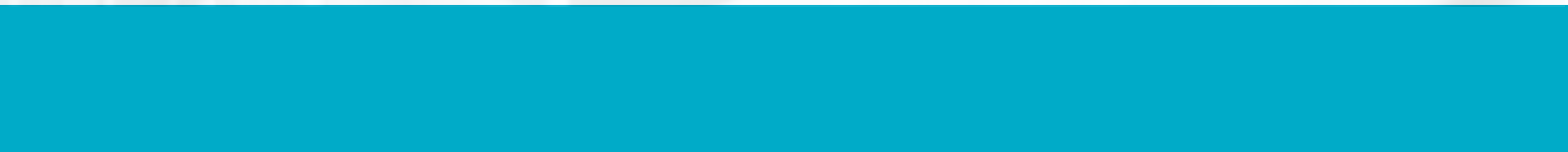


Guidance on vaccine handling and storage in GP practices



Practice name:

.....

Practice Vaccine Controller:

Print name:..... Signature..... Date.....

Deputy Vaccine Controller:

Print name:..... Signature..... Date.....

Practice manager:

Print name:..... Signature..... Date.....

Practice clinical governance lead:

Print name:..... Signature..... Date.....

This document updates the guidance on vaccine storage and handling in primary care issued by the Public Health Agency and the Strategic Planning and Performance Group (SPPG) (formerly known as the Health and Social Care Board (Integrated Care)) in 2021 and supplements the recommendations in Chapter 3 of *Immunisation against Infectious Disease 2013* ([the Green Book](#)).

The guidance applies to all staff involved in the planning or delivery of immunisation programmes in primary care settings. It outlines the minimum standards that are required to ensure that vaccines are stored and managed properly so that immunisations are carried out safely and efficiently, minimising the risk of compromising the effectiveness of vaccines given to patients and thus reducing risk to patients and wastage of expensive medicines.

Primary care practices are expected to align their practice policies regarding vaccine storage and handling.

History of changes

Version number	Change details	Date
V4	<ul style="list-style-type: none"> Updated document format, layout, action card and logos Addition of embedded document links and table of contents to improve usability. Updated contact details for Medicines Information Updated cold chain artwork for posters and magnets 	August 2024
V3	<ul style="list-style-type: none"> Updated advice on monitoring and recording fridge temperature. Updated process for reporting cold chain breach incident. Updated contact details for Medicines Information 	April 2021
V2	<ul style="list-style-type: none"> Changed layout to improve usability. Updated reporting process for incidents New posters and magnets 	January 2020

Summary

All staff involved in immunisation have a responsibility to ensure that vaccines are handled and stored appropriately. This is to reduce the risk of compromising the quality, efficiency, and safety of the vaccine programme and to improve the service for patients.

- There should be a nominated person (**Vaccine Controller**) in each area, where vaccines are stored, who is **trained**. The **Vaccine Controller has overall responsibility for:**
 1. Vaccine ordering.
 2. Ensuring that vaccines received by the practice from, for example, Movianto or a community pharmacy, have been stored between the recommended temperatures of 2-8°C.
 3. Ensuring that vaccine fridge temperature is observed and recorded on a daily basis and that vaccines are stored between the recommended temperatures of 2-8°C ([Appendix 2](#)). The Medicines Information Team recommend **twice daily monitoring as a minimum requirement, for good practice** to ensure the fridge is in full working order at the beginning and end of the working day.
 4. Ensuring data logger readings are reviewed on a **weekly** basis ([Appendix 3](#)).
 5. Ensuring vaccines leaving the practice (to go to for example satellite practices) are transported in a validated cool box and temperature readings are available on arrival at their destination.
 6. Ensuring maintenance of the vaccine fridge (including regular defrosting if it does not have a built-in auto-defrost) and associated equipment including thermometers/data loggers.
- Vaccines should be stored between the temperatures of 2-8°C. They may irreversibly lose their effectiveness if they are stored outside of the recommended temperatures. An integral thermometer should be used to measure maximum and minimum temperature daily and a data logger should also be used as a back-up with readings reviewed on a weekly basis.
- If vaccines are stored outside of the recommended 2-8°C for longer than 20 minutes this is referred to as a significant **cold chain breach** and immediate action is required.
- Vaccines stored outside of the recommended 2-8°C should be quarantined in a working vaccine fridge until advice has been sought from Medicines Information in your local Health and Social Care Trust ([Appendix 1](#)).
- Any cold chain breach should also be reported to the Health Protection Duty Room on 0300 555 0119.
- **If patients have been vaccinated with vaccines following a significant cold chain breach, contact the Health Protection Duty Room on the same day on 0300 555 0119.**
- Advice on the need to revaccinate patients when a cold chain breach has been identified following vaccination will be provided following contact with the Health Protection Duty Room.

