Pennine Care NHS
NHS Foundation Trust

## Policy Document Control Page

**Title**

**Title: Policy for the storage, handling, distribution and disposal of vaccines**

**Version: Version 4**

**Reference Number: CL98**

**Supersedes**

**Supersedes: Version 3**

**Description of Amendment(s):**

- 4.2.6 Annual maintenance contract will now include thermometer calibration. Need for staff to calibrate thermometers removed
- 6. Requirement for vaccine stock count on receipt of vaccines added
- 8.12 Requirement for a stock count at the end of a vaccination session added
- Appendix 5 Cool Bag Flow Chart added
- Appendix 6 Vaccine Log added

**Originator**

**Originated By: Robert Hallworth**

**Designation: Lead Clinical Pharmacist, Community Services**

**Equality Impact Assessment (EIA) Process**

**Equality Relevance Assessment Undertaken by: Lesley Smith/ Robert Hallworth**

**ERA undertaken on: 27 October 2016**

**ERA approved by EIA Work group on: 16 November 2016**

**Where policy deemed relevant to equality-**

**EIA undertaken by**

**EIA undertaken on**

**EIA approved by EIA work group on**

**Approval and Ratification**

**Referred for approval by: Lesley Smith**

**Date of Referral: 2nd August 2017**

**Approved by: Drugs and Therapeutics Committee**

**Approval Date: 2nd August 2017**

**Date Ratified by Executive Directors: 4th September 2017**

**Executive Director Lead: Medical Director**

**Circulation**

**Issue Date: 6th September 2017**

**Circulated by: Information Department**

**Issued to: An e-copy of this policy is sent to all wards and departments**

**Policy to be uploaded to the Trust's External Website? YES**

**Review**

**Review Date: 21 July 2020**

**Responsibility of: Lesley Smith**

**Designation: Chief Pharmacist**

**This policy is to be disseminated to all relevant staff.**

**This policy must be posted on the Intranet.**

**Date Posted: 6th September 2017**

**CONTENTS**

## 1. INTRODUCTION

A successful immunisation programme depends on the administration of effective vaccines. Vaccines are biological substances that can quickly lose effectiveness if they become too hot or cold during transport and storage. It is therefore essential to maintain an unbroken cold chain for the vaccines from the point of manufacture, during transport and during storage in a refrigerator, until the point of administration. The definition of a 'validated cold chain' is where temperature is continually monitored and documented and therefore maintained.

**This document must be used in conjunction with the most recent edition of "Immunisation against Infectious Disease" www.dh.gov.uk and individual manufacturer's advice in the event of vaccine refrigerator failure.**

It is essential that all those handling vaccines ensure cold chain compliance.

## 2. PURPOSE

This policy is intended to provide instruction in the correct management of vaccine transport and storage by describing the standards pertaining to the ordering, receipt and storage of vaccines as well as appropriate action to be taken during and after an immunisation session and following a vaccine refrigerator failure. Every member of staff dealing with vaccines will be able to effectively manage the cold chain. Managers will be required to regularly review / audit the use, maintenance and management of equipment used for the transport and storage of vaccines.

## 3. SCOPE

This policy applies to all services directly provided by the Trust and all clinical staff should familiarise themselves with the policy.

## 4. STORAGE

4.1 Vaccines must be stored in accordance with manufacturers' guidelines to ensure their efficacy. In order to achieve this:

4.1.1 Vaccines must be stored in validated vaccine or medicine refrigerators, which are designated for that purpose only. **Food, drink and specimens should not be stored in the refrigerator.**

4.1.2 Refrigerators must be wired directly to a fuse spur to maintain power supply or be clearly labelled to avoid risk of accidental unplugging. Refrigerators must have a minimum of 40mm clearance at the sides and top and 75mm clearance at the back to allow the free circulation of sufficient amounts of air.

4.1.3 Refrigerators should be kept locked at all times with the key removed when not in use or be located in a locked room.

4.1.4 Refrigerators must not be packed too tightly as this prevents circulation of cold air. The majority of vaccine refrigerators have an internal fan - this helps ensure the air is of a uniform

temperature by preventing stratification - the vents to the fan housing at the top of the compartment should not be blocked.

