











































- Every three months, audit records of stock and temperature management

Compliance with this SOP will be audited during Medicines Management audits of wards / departments. This SOP will be reviewed every three years or earlier should changes to legislation or to practice indicate otherwise.

## 14. References

- Powys Medicines Policy [PTHB | MMP 001 Powys Medicines Policy](#)
- Public Health Wales Guidance on Handling and Storage of Vaccines [PHW Advisory document Ordering storage and handling of vaccines 2017](#)
- [Professional Guidance on the Safe and Secure Handling of Medicines. Royal Pharmaceutical Society. December 2018](#)
- [MHRA inspectorate. Refrigerated medicinal products, part 1: receipt and storage - some things to consider.](#)
- [MHRA inspectorate. Refrigerated medicinal products, part 2: Transportation, packing, temperature management, the use of third party couriers and returns – some things to consider](#)
- [Immunisation against infectious disease](#), the green book.
- [National Reporting and Learning Service. Vaccine Cold Storage. National Patient Safety Agency January 2010.](#)
- [British National Formulary](#)
- [www.helapet.co.uk](#)
- [www.labcold.com](#)
- Vaccine Cold Chain Standards Policy, NHS Telford and Wrekin CCG <https://www.telfordccg.nhs.uk/your-health/medicines-management/policies/medicines-management-policies/5743-vaccine-cold-chain-standards-policy-july-2018-1/file>



This fridge contains temperature sensitive medicines and vaccines.  
The temperature must always be between 2°C and 8°C

## **Read.....Record.....Reset.....Recheck.....React.....**

### **Read**

Take daily readings of the thermometer's actual, minimum and maximum temperatures.

### **Record**

Record temperatures in a standard way on the standard form and sign each entry on the recording sheet

### **Reset**

Reset the thermometer after each reading. Also reset the thermometer when temperatures stabilise after periods of high activity (loading or unloading the fridge).

### **Recheck**

Recheck the temperature after ONE hour if out of range temperature then read, record, reset and react.

### **React**

The person making the recording must take immediate action if any temperature falls out of the range 2°C to 8°C. See disruption of cold chain guidance in Powys SOP for Safe & Secure Management of Refrigerated Medicines and Vaccines. The action(s) taken must be documented and should include contacting Medicines Management 01874 712641

### **If the fridge fails**

Keep the door closed and locked if possible. This will keep the contents cool and quarantine them.

**DO NOT STORE FOOD DRINK OR CLINICAL SPECIMENS IN THIS FRIDGE**

# Refrigerator Monitoring Sheet

Title: Safe and Secure Management of Refrigerated Medicines and Vaccines Standard Operating Procedure  
 Reference No: PTHB / MMS 010  
 Author: Medicines Management

**Appendix C**

The temperature must be between +2°C and +8°C. If the temperature is outside the recommended range, take action as stated in the disruption of cold chain section of this SOP.  
**Remember: Read, Record, Reset and React.**

**Record of daily monitoring of medication refrigerators**

Department \_\_\_\_\_

Month \_\_\_\_\_ Year \_\_\_\_\_

**FOR ADVICE CONTACT MEDICINES MANAGEMENT ON 01874 712641 OR IF OUT OF HOURS CONTACT NH OR BRONGLAIS PHARMACY**

Date	Time	Temperature Load / Air			Reset (tick when reset to actual temp)	Any Temp (Actual, Min or Max) outside recommended range? (please circle)	Temperature Rechecked after ONE hour			Action if any temperature outside normal range (PTO if necessary)	Signature
		Actual	Min	Max			Actual	Min	Max		
1						Yes No					
2						Yes No					
3						Yes No					
4						Yes No					
5						Yes No					
6						Yes No					
7						Yes No					
8						Yes No					
9						Yes No					
10						Yes No					
11						Yes No					
12						Yes No					
13						Yes No					
14						Yes No					
15						Yes No					
16						Yes No					
17						Yes No					

