## 30 minute | 4 hour rule What does this mean?

## Why do you have to return unused blood to blood bank within 30 minutes?

- Returning them within 30mins helps to decrease wastage.
- If Red Blood Cells (RBC) are returned to the Blood Bank (BB) within 30mins, they can then be returned to storage in the BB fridge.
  - Once they are back in the fridge, they can be re-crossmatched and released to any other patient.
- If RBC have been sitting at room temperature for >30mins, they cannot be returned to the BB fridge as they have been out of their ideal storage conditions for too long to safely go back into storage.
  - So, if you return RBC to the BB after 30mins have elapsed, the BB staff have no option but to discard them.

## Can blood that has been left on the ward for >30 minutes be transfused?

- All blood transfusions should be commenced within 30 minutes of the blood being released from blood bank.
- Ideally, you won't request blood to arrive on the ward until you are ready to immediately commence the transfusion.

**However**, you have up to 4 hours to complete a blood transfusion.

- So, RBC that have been left at room temperature in the clinical area (i.e. hung on an IV pole, sitting in the medication room etc...) may still be transfused provided the transfusion is complete **within 4 hours** from release from the blood bank. For example: If a unit of RBC is left sitting in the ward for 1 hour, you can still transfuse this unit to your patient, provided that you complete the transfusion within the next 3 hours (i.e. 1 hour + 3 hours = 4 hours total time out of the fridge)
- You also need to ensure that this administration time complies with the doctor's prescription. Medical staff will usually prescribe that the blood be transfused within a range of time (i.e. 1-3 hours, 2-4 hours).
  - o In stable, non-bleeding adult patients, the typical administration duration is:
    - Red cells 60-180 minutes per unit.
    - Platelets 15-30 mins per bag
    - FFP 30 mins per bag
    - Cryoprecipitate 30-60 mins per dose (which is usually 5-10units)
- Remember to perform the PRE-TRANSUFSION CHECK on any blood BEFORE it is connected to the patient.

## Does blood have to be transfused within 4 hours?

**YES,** a transfusion must be completed within 4 hours **WHY?** The risk of bacterial proliferation greatly increases when blood remains at room temperature for >4 hours

References:
ANZSBT Guidelines 2011
ARCBS website
FAQ's – EH intranet >Useful Links > Blood Matters
Blood and Blood Component Administration – EH Policy