4.1.5 To prevent the internal temperature rising, the refrigerator must not be opened unless necessary. The door must be kept open for the shortest possible time. This is particularly important when ambient temperatures are high, as once the door is opened the cool air inside the refrigerator quickly ‘falls’ out of the refrigerator as it is displaced by warmer, lighter air.

4.1.6 Vaccines must not be exposed excessively to light, and never to direct sunlight.

4.1.7 Refrigerators should not be placed next to a source of heat.

4.1.8 The temperature inside the refrigerator must be checked, using an appropriate maximum / minimum thermometer, read, recorded and reset at the same time daily (Bank Holidays and weekends excepting) by a named person or deputy. Recorded temperatures should be between 2°C - 8°C, aim for 5°C to give a safety margin of + / - 3°C. The thermometer should be used in refrigerators where vaccines are stored, irrespective of whether the refrigerator incorporates a temperature indicator dial.

4.1.9 The temperature recording charts should be kept for at least 2 years. They need to be kept for the duration of the shelf life of any product kept within it.

4.1.10 Where possible best practice requires data loggers to be used in all vaccine fridges and monitored on a monthly basis.

4.1.11 Do not store vaccines in the door of the refrigerator, as the temperature is warmer than in the main body.

4.1.12 The cold control should not be left at the coldest setting for longer than necessary because freezing of contents may occur.

4.1.13 Do not freeze vaccines. Freezing may inactivate liquid vaccines and can cause the glass ampoules to crack. Any vaccine subjected to temperatures of 0°C and below must be discarded.

4.1.14 Keep vaccines away from the cooling element or panel where ice may form and direct contact with frozen ice packs.

4.1.15 The designated person for vaccine control is responsible for ensuring that a person has been nominated to check the temperature of each refrigerator daily and that this duty is transferred to a deputy whenever necessary.

4.1.16 Alternative storage facilities must be available and should be used immediately if the refrigerator fails to function.

4.1.17 If the correct temperature is found not to have been maintained staff should contact the Pennine Care NHS Foundation Trust Medicines Management Team for advice.

4.1.18 Advice must be sought from the vaccine manufacturer before using / discarding vaccine that has been out of the cold chain. Unless specific advice states otherwise, including manufacturers stability data, vaccines that have not been properly stored are no longer within the terms of the product licence and should not be used.

4.1.19 Staff must also inform their clinical manager and complete an incident form.

4.2 Routine Maintenance

4.2.1 Refrigerators should be cleaned regularly (every 3 months) by wiping with a damp cloth. There must be alternative storage facilities for vaccines during this process. At this time checks should be made on the expiry dates of vaccines.

4.2.2 Refrigerators without automatic defrost should be defrosted every 6-8 weeks.

4.2.3 Transfer the medicines / vaccines to another refrigerator or a cool bag with pre-cooled gel packs whilst defrosting takes place and continue to monitor the temperature to maintain the cold chain.

4.2.4 Replace medicine / vaccine back in refrigerator when temperature is restored.

4.2.5 Dates of defrosting should be recorded on the temperature record by writing defrosted next to the signature box

4.2.6 There should be a maintenance contract that allows for at least annual servicing and calibration of thermometers.

4.3. Incident Reporting

In the event of a refrigerator failure:

- Quarantine all vaccines affected by an incident from other vaccines
- Record all details of the incident
- Implement any follow up of the incident after discussion with the Medicines Management Team
- Implement shared lessons learned from the incident
- Make sure written procedures for the disposal of vaccines are available locally.

## 5. ORDERING

Sufficient quantities of vaccine must be held to meet the largest known routine demand. In order to achieve this:

- Do not over order or allow excess stocks to build up (no more than 4 weeks stock)
- Stocks should be ordered on a "topping up" system
- Each practice area should have a protocol for obtaining vaccines for additional or non-routine requirements and a designated deputy for vaccine ordering.