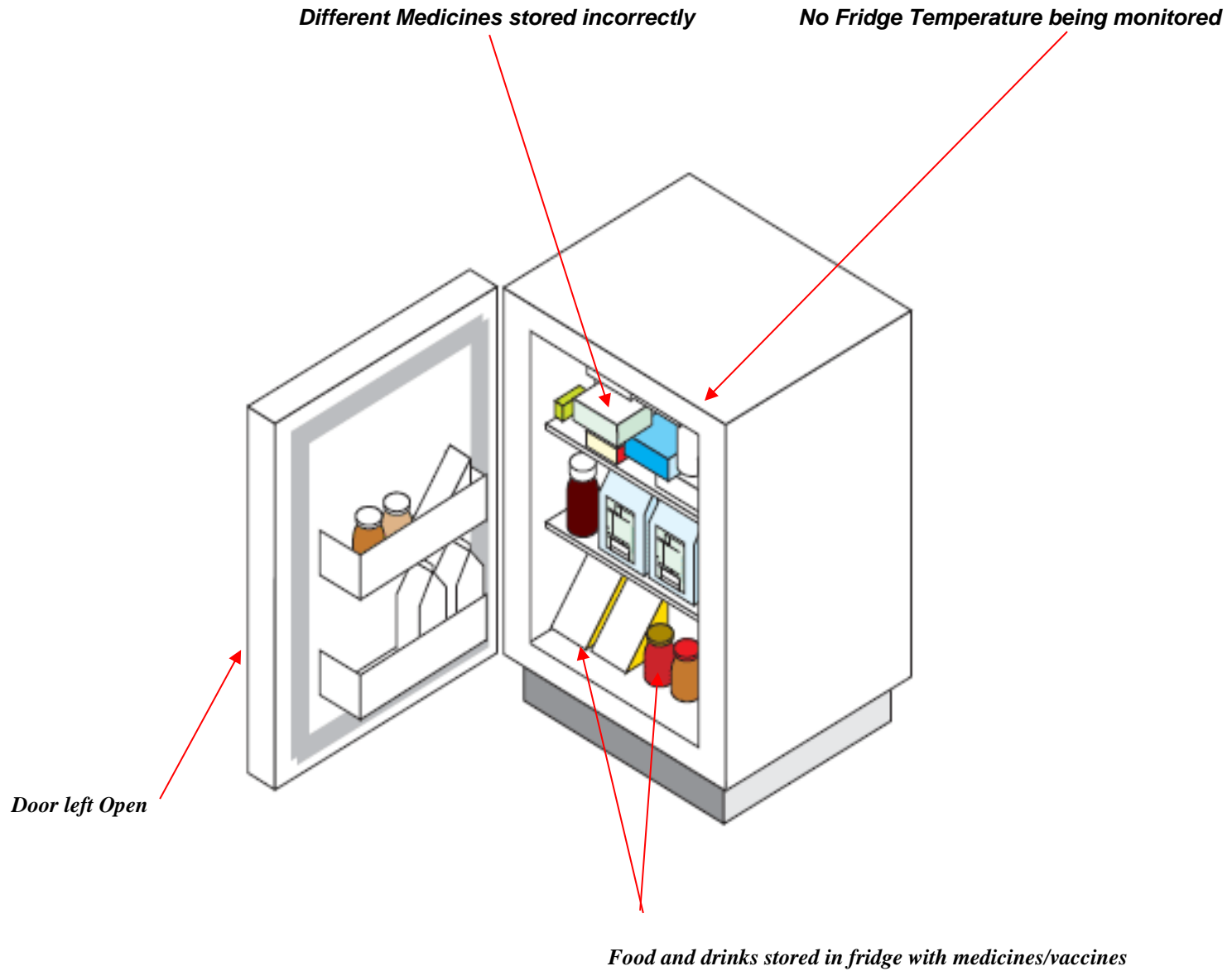
Date	Time	Temperature Load / Air			Reset (tick when reset to actual temp)	Any Temp (Actual, Min or Max) outside recommended range? (please circle)	Temperature Rechecked after ONE hour			Action if any temperature outside normal range (PTO if necessary)	Signature
		Actual	Min	Max			Actual	Min	Max		
18						Yes No					
19						Yes No					
20						Yes No					
21						Yes No					
22						Yes No					
23						Yes No					
24						Yes No					
25						Yes No					
26						Yes No					
27						Yes No					
28						Yes No					
29						Yes No					
30						Yes No					
31						Yes No					

Re: MIUs/Birthing units/Theatres – when these areas are not staffed, this MUST be recorded on the above log  
**N.B. If unit is not staffed for more than two consecutive days an arrangement MUST be made to perform a check on the third day.**