- Practices should also contact their local SPPG Practice Support Manager for advice on reporting the incident as an Adverse Incident.
- Every person involved in storing and handling vaccines should consider either attending face-to-face training or completing [e-learning](#) on cold chain management.

Contents

Summary	4
Introduction.....	7
Responsibilities for maintaining the cold chain in primary care	9
Ordering vaccines.....	9
Receipt of a delivery of vaccines	10
Vaccine fridge temperature recordings.....	10
Storage of vaccines.....	12
Vaccine fridges	12
Transporting small amounts of vaccines	12
Audit of cold chain maintenance	13
Training.....	13
Reporting cold chain breach incidents.....	13
Appendix 1: Northern Ireland Medicines Information Services	15
Appendix 2: Daily record of vaccine fridge checks.....	16
Appendix 3: Weekly review of vaccine fridge data logger	17
Appendix 4: Action card for GP practice teams	18
Appendix 5: Defrosting vaccine fridge record.....	19
Appendix 6: Self-audit for GP practices on cold chain maintenance	20
Appendix 7: “Keep your vaccines healthy” A3 poster.....	25

Introduction

This guidance applies to all staff involved in the delivery of immunisation programmes. It aims to ensure that vaccines are stored and managed properly so that immunisations are carried out safely and efficiently, reducing both risks to patients and wastage of expensive vaccines.

The UK National Health Service spends around £200 million a year on vaccine stock alone. In Northern Ireland this equates to around £6 million a year. Vaccines are sensitive to heat, cold and light and incorrect storage can result in loss of potency of the vaccine. If vaccines are not stored correctly it can result in a patient not being protected and vaccine wastage.

The **cold chain** is a term used to describe the specific temperature conditions in which vaccines should be kept during storage and distribution to protect against loss of potency. For licensure purposes, vaccine manufacturers have to provide a recommended storage temperature range. For virtually all currently used vaccines the temperature is between 2-8°C and this is stated in the vaccine Summary of Product Characteristics (SmPC). The recommended temperature forms part of the manufacturer's marketing authorisation (product license).

When vaccines are exposed to temperatures outside of the manufacturer's recommended range, this is referred to as a **cold chain breach** and the manufacturer can disclaim responsibility for any apparent failure of those vaccines. One off fluctuations with a temperature greater than 8°C lasting less than 20 minutes may occur when for example the vaccine fridge is being restocked. In this case the reason for the temperature excursion should be documented on the daily minimum/maximum temperature chart and no further action is required. All other unexplained/reoccurring temperature excursions are significant and require **immediate action**. Significant cold chain breaches should be reported to **Health and Social Care Trust Medicines Information** (see [Appendix 1](#) for contact details of Medicines Information) who can assist the practice in completing a risk assessment to decide whether or not vaccines stored outside of the manufacturer's recommendations will be used. Increasingly the SmPCs for some vaccines will contain information on vaccine stability outside of 2–8°C. Where this information is available practices can use it to determine whether/not a **single** temperature excursion is likely to have affected vaccine quality. The responsibility and liability of deciding to use vaccines involved in a significant cold chain breach lies with the immuniser.