## 6. RECEIPT OF VACCINES

Vaccines must be maintained at the correct temperature. In order to achieve this:

- Vaccines will be delivered under refrigerated conditions with the time of delivery pre-arranged
- The person receiving the vaccines will check that vaccines are intact before signing for them, noting time of dispatch and arrival
- The vaccines must be placed in the vaccine refrigerator immediately

- Vaccines should be date-checked and rotated to ensure that the oldest stock is placed at the front of the refrigerator and used first.
- A stock count of the vaccines should be performed and the running balance total be recorded upon receipt of vaccines, removal from the fridge and upon return of unused vaccines back to the fridge.
- Should the vaccines need to be transferred from the clinic / base delivery site to a different storage site this must be carried out using a validated cool bag with maximum / minimum thermometer recordings to provide evidence of cold chain maintenance. The vaccines must be transferred straight from one site to another and be placed into the refrigerator immediately upon arrival at the second site.

## 7. PREPARING VACCINE FOR TRANSPORT

7.1 Cool bag monitoring for non-medical cool bags:

7.1.1 Ensure the cool bag has been validated by either the manufacturer or the Trust

7.1.2 Use validated gel cool packs to maintain the temperature of the cool bag (Cool packs must be cooled following manufacturer's directions before use i.e. cooled or frozen)

7.1.3 Where available insert maximum / minimum probe into the bag with the gauge on the outer side of the bag

7.1.4 When the gauge is reading between 2°C - 8°C vaccines can be placed into the bag. **Do not** remove from their original package

7.1.5 Before removing the vaccines from the refrigerator check the refrigerator temperature and the refrigerator monitoring system has been maintained as per Trust policy

7.1.6 If this is not the case contact a member of the Medicines Management Team for advice

7.1.7 Record the temperature once the vaccines have been placed in the bag on the monitoring chart and a **designated person** is to continue to monitor and record the temperature regularly during and at the end of the session.

## 8. DURING A VACCINATION SESSION

The effectiveness of vaccines must be maintained at all times. Vaccines kept for prolonged periods at high temperatures are rendered ineffective and can also develop dangerous toxins. It is the cumulative effect of exposure to temperatures above those recommended by the manufacturer that reduces potency. Numerous short occasions at high temperatures are as bad as one long one.

8.1 A validated cool bag must be used to transport vaccines to a subsidiary site and, if possible, the cool bag should have been in the refrigerator overnight.

8.2 Vaccines should be placed in the cool bag immediately before leaving the main storage area and the date and time recorded.

8.3 Only the amount required for the session should be taken.

8.4 A maximum / minimum thermometer must be used in the cool bag whenever possible

8.5 Steps should be taken to keep the vaccines as cool as possible for the duration of the session, i.e. keep the lid in place as much as possible, and keep away from sun or heat sources

8.6 Only one box or multi-dose vial per immuniser should be taken from the refrigerator / cool bag at any one time and the door / lid closed immediately to prevent repeated temperature changes. During large clinics, vaccine may be stored in validated cool bags for a maximum period as stated in the manufacturer's product specification with maximum / minimum thermometers to reduce cool bag opening**.**

8.7 Any dated and labelled vaccines (indicating that they have been out of the cold chain in a previous session) must be used first.

8.8. A record should be maintained of all vaccines removed from the refrigerator.

8.9 At the end of the session check that the cool bag has been maintained between 2°C and 8°C, is this temperature range has not been maintained mark and date the vaccines left before returning to the fridge.

8.10 If a dated vaccine is still unused after the session it should be discarded if the 2-8ºC temperature range has not been maintained.

8.11 At the end of the session vaccines can be placed back in the storage refrigerator, if the temperature has been maintained at 2°C - 8°C in the cool bag.

8.12 A stock count should be taken and recorded on the log sheet.

## 9. SAFE ADMINISTRATION

Vaccines must be administered safely.

9.1. The practitioner must be willing to be professionally accountable for his / her work as defined in the Nursing and Midwifery Council (NMC) Code of Conduct.

9.2. The practitioner must have received training and be competent in all aspects of immunisation.

9.3. The practitioner must be competent to recognise and treat anaphylaxis. Guidance on clinical characteristics and management of anaphylaxis is given in the current "Immunisation Against Infectious Disease".

9.4. The practitioner must obtain appropriate consent before immunising. The guidelines described in the current "Immunisation against Infectious Disease" should be adhered to.

9.5. Expiry dates must be checked prior to administration and Patient Group Direction (PGD) / Green Book guidelines adhered to.

9.6. The practitioner must record type of vaccine, date and time given, injection site and batch number in accordance with the NMC document 'Standards for Medicines Management' 2008

9.7 The practitioner should be aware of the methods of reducing potential sharps injuries and how to act should an accident occur.

