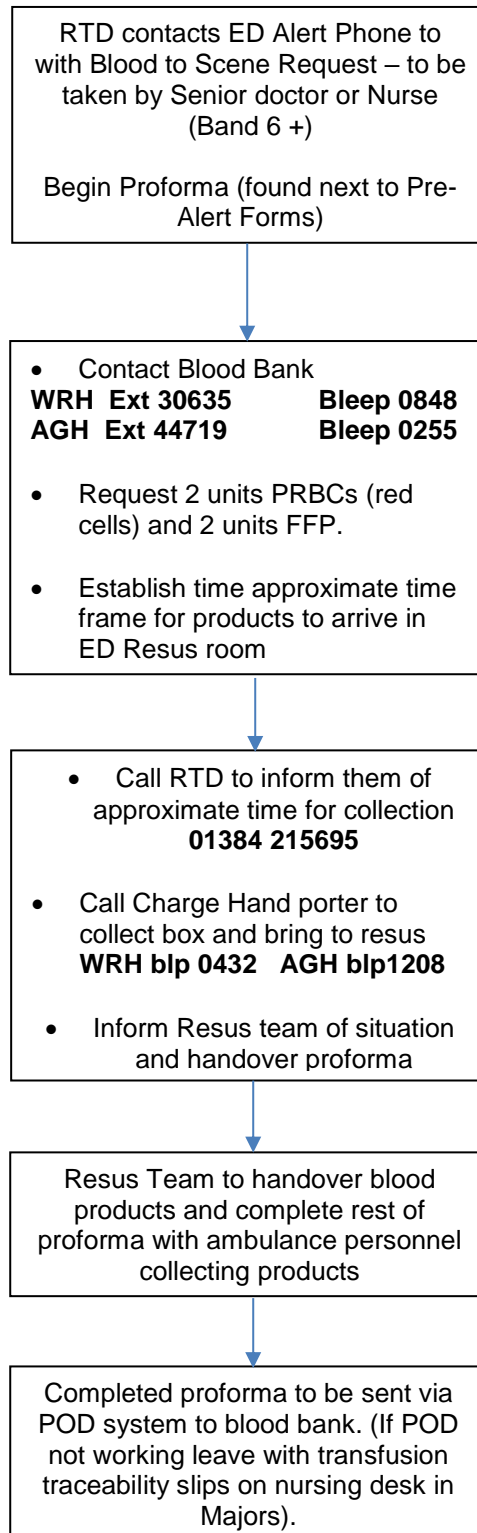
- call the RTD back **01384 215695**
- inform them of approximate time that products will be available for collection and to collect from the ED resus room.
- Ensure the Nurse-In-Charge and Resus room staff are aware. Handover the Blood to Scene proforma to the resus nursing team.
- Call charge hand porter on to go to blood bank to collect box and bring to ED resus.

WRH bleep 0432  
AGH bleep 1208

- 4) On collection:

The resus room team should establish identity of ambulance service personnel collecting the blood products and ask them to sign and print their name, time and date on the bottom of the

blood to scene proforma. This proforma should be then sent to Blood Bank via the Pod system. If the Pod system isn't working, the proforma should be left in the slot for Transfusion Traceability slips on the nursing desk in ED Majors area. This will ensure we have a record of units provided and assist with traceability.



## Process for Blood Bank

Upon receiving call from ED locate the 2 units of Red Cells and 2 units of pre thawed FFP from the issue fridge.

Log onto Winpath and update the status using the stock update option. Change the New Status to "TO OTHER HOSPITAL" and the New Location to "OTHER". In the comment box, write 'Blood to Scene'

Complete LF-U-TRA Blood Component Transfer Form and retain copy (any particular part of form?) in MHP folder.

Pack the cool box as instructed in LP-U-TRA Blood Collection, Receipt and Transfer. Place the LF-U-TRA Blood Component Transfer form on top of the polystyrene lid, under the canvas cover.

Fill in the Laminated Blood Box Label and attach to the box. – (this would state contents and time box was sealed, including expiry of FFP if needed)

The box is then collected by Porters to be taken down to ED

The ED team will send back the 'blood-to-scene' proforma with details of who and when blood products were collected and the likely destination hospital if known. This should be placed in the MHP folder with the associated LF-U-TRA.

