

# Blood Fridge Management

## RELEVANT LEGISLATION

- HSC Better Blood Transfusion
  - o Hospital Transfusion Team
  - o Transfusion Practitioners
- Blood Safety & Quality Regulations (2005)
  - o documented evidence of training
  - o vein-to-vein traceability of blood products
  - o SABRE
- NPSA Safer Practice Notice (2006)
  - o observed competencies
- SaBTO
  - o written/documentated evidence of consent for transfusion



# Blood Fridge Management

## COLD CHAIN REQUIREMENTS

- Red cells must be stored at 4°C
- Temperatures must be continually monitored
- Local alarm system required
- Remote alarm if fridge sited in an area which is not manned 24/7
- Defined procedure for responding to alarms
- Contingency plans for dealing with stock
- Monitoring systems calibrated annually



# Blood Fridge Management

## DAILY TASKS

Should be performed by day shift staff to ensure prompt action in the event of any problems

- Record air temperature (2°C-8°C)  
(some older fridges may have only 1 digital display...this should be the load temperature)
- Record load\* temperature (4°C +/- 2°C)  
(fridge should run at 4°C with tolerance allowed e.g. after door open)
- Check chart is set to correct day and time
- Check chart is within 1°C of load temperature
- Check pen is recording (if not change nib)
- Check any blood is within its expiry date
- Check there are no non-blood products in fridge  
(a small number of cool packs for transporting blood is permitted)

**Report any problem to responsible blood bank immediately**

\* load temperature is measured using a probe in water – this fluctuates less than air temperature.

# Blood Fridge Management

## WEEKLY TASKS

- Check the fridge alarm
- Check the remote alarm where applicable
- Replace chart taking care to set to correct date and time  
(ensure the chart is placed **squarely over the shaft** before replacing the screw)
- Check the interior of the fridge is clean and dry  
(the fridge should be cleaned with warm soapy water as required)
- Attach the chart to the check list sheet and return to the responsible laboratory  
(it is advisable to photocopy the records but the original must go to the responsible laboratory)

# Blood Fridge Management

North Devon District Hospital

Department of Blood Transfusion

CONTROLLED STORAGE OF BLOOD IN COMMUNITY BLOOD BANKS

File name T-SOP-68

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Date of Issue : February 2012

Name of Hospital:.....

DAILY TASKS - MUST BE CARRIED OUT BY DAY SHIFT STAFF	DATE and TIME						
Record Air Temperature (when indicated)							
Record Load Temperature (should be constant 4°C with a variation allowed of +/- 2°C e.g. after door open)							
Check chart is set to correct day and time							
Check chart is reading same as load temp.							
Check pen is working, if not replace nib							
If blood is in fridge, check it's within expiry date							
Check there are no non blood products in fridge							
Signature							

WEEKLY TASK	DATE/TIME	SIGNATURE
Check the fridge alarm (and remote alarm where applicable) use the appropriate procedure for fridge, ensure alarm sounds		
Write date and name of hospital on new circular record chart		
Replace chart taking care to set correctly. Ensure the chart is placed <b>squarely over the shaft</b> before replacing the screw.		
Check the fridge interior is clean and dry; if not clean with warm soapy water, report any excess condensation		
Attach the previous circular record chart to this sheet and return to NDDH Transfusion immediately please		

**In order to comply with MHRA requirements and E.U. law you MUST, please:**

**Report any problems to NDDH Transfusion laboratory on 01271 322327 and faults to NDDH Facilities on 01271 311500, immediately.**

**If your blood is supplied by the RD&E Transfusion laboratory you must also phone them on 01392 402461/402466.**

**Send copies of any service/repair/calibration paperwork to the NDDH Transfusion laboratory as soon as possible.**

**Return this sheet, fully completed, and the previous week's chart immediately each week.**

**Failure to comply with these requirements will result in immediate and indefinite suspension of blood supplies to your hospital.**

# Blood Fridge Management

## MAINTENANCE / CALIBRATION

- All blood bank fridges must have a maintenance inspection every 6 months
- Any faults must be attended by a qualified engineer
- A copy of all engineer's reports must be sent to the responsible laboratory
- Temperature charts must be calibrated every 6 months
- Staff must not tamper with the tension on the chart needle
- A copy of the calibration certificate must be sent to the responsible laboratory



# Blood Fridge Management

## TEMPERATURE MAPPING

To comply with MHRA fridges must be mapped:

- before first use
- at least annually
- after any move
- after any major repair

**The responsible laboratory will determine when mapping is required**



# Blood Fridge Management

## RECORDING BLOOD MOVEMENTS

- All blood units must be logged into the fridge
- The log must include the date and time of receipt
- The date and time of removal from the fridge must be logged
- This information should be checked against the start time to ensure the units are set up within 30 minutes
- The fate of any units not transfused (e.g. Emergency Blood) must be logged
- Copies of the log should be returned to the responsible laboratory





# Blood Fridge Management

North Devon District Hospital

File name T-SOP-58

Department of Blood Transfusion

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CONTROLLED STORAGE OF BLOOD IN COMMUNITY BLOOD BANKS

Date of issue : February 2012

## 5.4 Blood Log: Community Hospital Blood Movement Record For.....HOSPITAL

Blood units in to fridge						Blood units out of fridge				
Date	Time	Patient's Name	NHS No.	Unit No.	Signed	Date	Time	Signed	Fate of unit*	Pink slip completed?

*\*Fate of unit – Transfused, discarded/returned to Transfusion lab (give reason). Please return this form to NDDH Transfusion when filled.*

TRANSFUSION PROCEDURE

Review date February 2015

# Blood Fridge Management

## RETURNING BLOOD UNITS

- Unused emergency blood should be returned preferably at least 10 days prior to expiry - sufficient time for the blood to be used appropriately (the issuing laboratory should advise you on this)
- Unused blood should be returned to the issuing laboratory
- The small red clinimed boxes are validated for 3 hours
- Pack the blood in the centre of the box
- Fill all the dead air space with cool packs
- Securely seal the box and return to issuing laboratory
- Put paperwork in front pocket of box
- Where appropriate, replace cool packs in fridge  
(packs must be refrigerated for a minimum of 24 hours before use)