## 10. AFTER THE SESSION

Vaccines must remain effective for subsequent use.

10.1. Vaccines that have been transported in a validated cool bag with maximum / minimum thermometer recordings to provide evidence of cold chain maintenance can be placed back into the refrigerator.
10.2. All vaccines returned to the refrigerator should be clearly labelled if no maximum / minimum thermometer was available
10.3. Any opened or prepared vaccines and those returned from an outside clinic on more than one occasion must be destroyed.

## 11. SAFE DISPOSAL

Vaccines must be disposed of safely.

11.1 Vaccines must only be disposed of in sharps bins with yellow lids for incineration.
11.2 An exception is BCG Vaccine which is graded for segregation purposes as a cytostatic drug and must be disposed of in a sharps container with a purple lid.
11.3 All needles, syringes and any empty ampoules, vials, or contaminated waste must be disposed of immediately.
11.4 Any reconstituted vaccine, open vials or ampoules, or any vaccine left over in multidose vials must be disposed of at the end of each session.
11.5 Expired vaccines or those for which the cold chain has not been maintained must also be disposed of.
11.6 Sharps bins should be fixed to the wall and / or put out of reach of children.
11.7 Any sharps bins used at subsidiary sites should be returned to the main storage point at the end of the session.

## 12. SPILLAGE INCIDENTS

A safe environment must be maintained in relation to spillage.

12.1 If a spillage of vaccine occurs, personal protective equipment, i.e. gloves and apron, should be worn and the spillage soaked up with paper towels. Any waste needs to be disposed of as per the Trust Waste Policy.
12.2 The area should be cleaned according to manufacturer's guidance on vaccine spillage.
12.3 Spillage on skin should be washed immediately with soap and warm water.
12.4 Affected eyes should be irrigated / flushed as soon as possible with sterile 0.9% normal saline or tap water. Medical / nursing advice should be sought from the Occupational Health Department.

## 13. ADVERSE REACTIONS

Action must be taken promptly if adverse reactions occur.

13.1. Serious adverse reactions should be reported to the Medicines and Healthcare Products Regulatory Agency (MHRA) on the appropriate Yellow Card at www.yellowcard.mhra.gov.uk. All vaccines of the same batch number involved in an incident should be quarantined (in the cold chain) until investigated.

13.2. Adverse reactions are extremely rare so if several occur within a short time scale they should be reported to the Consultant in Communicable Disease Control (CCDC) at the Greater Manchester Health Protection Unit. Telephone number 0344 225 0562 (option 3)

13.3. Pennine Care NHS Foundation Trust will notify the appropriate staff if vaccines need to be recalled.

## 14. IMPLEMENTATION AND TRAINING

The Trust will ensure that the Policy has been issued and implemented as follows:

14.1 Issue and Implementation

14.1.1 A variety of dissemination methods are in place to make sure that all staff are aware of, have access to and comply with, the Policy.

14.1.2 Lists of all new policies are published in the Trust's Corporate Brief including a brief description and its intended audience.

14.1.3 All policies are held on the Trust's intranet, to which all staff have access. Staff should always consult the intranet for the latest version

14.1.4 Where a hard copy is kept on a ward / clinical area, it is the responsibility of the Ward Manager / Service manager to ensure that the current version is on file.

14.1.5 Following approval, the Chief Pharmacist is responsible for cascading details of the latest version of all policies to healthcare professionals.

14.1.6 Ward and service managers are responsible for ensuring staff in their area of managerial control, are fully aware of the content of policy.

14.1.7 All healthcare staff are responsible for ensuring they understand the content of the policy.

14.2 Training

14.2.1 Training in medicines management and in relation to this policy forms part of the Trust's mandatory and essential training programme for identified staff groups.

14.2.2 The format of the mandatory medicines management training is described as per the Trust Training Needs Analysis (TNA).

14.2.3 All permanent staff groups identified in the TNA, book themselves on to the Trust's training in medicines management. On attendance, the pre-booked training staff are responsible for signing the attendance register which is collated by the Organisational Learning and Development (OL&D) Department.

14.2.4 Where pharmacy staff provide additional training on medicines on an ad hoc basis or at the request of managers within the Trust, attendance records will be completed and forwarded to the OL&D Department for inclusion on the electronic training record.