All significant cold chain breaches, especially if vaccines have been administered to patients before the discovery of the cold chain breach, should also be reported to the Health Protection Duty Room on 0300 555 0119 for assessment of the potential risk to patients. Duty Room staff will provide the practice with verbal recommendations re: vaccine handling and storage in primary care. Practices should also contact their Practice Support Manager for advice on reporting the incident as an [Adverse Incident](#).

PHA monitoring of cold chain breach incidents in GP practices reported 75 cold chain breaches between October 2016 and May 2019 across the region: approximately two incidents per month. The incidents resulted in a vaccine loss of £330,000, which is an average of £4,500 per incident. Common causes of preventable vaccine loss as a result of cold chain breaches includes the vaccine fridge door being left open, the fridge being switched off, poor maintenance of fridge and poor recording and training of staff resulting in delayed reaction to cold chain breach.

This document provides professionals responsible for vaccinations with guidance for:

- responsibilities for maintaining the cold chain;
- ordering vaccines;
- receipt of delivery;
- storage of vaccines;
- maintenance of the cold chain;
- incident reporting.

Responsibilities for maintaining the cold chain in primary care

In every general practice where vaccines are stored a **Vaccine Controller** should be appointed. The **Vaccine Controller** should have completed training (online/face-to-face) in vaccine handling and storage/cold chain maintenance and assume overall responsibility for vaccine ordering, receipt, temperature recordings, storage of vaccines and maintenance of vaccine fridge (including regular defrosting if it does not have a built-in auto-defrost) and data logger.

There should also be a deputy trained to take over the responsibility of the **Vaccine Controller** in their absence. Health and Social Care Trust employed staff working in a treatment room can take on the role of **Vaccine Controller** in agreement with their line manager if they have received the appropriate training. All members of staff involved in maintaining the cold chain should also have received appropriate training. This includes those directly responsible for:

- the ordering, receipt, and immediate refrigeration of vaccines;
- transporting vaccines;
- promoting good practice (eg practice manager);
- administering vaccines (including visiting staff);
- responding to cold chain breaches.

It is the responsibility of the person transporting and administering vaccines to assure themselves that the vaccine has been stored between 2-8°C prior to administration. This includes staff administering vaccines to patients outside of the practice, for example in their own home/care home setting. Paper copies of daily minimum, maximum and current temperatures should be available for visiting staff to allow them to check and ensure that the cold chain has been maintained. In addition, as a back-up, a record of the weekly data logger check should be readily accessible. Each practice should have a procedure in place for how to handle a cold chain breach and everyone's roles and responsibilities should be clearly defined.

Ordering vaccines

No more than **two weeks** of vaccine stock should be ordered in advance of use to prevent excess vaccine loss in the event of a cold chain breach. For some seasonal or annual vaccine programmes (such as flu and shingles) where delivery is directly from the wholesaler/distributor delivery stock can be kept at a **lower level**, as it is possible to order frequently and with shorter notice. Stock should only be ordered if there is sufficient space to store it and allow for adequate airflow in the fridge (50% capacity).

Regular ordering of smaller amounts of stock will be required from October to March when seasonal flu vaccine will require significant storage space. PPV and shingles vaccine will also usually be required in larger quantities at this time. For the previous three years the highest number of cold chain breaches was reported in October and November with flu vaccines and the shingles vaccines accounting for the greatest proportion of implicated vaccines. Uptake of these vaccines should be assessed on a weekly basis and practices should

not stockpile vaccines. It is particularly important not to stock more than a couple of weeks of the required quantities of shingles vaccine due to the potential for huge financial loss during a cold chain breach.

Receipt of a delivery of vaccines

On arrival at a practice/clinic all vaccines should be handed to the authorised recipient and should be checked against the order/delivery note. This includes vaccines that are delivered or transported from community pharmacies. They should be visually checked for any obvious signs of damage prior to the authorised recipient signing for them. The recipient should record the vaccine type, brand, and batch number, expiry date and the date and time of receipt. Stock should be rotated to ensure that old stock is moved to the front of the fridge and expiry dates should be checked to ensure that expired vaccines are disposed of as per local protocol.



