

Summary of Vaccine Storage and Handling Procedures

The [Care Quality Commission](#) (CQC) consider the safe storage of vaccines and medical fridges in practices within their 'safe use of medicines domain'. Best practice would be for the practice to have a working policy for medicines that require refrigeration. The CQC [GP MythBusters 17: vaccine storage and fridges in GP practices](#) provides further information.

- Always use a specialist vaccine refrigerator. Never use a domestic refrigerator or situate refrigerator near a radiator or any heat source; it should be properly ventilated.
- Nominate one person and at least one deputy responsible for ensuring the correct storage.
- Keep the vaccine fridge secure. Only authorised staff should access it. Keep the fridge locked or in a locked room.
- Record the maximum and minimum refrigerator temperature at least once each working day, usually with an external digital thermometer. The calibration of thermometers should be checked annually to ensure that they work correctly by using another thermometer. **A Datalogger** is advised in fridges and freezers to record temperatures and store up to a year's worth of data. It uses a Windows-based software and is an easy-to-use as a USB memory stick. Records should also include the date, time, signature, actions taken and any comments.
- Keep records¹ of full storage history of vaccines for 5 years² and fridge maintenance logs (e.g., servicing, defrosting and cleaning, calibration and electrical testing) for 11 years³.
- Back up arrangements should be planned in the event of a breakdown of fridge failure.
- Place vaccines into the refrigerator immediately on receipt with new stock behind existing stock. Keep vaccines in their original packaging to protect against light and changes in temperature. Keep a record of all vaccines received.
- Do not overfill the refrigerator, occlude the fan, or use occlusive plastic containers to store vaccines.
- Store the vaccines between +2 °C and +8°C unless otherwise stated by the manufacturer.
- Take appropriate action if temperatures fall outside the recommended range (see below)
- Use a validated cool box when transporting vaccines to another site. Take care to keep frozen ice packs out of direct contact with the vaccine as this can cause the product to freeze.
- Any unopened vaccine returned from an immunisation session must be dated and marked "Use First" prior to returning to the refrigerator. Use first in the next immunisation clinic or discard. **FOR COVID VACCINATIONS THIS DOES NOT APPLY.** Any vials that have had doses withdrawn or unused vaccine vials that have left the PCN Designated site for administration elsewhere must never be returned to the PCN refrigerator and must be discarded (please refer to SPS SOPs <https://www.sps.nhs.uk/home/covid-19-vaccines/>)
- Vaccines must be disposed of according to local procedures.
- Ensure the electricity supply cannot be accidental disconnected (red/labelled plug).
- Food, drink, and clinical specimens **must never** be stored in the same fridge as vaccines.
- Spillages on skin should be washed with soap and water but if vaccine gets into eyes, they should be washed with 0.9% sodium chloride and medical advice sought.

Dealing with Temporary Disconnections of the Electric Supply.

- Note the current, maximum, and minimum refrigerator temperature.
- **If within the range +2 °C to +8°C**, reconnect the power supply - no further action is required.
- **If outside the range +2 °C to +8°C**
 - Reconnect the power supply noting the time at which the power was reconnected
 - Try to establish how long the vaccines have been outside the required temperature range.
 - Check for any evidence of previous exposure of the vaccines to breaks in the cold chain.
 - Establish the approximate number and types of the vaccine in stock including any marked "USE FIRST".
 - Contact the vaccine or medicines manufacturer for advice on what to do and whether medicines/vaccines are still safe to use. Alternatively, search for the drug name on the [Specialist Pharmacy Service \(SPS\)](#) website - <https://www.sps.nhs.uk> and scroll down to the refrigerated storage section. **If in doubt, discuss with a pharmacist.**

Dealing with a Refrigerator Breakdown

- Note the current, maximum, and minimum refrigerator temperature. If possible, determine the time of breakdown.
- **If within the range +2 °C to +8°C**
 - Transfer the vaccines to another refrigerator if possible.
 - If transfer to another refrigerator is not possible, keep the door of the faulty refrigerator closed and record the temperature regularly.
 - Make arrangements for the urgent repair or replacement of the refrigerator.
- **If outside the range +2 °C to +8°C**
 - Transfer vaccines to another refrigerator if possible. If transfer is not possible, keep the door closed.
 - Try to establish how long the vaccines have been outside the required temperature range. Contact the vaccine or medicines manufacturer for advice on what to do and whether medicines/vaccines are still safe to use. Alternatively, search for the drug name on the [Specialist Pharmacy Service \(SPS\)](#) website - and scroll down to the refrigerated storage section. You can also ask your GP clinical /PCN pharmacist for advice.
 - Check for any evidence of previous exposure of the vaccines to breaks in the cold chain and establish the approximate number and types of vaccine including any marked "USE FIRST"
 - Refrigerators should be defrosted regularly according to the manufacturers' instructions. During this process, store vaccines in an alternative refrigerator or validated cool box. If the contents of the fridge have been found to be stored outside the correct temperature range, please contact your practice support pharmacist for advice and report to NHSE as an incident.

References:

1. [Records Management Code of Practice 2021 NHS Transformation Directorate](#) accessed 08/08/2022
2. [Vaccine Incident Guidance \(publishing.service.gov.uk\)](#)
3. [Green Book](#) accessed 08/08/2022