

**Single unit** blood transfusions reduce the risk of an adverse reaction

# Don't give unit two without review

## Before you transfuse your patient:

-  Does their current haemoglobin level indicate a need for transfusion?
-  Are they symptomatic?
-  What is their target haemoglobin level and would this be achieved by transfusing one unit?
-  Only request one unit at a time for stable non-bleeding patients.
-  Document the reason for the transfusion.

## Each unit transfused is an independent clinical decision

### Clinically re-assess your patient after each unit is transfused:

-  Do they still have symptoms of anaemia?
-  Are there any signs or symptoms of a transfusion reaction?
-  Is further transfusion appropriate? Re-check haemoglobin level.



# Indications for the use of red cells in adults

This guidance is based on the NBTC Indication Codes for Transfusion (June 2016)

## Red cell dose

In the absence of active bleeding, use the minimum number of units required to achieve a target Hb. Consider the size and weight of your patient; assume an increment of 10g/L per unit for an average 70kg adult.



### **R1 Acute bleeding**

Acute blood loss with haemodynamic instability. After normovolaemia has been achieved/maintained, frequent measurement of Hb (including use of near patient testing) should be used to guide the use of red cell transfusion.



### **R2 Hb ≤ 70g/L stable patient acute anaemia**

Use Hb threshold of 70g/L and a target Hb of 70-90g/L to guide red cell transfusion. Follow local/specific protocols for indications such as post cardiac surgery, traumatic brain injury and acute cerebral ischaemia.



### **R3 Hb ≤ 80g/L if cardiovascular disease**

Use Hb threshold of 80g/L and a target Hb of 80-100g/L.



### **R4 Chronic transfusion dependent anaemia**

Transfuse to maintain a Hb which prevents symptoms. Suggest Hb threshold of 80g/L initially and adjust as required. Haemoglobinopathy patients require individualised Hb thresholds, also consider age and diagnosis.



### **R5 Radiotherapy maintain Hb > 110g/L**

There is limited evidence for maintaining a Hb of 110g/L in patients receiving radiotherapy for cervical and possibly other tumours.



### **R6 Exchange transfusion**

#### References:

1. Robinson, S. et al. on behalf of the British Society for Haematology (BSH) (2017) The administration of blood components
2. National Institute for Health and Care Excellence (2015) Blood transfusion. NICE guideline (NG24)
3. National Blood Transfusion Committee (2016) Indication Codes – An Audit Tool (June 2016) <http://hospital.blood.co.uk/patient-services/patient-blood-management/transfusion-team-resources/>