Vaccines must be refrigerated immediately in a vaccine fridge and must not be left at room temperature.

There have been significant vaccine losses reported in the past when vaccines have not been placed in a vaccine fridge upon arrival at the practice. Every precaution should be taken to ensure that this **does not** happen. Domestic fridges should not be used to store vaccines. Keeping vaccines in their original packaging protects them from prolonged exposure to ultraviolet light which may lead to loss of potency. Vaccine stock should be rotated to ensure that older stock is placed at the front of the fridge so that it can be used first.

If vaccines are inadvertently left at room temperature they should be moved immediately to a vaccine fridge, quarantined, and marked so that they are not used. Medicines Information should then be contacted with details of how long they have been kept outside of the cold chain, including the brand, batch number and expiry date, so that they can provide advice on whether or not they can be used or should be disposed of. Care should be taken to ensure that these vaccines are not inadvertently administered until after advice has been sought from Medicines Information in your local Health and Social Care Trust ([Appendix 1](#)).

Where vaccines are being transported between pharmacies and GP surgeries robust local arrangements should be in place to ensure the cold chain is maintained.

Vaccine fridge temperature recordings

Vaccine fridge temperature recordings should be checked and documented at least daily, preferably twice daily. Opening and closing of the vaccine fridge door should be kept to a minimum and a reminder (such as the PHA fridge magnet) should be placed on the door. Vaccine fridges with an audible alarm function are recommended and the alarm should be tested regularly. Record keeping should be robust and paper-based copies should be maintained in a folder/logbook close to the fridge and easily accessible. Paper recordings should be kept of the date, time, minimum, maximum and current temperature reading ([Appendix 2](#)). The vaccine fridge minimum/maximum **thermometer should be reset** after the temperatures have been recorded. The thermometer should also be reset after periods of high activity. Daily temperature recordings should be kept for a period of five years. All vaccine fridges should be properly maintained and serviced in accordance with the manufacturer's guidelines, and it should be clear who is responsible for maintenance and servicing of the fridge, for example the GP practice or the Health and Social Care Trust. Each vaccine

fridge should have a unique identifier (such as serial number/asset number) which should be recorded on associated paperwork such as temperature recordings/servicing records. It is important to ensure that satellite vaccine fridges are not overlooked as part of the daily monitoring or servicing schedule.

Data loggers should be used so that additional information is available about temperature excursions in the event of a cold chain breach.^{1,2} The data logger should be placed in the vaccine fridge as per manufacturer's guidelines and checked routinely weekly by the **Vaccine Controller** to ensure that it is working correctly (See [Appendix 3](#) for template to review data logger recordings weekly). This includes checking readings against the paper minimum/maximum temperature readings. Data should be accessible by more than one person in the practice to allow for staff absences. Medicines Information may ask for information provided by the data logger to inform the decision about whether or not vaccines can be used, and data loggers should be set at five-minute intervals. All clinical staff should know how to download save and file the data logger recordings. **Note:** The use of a data logger **does not replace** the need for keeping paper copies of daily/twice daily minimum, maximum and actual temperature readings (see sample record sheet in [Appendix 2](#)). The paper copies should also record when the vaccine fridge temperature has been reset. When the fridge door has been open for longer periods to restock this should also be recorded in the comments sheet.



It is important that all staff know to **react** if the fridge temperature recordings are outside of the recommended 2-8°C for more than 20 minutes.

Fridge magnets and [posters](#) are available to remind staff of the importance of reacting if there is a cold chain breach.

The PHA recommends GP staff to use the [Appendix 4: Action Card](#) as a quick reference guide. Consider downloading and printing for ease of access during daily practice.