14.2.5 Pharmacy staff input on an ongoing basis to the induction programme of junior medical staff.

14.2.6 Further training will be made available when necessary to support initiatives of the National Patient Safety Agency and / or the National Institute for Health and Care Excellence (NICE).

14.2.7 Medicines management training needs in relation to this policy should be identified through the Individual Performance and Development Review (IPDR) process and fed into the Trust TNA.

14.2.8 Training required for individual members of staff is identified through the Trust's IPDR process and arranged as appropriate.

## 15. AUDIT AND MONITORING OF COMPLIANCE

15.1 It is the responsibility of the Vaccine Controller in each service area to ensure that this policy document is followed.
Monthly: Refrigerator contents should be checked
Quarterly: Vaccine stock should be audited and recorded
Annually: Audit records and stock and temperature management.

15.2 Audit
Audit in relation to this policy will be carried out as part of the Trust's clinical audit programme and in accordance with the annual audit calendar.

15.3 Monitoring

15.3.1 Compliance with this policy will be monitored using an analysis of incidents and complaints, by the Managing Prescribing Risk Sub Group (MPRS group) on a quarterly basis, where there has been a failure to follow procedure.

15.3.2 Quarterly medication error / incident reports (Safeguard) are reviewed by MPRS group. Analysis allows identification of trends and themes.

15.3.3 Quarterly prescribing error incident data is reviewed by the MPRS group and reported to the Medical Director.

15.3.4 Action plans to manage improvement in compliance will be developed by the MPRS group on a quarterly basis where necessary.

15.3.5 Key findings of both audit and monitoring of compliance will be reported to the Drugs and Therapeutics Committee.

15.3.6 Training required for individual members of staff is identified through the Trust's IPDR process and arranged as appropriate. Any non-attendance is reported to the individual's Service Manager.

15.3.7 Checking and monitoring of non-completion of mandatory medicines management training is undertaken by the OL&D Department and entered on to the Trust's electronic training record. A monthly report is provided to service managers by the OL&D Department on the completion of mandatory and essential training. Any non-attendance is reported via e-mail from the OL&D department to the individual's authorising manager for action and future attendance to be arranged

15.3.8 In addition the OL&D Department will provide a six monthly report of staff attendance for all required training to the Educational Governance Group (EGG) for monitoring. The EGG will be responsible for the development of any actions required in relation to training which will be implemented and monitored by Divisional and Borough Integrated Governance Groups.

## 16. SUPPORTING POLICIES, PROCEDURES AND GUIDELINES

This policy should be read in conjunction with the following policies and procedures:

Medicines Policy (CL15)

## 17. REFERENCES


Immunisation against infectious disease, Public Health England (2014). https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

Health Protection Training. Public Health England (2014). https://www.gov.uk/government/collections/health-protection-training#immunisation-training-resources-for-healthcare-professionals

Protocol for ordering, storing and handling vaccines. Public Health England (2014). https://www.gov.uk/government/publications/protocol-for-ordering-storing-and-handling-vaccines

Department of Health. Health Technical Memorandum 07-01: Safe management of healthcare waste. 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/167976/HTM_07-01_Final.pdf

Royal College of Nursing. Sharps Safety RCN Guidance to support the implementation of The Health and Safety (Sharp Instruments in Healthcare Regulations) 2013 https://www2.rcn.org.uk/__data/assets/pdf_file/0008/418490/004135.pdf

**APPENDIX 1**

## Vaccine Refrigerator Temperature Record Sheet
## For refrigerators with RESET button

Vaccine refrigerator temperature to be checked DAILY and readings (current temperature, maximum and minimum) recorded. Also RESET delay after reading. If readings outside of range 2-8°C, contact the Estates department and seek the advice of the Medicines Management team regarding the stability of the vaccines. Use a new chart each month.

Ward / Unit:…….. Month: ……. Year: ……..

| Date | Time | Current Temp ºC | Maximum Temp ºC | Minimum Temp ºC | Reset (tick) | Checked by (signature) | Comments |
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**N.B.**
During periods of the door being open, i.e. when rotating stock or putting away, the refrigerator temperature may increase to over 8°C. It is advised that the door is shut as soon as possible, the current temperature checked in one hour and if below 8°C, the thermometer reset. If still above 8°C seek advice. Please record in comments section periods of door being opened for prolonged periods.