## Governance of Process

All cases of blood-to-scene provision will be reviewed by the Trust transfusion practitioners and ED consultant lead for major trauma. They will follow-up on the fate of blood products and maintenance of cold chain as well as ensuring adherence to this guidance. This will involve close liaison with WMAS as the pre-hospital teams will hold responsibility for the fate of the blood products once handover has occurred.

When any incidents occur in within the ED or blood bank, this will be raised and investigated via the usual incident reporting pathways via the Datix system.

When any incidents occur with regards to the fate of any blood products or the use of these products (e.g. breach of cold chain), this will be raised through the Trust Datix incident reporting process and passed to WMAS (or other relevant pre-hospital service) to investigate. If necessary, the ED lead for major trauma will also raise the incident with the regional trauma network (Birmingham, Black Country, Hereford and Worcestershire Network) via the TRID reporting process to ensure shared learning.

All cases and incidents will be summarised and discussed on the agenda at the Trust Transfusion Group and Trust Trauma Group.

## Appendix 1: Proformas for AGH and WRH ED

<b>PRE-HOSPITAL REQUEST FOR BLOOD PROFORMA EMERGENCY DEPARTMENT AGH</b>					
<b>Date</b>		<b>Time</b>			
<b>WMAS Case ID</b>					
<b>Patient Details (If <u>Known</u>)</b>					
<b>Name</b>					
<b>Age</b>		<b><u>D.o.B.</u></b>		<b>Sex</b>	M / F
<b>Pregnancy Status</b>					
<b>ACTIONS</b>					
<ul style="list-style-type: none"> <li>○ Call Blood Bank (44719 or bleep 0255) and request 'Blood to Scene' pack (2 units Blood) <span style="float: right;">Time:</span></li> <li>○ Notify Trauma Desk of approximate time for collection: <span style="float: right;">Time:</span> Trauma Desk <b>01384 215695</b></li> <li>○ Contact blood porter to collect from blood bank – <b>Bleep 1208</b></li> <li>○ Nurse in Charge Informed: <span style="float: right;">Time:</span></li> <li>○ Resus Team informed and this form handed over to them <span style="float: right;">Time:</span></li> </ul>					
<b>BLOOD TO SCENE BOX ARRIVAL AND COLLECTION</b>					
Blood box arrival to ED Resus				Time:	
<u>Collected By:</u>					
Name:					
Role:					
Professional ID number:					
Date:				Time:	
Signature:					
Likely destination hospital of patient:					

**COMPLETED FORM TO BE RETURNED TO BLOOD BANK**

**PRE-HOSPITAL REQUEST FOR BLOOD PROFORMA  
EMERGENCY DEPARTMENT WRH**

Date		Time	
WMAS Case ID			

**Patient Details (If Known)**

Name					
Age		D.o.B		Sex	M / F
Pregnancy Status					

**ACTIONS**

- Call Blood Bank (30635 or bleep 0848) and request 'Blood to Scene' pack (2 units Blood + 2 units FFP) Time:
- Notify Trauma Desk of approximate time for collection: Time:  
Trauma Desk **01384 215695**
- Contact Porter to collect from blood bank – **Bleep 0432**
- Nurse in Charge Informed: Time:
- Resus Team informed and this form handed over to them Time:

**BLOOD TO SCENE BOX ARRIVAL AND COLLECTION**

Blood box arrival to ED Resus	Time:
Collected By:	
Name:  Role:  Professional ID number:  Date: <span style="float: right;">Time:</span>  Signature:   Likely destination hospital of patient:	