Protect your vaccines to protect your patients

HSC Health and Social Care

- Keep** door opening to a minimum
- Read** minimum and maximum temperatures
- Record** temperatures for each one on a log sheet
- Reset** the thermometer after each reading
- React** if the temperature is in the danger zone

Danger! Above 8°C or below 2°C may damage your vaccines

Strive for 5°C

Report cold chain breach incidents to the PHA Duty Room, call 0300 555 0119

www.publichealth.hscni.net

Storage of vaccines

Vaccine fridges

A vaccine fridge **must** be used for storing vaccinations and domestic fridges must not be used for the storage of vaccines **under any circumstances**. Practices should ensure that they have adequate space to store vaccines required for immunisation programmes at any time of the year. Additional storage capacity may be required for example when the flu programme is being delivered.

When placing vaccines in the vaccine fridge ensure that there is sufficient space left for air to circulate (no more than 50% full) and do not place vaccines near to the side/back wall of the fridge to prevent freezing. It is important that systems are in place to avoid accidental interruption of the electrical supply either by using a switchless socket/marking the socket to ensure that the plug is not accidentally switched off. Vaccine fridges should be placed away from heaters/sunlight in an area that is ventilated, and records should be kept of regular maintenance, electrical and calibration tests as per manufacturer's guidelines. Vaccines should not be stored in the door of the fridge and the vaccine fridge should not be used to store anything other than vaccines. Reconstituted vaccines should be stored in accordance with the vaccine SPC/packaging insert. Vaccines are prescription only medicines (POMs) and must be stored under locked conditions (lockable fridge/room).



As mentioned previously, it is important to rotate vaccine stock so that vaccines with the shortest expiry date are moved to the front of the fridge and used first. Keeping individual vaccine fridge stock control books with details of numbers of different types of vaccines and expiry dates will reduce door opening to check stock contents when reordering. It is good practice to note time of restocking on temperature recording charts to explain short periods of temperature variations and door opening should be kept to a minimum. The vaccine fridge should be defrosted in accordance with the manufacturer's guidelines and dates of defrosting (if required) should be recorded.

Transporting small amounts of vaccines for use in satellite clinics, care homes/patient's own home using short transit times of under two hours

Vaccines being transported outside of the practice should be removed from the vaccine fridge immediately before transfer and should only be transported using a validated cool box (with a minimum/maximum thermometer or data logger). A record of minimum/maximum temperature readings should be kept for a period of five years with the vaccine fridge records that they are associated with (the fridge that vaccines will be returned to/kept in). If transported vaccines are maintained in the cold chain (between 2-8°C) they can be returned to the vaccine fridge and marked "use first". Validated cool boxes should be used in accordance with manufacturer's guidelines and care should be taken to prevent direct contact between the cool packs and the vaccines to prevent freezing and damage to vaccines.

Vaccines should not be transported to and from the vaccine fridge to clinics on more than one occasion. Vaccines should be placed in cool boxes directly



before leaving to go to vaccination clinics and placed in a vaccine fridge on arrival/left in a validated cool box until they are required. Patients should not be routinely asked to store vaccines but if they are required to do so should be given clear instructions on correct storage. Any supply made from a practice to an outlying clinic, care home/patient's home for administration should be made by a trained member of staff with clear instructions on maintenance of the cold chain. Validated cool boxes should be stored out of direct sunlight during transport.

Audit of cold chain maintenance

It is recommended that the **Vaccine Controller** carries out weekly reviews of temperature readings using the data logger (see [Appendix 3](#)). In addition to this an annual audit of cold chain procedures should be completed and areas for improvement should be discussed at team meetings (including training needs of staff involved in cold chain maintenance).

Training

All staff involved in maintaining the cold chain (reception staff, staff recording temperature readings and those administering vaccines), should have read [Chapter 3 of The Green Book](#) and have completed either face-to-face training or online training on [vaccine storage and handling](#). Staff can register to complete online training and assessment using a Health and Social Care email address. In addition to this the PHA Health Protection Team have developed training slides on vaccine handling and storage that can be accessed via the GP intranet.