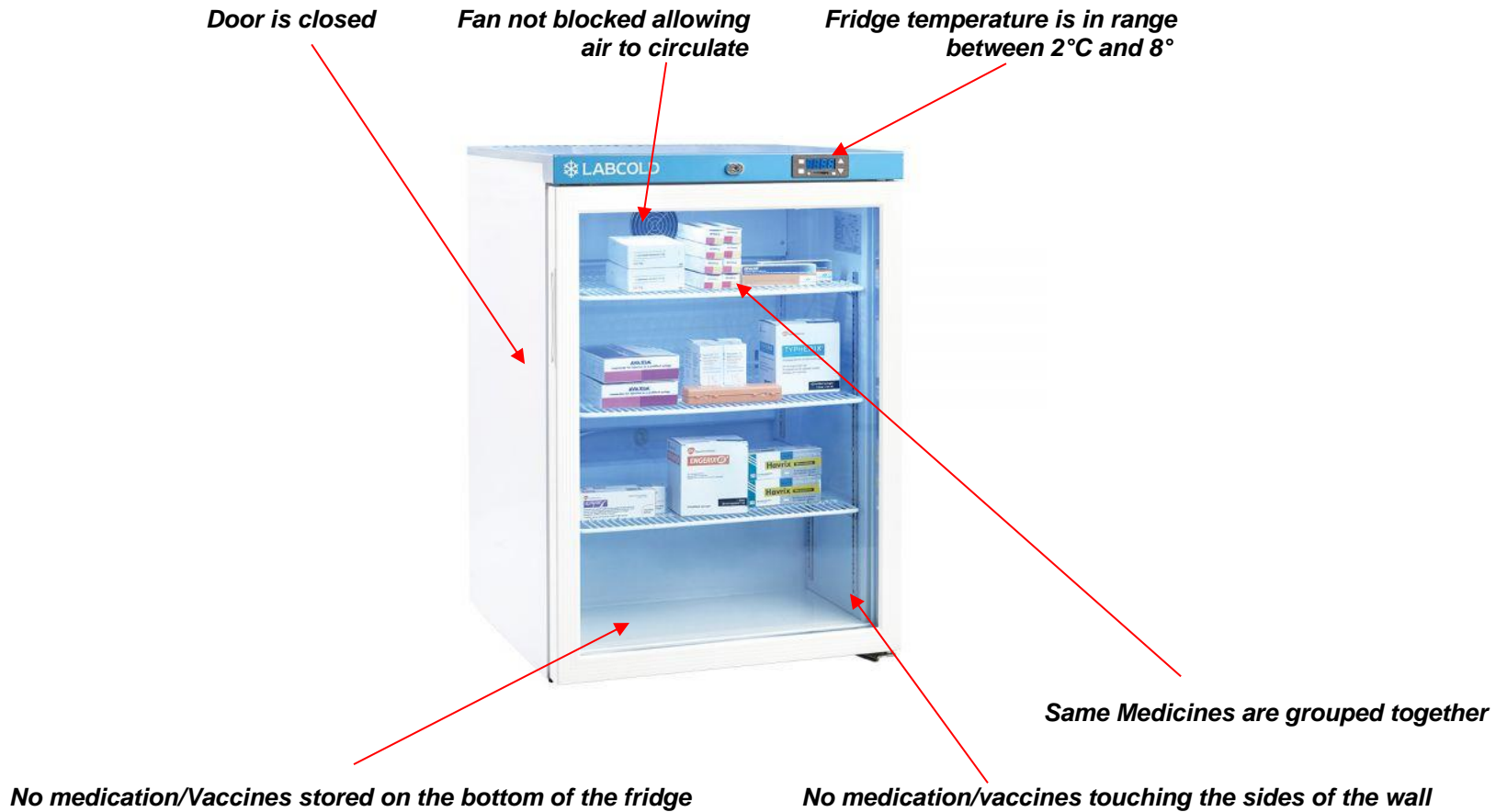


### ***Appendix D Incorrect Fridge Storage***



## **Appendix E**

### **Correct Fridge storage**



## Appendix F.1

# VaccinePorter® 6



### Prior to use:

Before inserting each Medicoool® into the VaccinePorter® system, please follow these instructions:

- Refrigerate 6 x Medicoool® 28 at +5°C, ± 3°C for a **minimum** of 24 hours\*.
- Medicoool® cool packs should be stacked flat on storage shelves no more than 3 high, with 50mm of free air circulation around the packs.