**COMPLETED FORM TO BE RETURNED TO BLOOD BANK**

## Monitoring

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	<b>WHAT?</b>	<b>HOW?</b>	<b>WHEN?</b>	<b>WHO?</b>	<b>WHERE?</b>	<b>WHEN?</b>
	These are the 'key' parts of the process that we are relying on to manage risk. We may not be able to monitor every part of the process, but we MUST monitor the key elements, otherwise we won't know whether we are keeping patients, visitors and/or staff safe.	What are we going to do to make sure the key parts of the process we have identified are being followed? (Some techniques to consider are; audits, spot-checks, analysis of incident trends, monitoring of attendance at training.)	Be realistic. Set achievable frequencies. Use terms such as '10 times a year' instead of 'monthly'.	Who is responsible for the check? Is it listed in the 'duties' section of the Policy? Is it in the job description?	Who will receive the monitoring results? Where this is a committee the committee's specific responsibility for monitoring the process must be described within its terms of reference.	Use terms such as '10 times a year' instead of 'monthly'.
Page 4	Cold chain of blood products	Case review	Within 2 weeks of case occurring	Transfusion practitioners and ED lead consultant for major trauma	Trust transfusion Group and Trust Trauma Group	4 times a year
Page 4	Final fate of blood products	Case review	Within 2 weeks of case occurring	Transfusion practitioners and ed lead consultant for major trauma	Trust Transfusion Group and Trust Trauma Group	4 times a year

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### References

- WMAS Operational Guideline 013 (version 2) – Provision of blood to Scene

### Contribution List

#### Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
James France, Emergency Medicine Consultant, WRH
Sophie Page, Band 7 ED and Trust Simulation training team
Camran Khan, Blood Bank Manager , WAHT
Caroline Leech, Major Trauma Lead, UHCW
Matrons and Band 7 team members, Emergency Departments WAHT

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Trust Transfusion Group
Trust Trauma Group



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**Supporting Document 1 - Equality Impact Assessment Tool**

. To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;



## Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form

Please read EIA guidelines when completing this form

### Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	
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Details of individuals completing this assessment	Name	Job title	e-mail contact
	Nick Turley	Emergency Medicine consultant	Nick.turley@nhs.net
Date assessment completed	27/06/2023		

### Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	Title: Policy for ‘Providing ‘Blood-to-Scene’ to support Pre-hospital services in the Management of Major Trauma’			
What is the aim, purpose and/or intended outcomes of this Activity?	To facilitate the provision of blood products for the resuscitation of major trauma patients in the pre-hospital setting			
Who will be affected by the development & implementation of this activity?	<input type="checkbox"/> Service User <input type="checkbox"/> Patient <input type="checkbox"/> Carers <input type="checkbox"/> Visitors	<input type="checkbox"/> Staff <input type="checkbox"/> Communities <input type="checkbox"/> Other _____		
Is this:	<input type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity <input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?			

What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.)	Recognised international best practice in the management of major haemorrhage in trauma
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Engagement with: <ul style="list-style-type: none"> <li>- ED staff</li> <li>- Pre hospital services</li> <li>- Blood bank/transfusion service</li> <li>- Portering service</li> </ul>
Summary of relevant findings	Teams believe process is in best interests of patients and happy to engage/proceed.

### Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.**

Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
Disability	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
Gender Reassignment	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
Marriage & Civil Partnerships	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
Pregnancy & Maternity	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
Race including Traveling Communities	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
Religion & Belief	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
<b>Sex</b>	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
<b>Sexual Orientation</b>	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
<b>Other Vulnerable and Disadvantaged Groups</b> (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma
<b>Health Inequalities</b> (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)	√	√		Process likely to improve access to best practice resuscitation for major trauma or at least not change current access to resuscitation in major trauma

## Section 4

<b>What actions will you take to mitigate any potential negative impacts?</b>	<b>Risk identified</b>	<b>Actions required to reduce / eliminate negative impact</b>	<b>Who will lead on the action?</b>	<b>Timeframe</b>
<b>How will you monitor these actions?</b>				
<b>When will you review this EIA?</b> (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	<b>At document review date or before if clear evidence of inequality becomes apparent during case reviews / incident investigations.</b>			

## Section 5 - Please read and agree to the following Equality Statement

### 1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9

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protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

<b>Signature of person completing EIA</b>	NT
<b>Date signed</b>	27/6/2023
<b>Comments:</b>	
<b>Signature of person the Leader Person for this activity</b>	
<b>Date signed</b>	
<b>Comments:</b>	



## Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.