Reporting cold chain breach incidents

All significant **cold chain breach incidents**, such as vaccines stored outside of the recommended 2-8°C for longer than 20 minutes, should be reported to Health and Social Care Trust Pharmacy Medicines Information and the PHA Health Protection Duty Room (see [Appendix 4](#)).

Health and Social Care Trust Pharmacy Medicine Information can contribute to risk assessment of vaccines that have been stored outside the cold chain. Vaccines identified as being part of a significant cold chain breach may no longer be within the terms of their marketing authorisation (product license). However, it is sometimes still possible to use these vaccines, which are then referred to as [off-label vaccines](#). Health and Social Care Trust Pharmacy Medicine Information will assess whether or not the vaccines have been compromised with the **Vaccine Controller** (in the site where the vaccines are stored) and provide advice on stability to help determine whether they can still be administered to people. **Do not dispose of vaccines until advice has been sought.** The responsibility for risk assessment remains with the GP practice team.

The **PHA Health Protection Team** is responsible for assessing the risk to patients from a significant cold chain breach incident and carrying out ongoing monitoring of incidents to inform best practice. Incidents are reported to the Health Protection Duty Room for risk assessment, immediate and follow up advice. The PHA Health Protection Immunisation Team will provide advice if vaccines have been administered to patients before the discovery of the cold chain breach and may require revaccination.

The **Strategic Planning and Performance Group (SPPG)** is responsible for delivering the GMS contract with GP practices and providing advice on reporting any adverse incidents. All Adverse Incidents (AI) should be reported to SPPG. Your Practice Support Manager should be contacted for advice on the AI process.

Details of the process and blank forms for completion are available on the [HSC Primary Care Intranet site](#).

In the event of a cold chain breach:

- Quarantine all vaccines stored outside recommended 2-8°C but maintain the cold chain until further advice has been sought.
- Contact Pharmacy Medicines Information in your local Health and Social Care Trust on the same day that the incident is identified ([Appendix 1](#)). Please note when multiple vaccines are involved collating information from pharmaceutical companies can take some time to complete and may take anything from a few days to a week. If there is an upcoming vaccine clinic then new stock should be ordered for the clinic, **if possible**, while information is obtained about quarantined stock.
- Report the incident to the Health Protection Duty Room on 0300 555 0119.
- Record all details of the incident.
- Contact your SPPG Office for advice on the adverse incident process.
- Implement recommendations provided by the PHA following the incident.

If patients have been vaccinated with vaccines following a **cold chain breach**, **contact the Health Protection Duty Room immediately on 0300 555 0119**.

Appendix 1: Northern Ireland Medicines Information Services (NIMIS) Monday to Friday 9.00am - 5.00pm

Trust	Email Address	Phone Number
Belfast Health and Social Care Trust Regional Service and Local Service for Belfast Trust	medicineinfo@belfasttrust.hscni.net	028 9504 0558
South Eastern Health and Social Care Trust Local Service	medicines.information@setrust.hscni.net	028 9056 1445 028 9048 4511 ext. 10220
Western Health and Social Care Trust Local Service	altnagelvin.medinfo@westerntrust.hscni.net	028 7161 1462 028 7134 5171 ext. 213756
Northern Health and Social Care Trust Local Service	1st Contact <i>Specialist Vaccine Services Pharmacy Technician, Pharmacy Department, Mid-Ulster Hospital, Magherafelt</i> Alternative contact medicines.info@northerntrust.hscni.net	028 7936 6755 028 9442 4556 ext. 4763
Southern Health and Social Care Trust Local Service	medicinesinfo.cah@southerntrust.hscni.net	028 3756 3893 028 375 63890

- If your local medicines information team are not available, then refer to the Northern Ireland Regional Medicines Information Team for advice.
- In all cases when more than two products have been exposed to a cold chain failure an email will be requested to confirm: product name (generic/Brand), manufacturer, expiry date, batch number, duration of temperature excursion and temperature recorded over that period.