**APPENDIX 2**

## Vaccine Transport Temperature Monitoring Sheet

**DATE:……. Person Responsible for transport:…….**
**Signature…….. Designation……**

To be used when vaccines need to be carried and stored in a cool bag for an extended period (to cover a morning and afternoon vaccine session in various locations).

The bag should be opened at the beginning of the session and the temperature recorded. During the session the bag should be opened as little as possible to retrieve each dose and closed immediately to maintain the cold chain.

Temperature must remain between 2 and 8°C to ensure the viability of the vaccines within.

Please record MINIMUM and MAXIMUM temperature hourly whilst vaccine out of vaccine refrigerator

If the bag temperature readings are outside the required range (2°C and 8°C) please take advice from the Trust Medicines Management Team (0161 716 3948) before continuing to use or returning to refrigerator. Also, please complete a Safeguard Incident Report.

| Time | Location | Minimum (Not below 2°C) | Maximum (Not above 8°C) | Current Temperature | Actions taken If outside 2-8°C / Comments | SIGNATURE |
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**Please record outcome for vaccines (e.g. returned to refrigerator)**

**APPENDIX 3**

# VACCINE STORAGE GUIDELINES
## To be displayed on the front door of the refrigerator

### IMMUNISERS RESPONSIBILITIES

1. Ensure that the **refrigerator temperature record chart** is up to date and all readings are between +2°C and +8°C.

2. Remove the estimated required amount of vaccine from the refrigerator immediately prior to the session to keep door opening to a minimum.

3. At the end of the session only return vaccine that has been correctly stored according to manufacturers guidelines. Keep all vaccine in its original packaging.

4. Vaccine to be stored on refrigerator shelves only (not in doors).

5. Store only vaccine in refrigerator.

6. Ensure that the vaccine refrigerator is locked following use.

### RESPONSIBILITIES OF NAMED DESIGNATED PERSON FOR VACCINE STORAGE

1. Check refrigerator temperature daily (Mon-Fri) and record minimum, maximum and current temperature in °C on the **refrigerator temperature record chart.**

2. Reset minimum and maximum readings immediately after recording.

3. Appoint appropriate deputy to cover holidays and absence.

4. Make small but regular orders to avoid stockpiling

5. On receipt of vaccines
   - Check your vaccine order for leakage, damage and discrepancies
   - Place vaccines immediately under storage conditions
   - Check expiry dates and rotate stock
   - Reset thermometer after restocking of refrigerator

6. Appropriately label power supply to vaccine refrigerator to avoid accidental switching off

If **refrigerator temperature record chart is not up to date or the vaccine refrigerator temperature** is below 2°C or above 8°C collate information (refer to questions on monitoring chart) prior to contacting *Medicines Management* for advice.

↓

Complete an incident form

↓

Contact Estates on 0161 716 3030
Inform Medicines Management, 0161 716 3948 of the incident and any actions taken