### Instructions for Use - Please Turn Over

\*Due to the potential variation in fridge performance, frequency of opening and other fridge contents, it is recommended that Medicoool® pre-conditioning is validated by the user.

**Lid**

**Product (Vaccines)**

**6 x Medicoool® MC28**  
Weight: 600g per Medicoool®  
(supplied separately)

**Inner moulding**

**Protective Carrying Case**



CP1421/1017

## **Appendix F.2**

### **Vaccine Porter - Instructions for Use**

System assembly and product packing

Pack and seal the VaccinePorter® system swiftly, as follows:

1. Place 1 x Medicoool® 28 on the base of the system.
2. Place the product to be transported in the centre of the VaccinePorter®.
3. Place 1 x Medicoool® 28 on each side of the system, surrounding the Product.
4. Place 1 x Medicoool® 28 on top of the product.
5. Close the lid and ensure it is sealed by closing the outer carrying case immediately.
6. Only open the VaccinePorter® if necessary and remember to re-seal as soon as possible.

Although the Vaccine Porter® has been validated so that the product can be added and removed from the sealed system during use, do not open unnecessarily and remember to re-seal the system quickly.

#### **To re-use the system:**

In case you decide to re-use the system, please follow these steps below prior to conditioning the Medicoool® cool packs:

- A weight check and visual squeeze check will need to be carried out to ensure there is no loss of liquid. If the Medicoool® is  $\pm 20$ g different to the weight shown on the Medicoool® (overleaf) or shows any signs of leaking, then it is recommended that it is disposed of.
- We recommend that any chipped or broken polystyrene inners are replaced before use as this can affect the thermal performance of the VaccinePorter®.

[Further information is available from:](#)

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## Appendix G How to use SD card

# Steps to follow if your daily fridge check shows a reading outside of normal range between 2 and 8 degrees.

- The SD card is kept in a white envelope in one of the poly pockets in the fridge file. Please find the SD card and insert it in the SD card slot on the fridge (white side facing up).
- Wait 5 seconds then press the tick button (next to the SD card slot). The display will change from showing the temperature to showing the word LOAD.
- To download the data press the tick button AGAIN. The display will then show the number of days the fridge has been running since the data was last downloaded and will count down as the data is copied to the SD card (if the data has not been downloaded for a long time this may take some time)
- Once all the data has been downloaded onto the SD card the display will show the word DATE.
- Press the mute button (next to the SD card slot on the opposite side to the tick button) the display will show the word DONE.
- Remove the SD card from the fridge
- Insert the SD card into the SD card reader (also kept the white envelope in one of the poly pockets in the fridge file)
- Insert the SD card reader into one of the USB slots on the computer. You will be asked if you would like to encrypt the device – DO NOT ENCRYPT.

- To download the data from the SD card onto the computer follow these instructions: On the black strip on the bottom of the computer there is a yellow file with a blue N shape on it – click on this – then on the left hand side somewhere down the list you will see USB Drive (E:) – click on this
- A list of Excel files will show. Each Excel file is one day. The name of the file is the date as YYMMDD. To get the most recent downloads at the top of the page click on the word ‘date modified’
- Select the date you want to look at from the first column.
- Column A is the time and column B is the temperature. The temperature is recorded every minute so you can see exactly how many minutes the temperature has been above 8.
- Print or Save the file onto the computer.
- You can then exit out of all windows.
- To safely remove the SD card from the SD card reader: on the bottom right side of the computer near the time and date there is a white arrow (if you hover over it says ‘Show hidden icons’), click the arrow and it will show all the icons. Hover over each one to find the one that says ‘Safely remove hardware and eject media’, click that one and scroll down to eject SD card, double click and a message will flash up next to the white arrow saying ‘Safe to remove’.
- Take the SD card out of the reader and put it back in the white envelope in the fridge file.

**PLEASE FOLLOW NORMAL COLD CHAIN PROCEDURE**, this process will allow you to inform pharmacy exactly how many minutes the fridge has been out of range.

## Appendix H Is your fridge temperature out of range? Display near fridge for immediate reference