For up-to-date contact details and further information on vaccine supply, please email the PHA Immunisation team pha.immunisation@hscni.net

Note: for private vaccinations (such as travel vaccines) advice should be sought directly from the vaccine manufacturer and NOT Health and Social Care Trust services.

Appendix 2: Daily record of vaccine fridge checks

Name of facility:

Fridge identifier:

Month and year:

The temperature should be between 2°C and 8°C. Check twice (am and pm) each working day. If the temperature is outside the recommended range, take appropriate actions as indicated in the written procedure.

Remember: Read, Record, Reset and React.

Date	Time	Current temp	Min temp	Max temp	Thermo meter reset (tick)	Checked by (signature)	Comments (to include details of when fridge was stocked or when frequent opening & closing of door occurred)

Reviewed by: _____ (name) _____ (date)

Appendix 3: Weekly review of vaccine fridge data logger

To be carried out by Vaccine Controller or deputy weekly

Fridge reference/location:

Date:	Reviewed by:	All OK (no readings outside 2-8°C) or action taken?

Appendix 4: Action card – vaccines exposed to temperatures outside of range

Who to contact:



The **Public Health Agency Duty Room (0300 555 0119)** should be contacted for advice in the event of a significant cold chain breach.



Your local Health and Social Care Trust Pharmacy Department, **Medicines Information** team (see [Appendix 1](#)) can provide a decision on whether the vaccine(s) can be used or discarded in all circumstances.

GP Practice team



1. Suspected fridge problems:

Fluctuations outside the range 2-8°C should be investigated.

If there is no known reason for a temperature fluctuation (for example the temperature increase is not due to new vaccines being stored or vaccines being removed for clinic) OR if there is a suspicion of sustained increase in temperature:

- Quarantine stock within cold chain (mark stock but keep in a fridge) until the issue is resolved.
- Check previous two months of paper copies of minimum/maximum temperature readings and compare to data logger readings.
- If the issue with temperature control cannot be resolved promptly, then vaccines must be moved to another suitable fridge.
- If the stock involves Health and Social Care Trust supplied vaccines, inform the supplying Health and Social Care Trust Pharmacy Department.
- Consider cancelling, postponing, or reducing orders already in the system.
- Do NOT use any suspect vaccine until situation is clarified. If necessary, reschedule vaccination clinics.

2. If vaccines have been inadvertently left at room temperature on delivery or other circumstances outside routine use in clinic:

Quarantine the vaccines within a fridge ASAP - Do NOT dispose of vaccines until advised to do so.

- Contact your local Health and Social Care Trust Medicines Information Department – see [Appendix 1](#) for a decision on whether the vaccines can be used [off-label](#) or should be discarded.
- The Public Health Agency Duty Room can help provide support on what actions are required.
- For further detail refer to section reporting cold chain breach incidents.

3. Incident reporting and shared learning:

A cold chain breach incident may be considered as an Adverse Incident and should be reported to [SPPG](#).

- Inform your Practice Support Manager as soon as possible following a vaccine related incident.
- They can provide support and advice to help mitigate against future risk of reoccurrence.
- Incident reporting is important and helps to promote shared learning and responsibility.

Appendix 5: Defrosting vaccine fridge record

Date:	Signature

Appendix 6: Self-audit for GP practices on cold chain maintenance

1. Organisation

(i) Is there a designated lead/**Vaccine Controller** in the practice responsible for ordering, receiving and ensuring proper storage and management of the vaccines?

Yes Name:

No

(ii) Has this lead person received training?

Yes

No

(iii) Is there a deputy designated person for ordering, receiving and ensuring proper storage and management of the vaccines?

Yes Name:

No

(iv) Has this person received training?

Yes

No

2. Fridges

(i) How many fridges do you have in your practice that can potentially be used for vaccine storage?

1

2

3

More than 3 (please specify how many)

(ii) How many of these are used to store vaccines routinely?

1

2

3

More than 3 (please specify how many)

(iii) Are the fridges used to store vaccines pharmaceutical/vaccine fridges?

Yes

No – domestic type fridge is used – **action required to resolve**

(iv) Is the fridge or clinical area locked when not supervised?