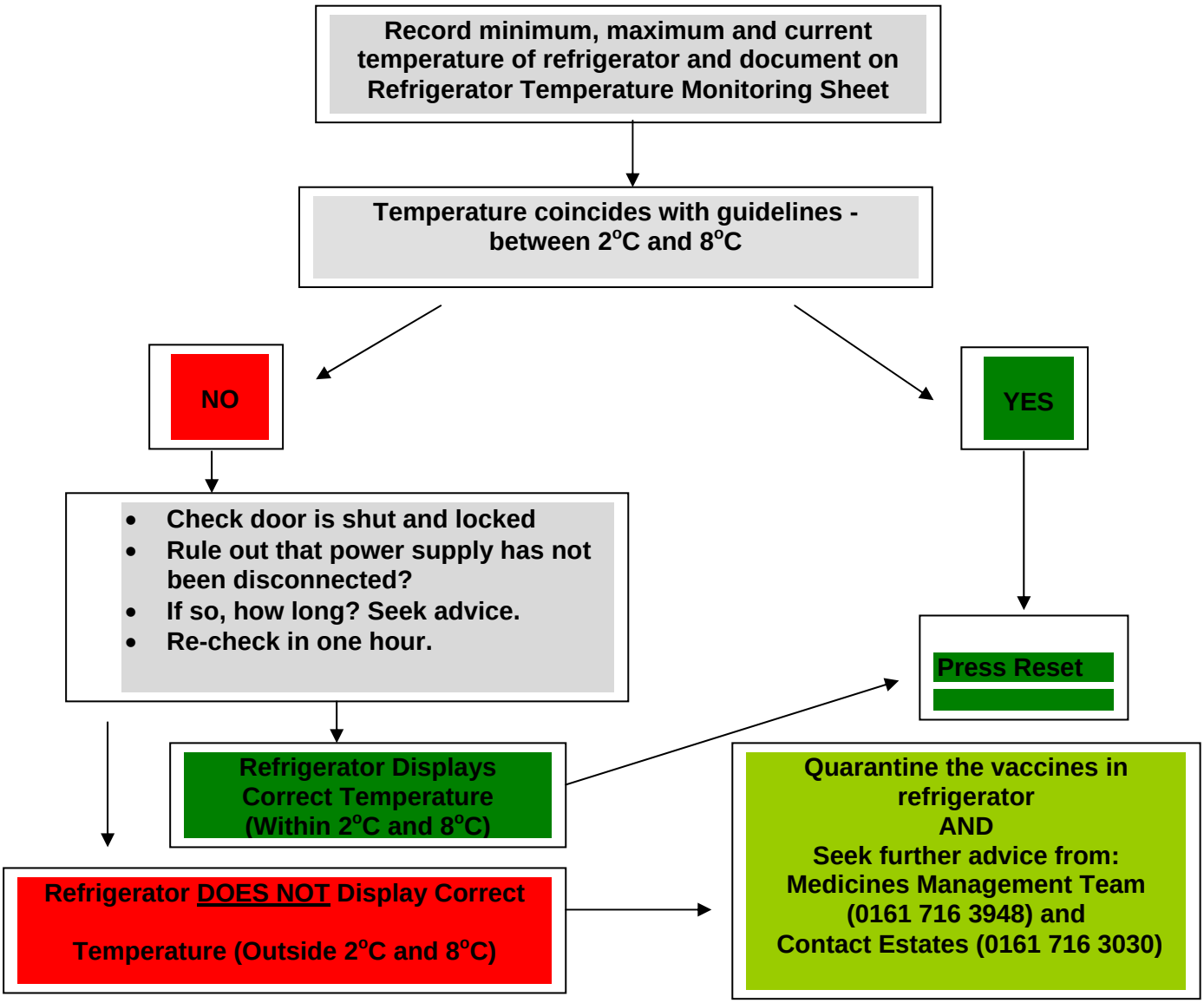
↓

Current **refrigerator temperature record chart** to be located in a plastic wallet as close to the refrigerator as possible. Once fully complete temperature charts to be transferred to an appropriate file and retained as per medical records for audit purposes.

**APPENDIX 4**

# REFRIGERATOR FLOW CHART

## VACCINE REFRIGERATOR TEMPERATURES MUST BE CHECKED AT LEAST ONCE PER DAY TO COMPLY WITH POLICIES AND PROCEDURES




**PLEASE NOTE**

- During prolonged periods of the door being opened, i.e. when rotating stock or putting stock away, the temperature of the refrigerator will increase. It is therefore advised that the door should be shut as soon as possible and the temperature checked within one hour.

