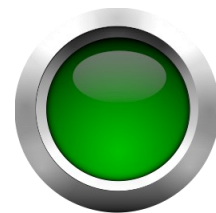


# Blood transfusion (BoB) SOP

QPI

Further reading

NICE NG24 2015  
ATC/TIC overview. Journal Intensive Care 2017  
Traumatic haemorrhagic shock 2017  
BoB operational & training pages



## Related SOPs

Haemostasis SOP	Fluid therapy SOP	Splintage SOP	Tranexamic acid SOP
	Calcium chloride SOP	Low output state in trauma SOP	

Prehospital blood component therapy at GNAAS is delivered as a balanced transfusion of thawed fresh frozen plasma and packed red cells.

Blood transfusion represents *one part of a holistic approach* to patients with major haemorrhage. Other elements include:

- <C>ABC approach
- Aggressive haemorrhage control - refer to the Haemostasis SOP
- Early administration of tranexamic acid
- Minimum patient handling techniques for clot stability
- Prevention of hypothermia - warm the patient, warm the blood
- Administration of 5ml 10% calcium chloride (0.1ml/kg in children)
- Prehospital initiation of the major haemorrhage protocol
- No unnecessary delays at scene

The principles of damage control resuscitation are explained in more detail in the referenced articles above.

## Indications for transfusion

Traumatic or non-traumatic major haemorrhage

**AND**

Sustained signs of hypoperfusion  
(eg. SBP<90mmHg/loss of radial pulse/impaired mentation)

# Blood transfusion (BoB) SOP

All GNAAS staff should be familiar with the associated [BoB operational SOP](#)

All GNAAS staff must undertake [annual competency training](#)

The [transfusion checklist](#) must be verbally completed by 2 GNAAS crew members simultaneously prior to blood product administration for all patients

A [BoB prescription sheet](#) should be completed for all patients

All patients who have received a prehospital transfusion should be given 5ml 10% calcium chloride (0.1ml/kg in children). Ideally this should be through a separate cannula. Where this is not possible, give the calcium chloride first followed by a 10-20ml saline flush before the blood component therapy. Where blood products are already running, a 10-20ml saline flush must be given both before and after the calcium chloride injection to prevent mixing in the line

Transfusion through an intraosseous line will require a 3-way tap (upstream of the warmer) and a large luer-lock syringe

Where possible, please attempt to get a photocopy of the initial blood gas result from the receiving hospital

A [BoB audit form](#) must be completed and emailed securely on the same day

Where ROLE is declared on scene, it is important to leave a note in the cool box detailing which hospital mortuary the patient was taken to and the PRF number so that records can be matched at a later date

## Patient advice leaflet

National recommendations state that informed consent should be given prior to administering any blood transfusion, however, the nature of our emergency patient population means that it is unlikely that we will be transfusing blood to a patient who is awake, alert and in a position to give consent.

However, in the rare even that this is possible or a patient's relative would like further information, the BOB equipment bag contains 2 information leaflets:

*NHSBT – Will I need a blood transfusion?*

*NHSBT - Information for patients who have had an unexpected blood transfusion*

# Blood transfusion (BoB) SOP

## Serious hazards of transfusion (SHOT)

It is unlikely that we will be able to identify this in our patients due to their unstable nature, but suspect this if the patient develops new signs:

- Sudden deterioration on starting the blood
- Increased HR, low BP, wheeze, low Sats, rash, increased temperature

If in doubt STOP the transfusion and report the effects at receiving hospital and hand over the unit of blood for testing at the receiving hospital.

Allergy is the most common side effect of transfusion and frequently results in a widespread urticarial rash.

- Stop the transfusion, discard giving set, retain unit for testing
- Treat – Chlorphenamine 10mg iv

## Paperwork reminder

1. Give hospital information sheet to receiving team
2. Complete BoB audit form on the same day and email securely
3. Photocopy initial hospital blood gas results and attach to PRF
4. Attach hospital ID sticker to reverse of signed torn-off tags and return in cool box
5. Give hospital information sheet to receiving team
6. Complete BoB audit form on the same day and email securely

## Resupply reminder

BoB resupply available Thursday 20:00 - Monday 20:00

Both units of FFP must have been used prior to requesting resupply

1. Call RVI transfusion lab - **0191 2824335/2829002**
2. Call relevant blood bikes: Northumbria - **0191 2286495/07712875269**  
Cumbria - **0843 8868780/07540240413**