Yes

No

(v) Does the practice routinely defrost the vaccine fridge(s)?

Yes

No

Fridge has an auto defrost

(vi) Does your fridge have a switchless socket?

Yes

No

(vii) Is the vaccine fridge serviced regularly and maintained in accordance with the manufacturer's guidelines?

Yes

No

3. Monitoring

(i) Is the fridge temperature monitored?

Twice daily?

Daily?

Every other day?

Weekly?

Other (please specify)

- (ii) Is the fridge temperature noted on a chart and retained for five years as part of practice records?
- Yes
 - No
- (iii) What type of thermometer is used to monitor the fridge temperature (*tick all that apply*)?
- Integral fridge thermometer
 - Calibrated external thermometer
 - "Stand alone" thermometer
 - Other (*please state*)
.....
- (iv) Are your thermometer(s) calibrated/replaced annually?
- Yes
 - No
- (v) Is there a maximum and minimum temperature displayed on your thermometer(s)?
- Yes
 - No
- (vi) Do you have a data logger as a back up to the fridge thermometer?
- Yes
 - No
- (vii) Is there a nominated person responsible for monitoring the fridge temperature?
- Yes
 - No
- (viii) Is there a nominated deputy responsible for monitoring the fridge temperature?
- Yes
 - No

4. Waste

(i) Does the practice have a supply of sharps boxes for disposal of vaccines and sharps waste?

Yes

No

5. Transport

(i) Are these vaccines delivered directly to your practice?

Yes

No

If yes, please go straight to Section 6

If no, please answer question (ii)

(ii) Are your vaccines delivered to a holding centre?

Yes

No, delivered direct to practice

If yes, please answer questions (iii). If no go straight to question (iv)

(iii) How do you obtain your vaccines from the holding centre?

Collected by a member of practice staff

Collected by Health and Social Care Trust nurse (such as Health Visitor or District Nurse)

Other (please provide details)

.....

(iv) Does your practice have a dedicated and validated cool box used for transporting the vaccines between sites, eg from holding centre or to satellite practice?

Yes

No

If no, how are the vaccines transported safely?

6. Managing problems with the fridge

(i) Is there a process in place to manage occasions when the temperature exceeds the maximum or minimum recommended value?

Yes

No

(ii) Who do you seek advice from with any queries regarding vaccine stability or related issues? Please tick all that apply.

Public Health Agency Duty Room staff

Strategic Planning and Performance Group staff

Health and Social Care Trust Medicines Information

Drug Company

Other (please provide details)

Keep your vaccines healthy



When ordering please remember

For each vaccine supplier ensure you:

- Know how often you should order
- Know how far in advance to order
- Know delivery arrangements

When receiving your order:

- Check your order thoroughly when it arrives, it can't be taken back afterwards
- Refrigerate the stock as soon as you have checked it off against the order
- Place the new stock towards the back of the fridge so the shortest-dated stock is used first
- Do not over fill the fridge as this restricts the airflow

When stocking your fridge:

- Check expiry dates regularly – never use out of date vaccine
- Keep vaccines in their original packaging in the main part of the fridge, not in drawers
- Keep your fridge door locked at all times
- Keep the opening of the fridge door to a minimum
- Use a maximum-minimum thermometer and keep a daily record of the temperatures
- Have back-up storage for your vaccines in case of power failure
- Position the fridge away from heat sources and mark or tape the fridge plug to avoid it being turned off accidentally
- See [Chapter 3 of the Green Book](#) for more information



When responding to a vaccine storage incident, please follow the guidance at www.pha.site/vaccine-handling-storage

Please report vaccine losses to pha.immunisation@hscni.net after following advice provided by medicines information in your local Trust area

www.publichealth.hscni.net

05/24

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- Greg Miller (Pharmacy Advisor, SPPG)
- Paula King (Lead Pharmacist Regional Medicines and Poisons Information Service, Belfast Health and Social Care Trust).
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