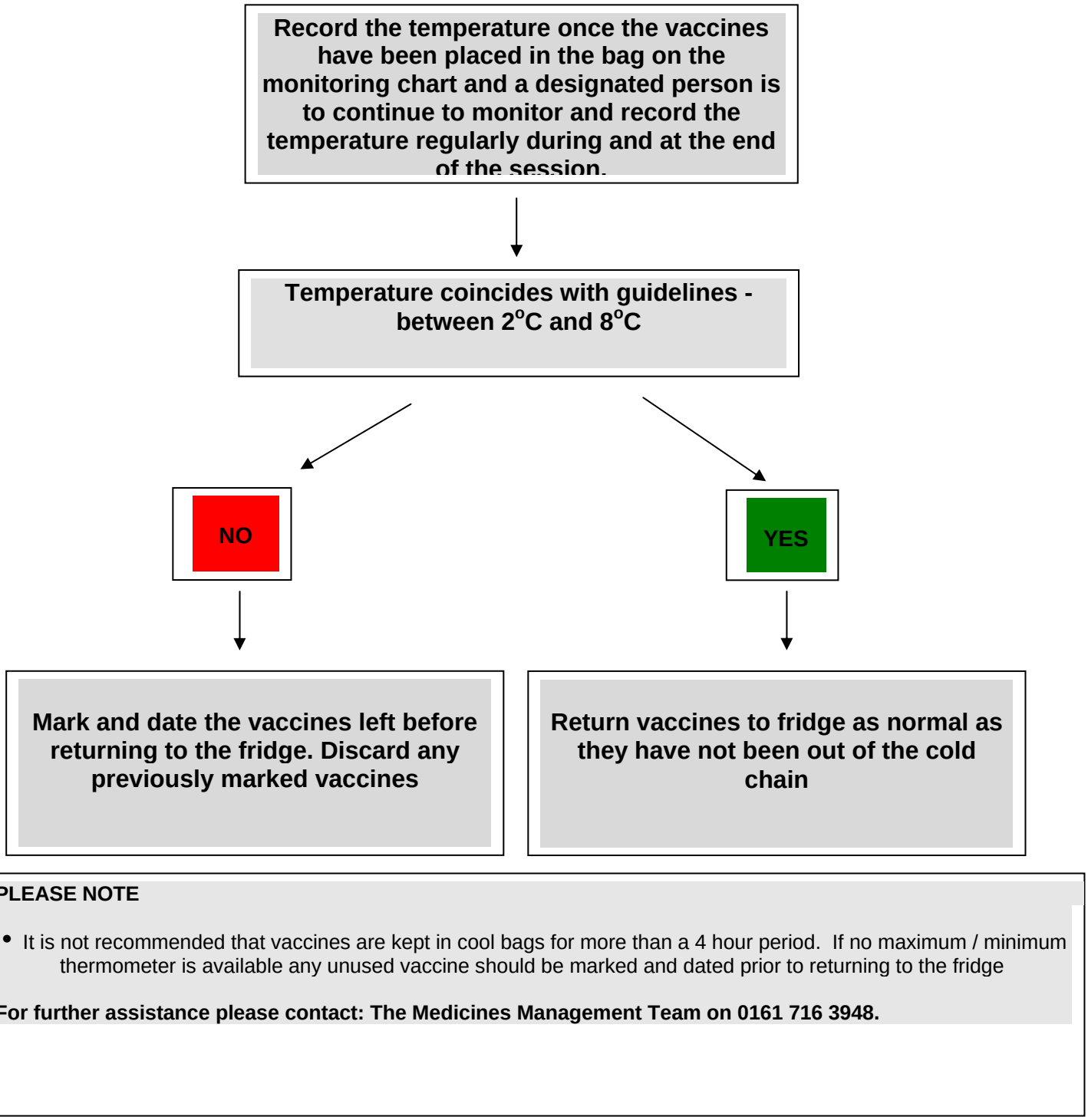
- It is important, in the event of the temperature not complying with the policy that documentation is made with date, time, and action taken and by whom, showing clearly on the back of the temperature chart.

**For further assistance please contact: The Medicines Management Team on 0161 716 3948.**

**APPENDIX 5**

# COOL BAG FLOW CHART

**WHERE POSSIBLE MAXIMUM / MINIMUM THERMOMETERS SHOULD BE USED WHEN TRANSPORTING VACCINES TO IMMUNISATION SESSIONS. TEMPERATURES MUST BE CHECKED REGULARY TO ENSURE A TEMPERATURE WITHIN THE RANGE 2-8ºC IS MAINTAINED TO COMPLY WITH POLICIES AND PROCEDURES**




**PLEASE NOTE**

- It is not recommended that vaccines are kept in cool bags for more than a 4 hour period. If no maximum / minimum thermometer is available any unused vaccine should be marked and dated prior to returning to the fridge

**For further assistance please contact: The Medicines Management Team on 0161 716 3948.**

**APPENDIX 6** **VACCINE LOG**

Name of Vaccine Batch Number Expiry Date

| Date | School | Received | Taken | Used | Wasted | Returned | Running total | Signature | Comments |
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