FAO: Community Pharmacy and HSC Trust Vaccination Teams

Spring 2026 COVID-19 Vaccination Programme

Nuvaxovid Pre-filled Syringe – Additional Information on Vaccine Handling and Storage

Responsibility for Maintaining Cold Chain

Vaccination service providers operating onsite, remote clinics, or other off-site vaccination services are responsible for monitoring and maintaining the cold chain. The operational approach to achieving this is at the discretion of each provider, provided that it meets contractual and governance requirements.

Vaccines must be stored, transported and handled in a controlled manner that maintains the cold chain at **+2°C to +8°C**. This is in accordance with the SmPC, PGD, VGD, UKHSA guidance, Green Book Chapter 3, SPPG Community Pharmacy Cold Chain Guidance, PHA Guidance on Vaccine Handling and Storage in GP Practices, and NHSE guidance.

Nuvaxovid Storage & Handling Requirements Are Similar to Flu Vaccine Requirements

Nuvaxovid is a protein-based, adjuvanted, recombinant nanoparticle COVID-19 vaccine. It uses traditional established technology, where the spike proteins are grown in cells, similar to the methods used to produce cell-based flu vaccines. The shelf life of Nuvaxovid is 9 months when stored between +2°C to +8°C.

Vaccine Handling Allowances Prior to Administration

Short periods of controlled operational vaccine handling are permitted during administration. The COVID-19 vaccine Nuvaxovid is supplied as a single-dose pre-filled syringe (PFS) and does not require reconstitution; therefore, periods outside the cold chain should be kept to an absolute minimum. This advice applies to Nuvaxovid in the same way as flu vaccinations.

Studies have shown that if air temperatures exceed 8°C for less than 20 minutes, this will not have warmed the medicine itself above 8°C. Any exposure outside +2°C to +8°C for more than 20 minutes should follow the process for a significant cold chain breach and PHA advice sought on any actions necessary (see below). This approach is consistent with the long-standing practice for adult seasonal influenza vaccination services.

Difference Between COVID-19 Multi-Dose Vial and Pre-Filled Syringe Stability Data

Manufacturers of multi-dose vial (MDV) COVID-19 vaccines provide additional ambient temperature stability data to support the reconstitution and preparation of MDVs prior to administration. This was particularly relevant during the COVID-19 pandemic when MDVs were prepared at scale to support Mass Vaccination Centres. This data is not supplied as a matter of course for flu or Nuvaxovid vaccines presented in a PFS. As such, periods outside the cold chain for these vaccines should be kept to an absolute minimum. The absence of ambient temperature stability data within the SmPC for PFS should not, in itself, be a barrier to safe and effective operational delivery.

Significant Cold-Chain Breach

A significant cold-chain breach is defined as prolonged exposure outside +2°C to +8°C for more than 20 minutes, or any freezing event. Such incidents should be managed in line with existing incident reporting and governance procedures. For community pharmacy this is detailed in the service specification and SPPG cold chain guidance. HSC Trusts should follow their local Trust guidance for managing cold chain breaches.

Unused vaccinations after transport/offsite storage

Provided that the vaccination service provider is confident and satisfied that cold chain was maintained throughout the clinic session, including use of a validated cold chain system and no evidence of a significant cold chain breach, any unused vaccines may be returned to refrigerated storage and retained for future use. It is recommended that returned vaccines are clearly labelled and prioritised for subsequent sessions.

Q: How Stable are Vaccines Generally?

Vaccines available for use in the UK are generally very stable and able to withstand short temperature excursions outside the recommended temperature range. Where vaccines have been stored either above or below the +2°C to +8°C range for longer periods of time, any loss of potency, although irreversible, is likely to be gradual rather than immediate or complete.

However, when stored within the recommended cold chain conditions, most vaccines are very stable. Exposing vaccine to higher than recommended temperatures does not cause an immediate loss of vaccine effectiveness but tends to lead to acceleration of the natural decline in potency.

As high temperatures (above +25°C) are unlikely to be encountered as a result of cold chain failure in the UK, this would suggest most incidents (involving one-off exposure to moderate temperatures for a short period of time) are unlikely to significantly affect the potency of many vaccines. This is particularly true where vaccines are used early in their shelf life, and if the provider maintains good stock control (ordering what is needed for a 2-to-4-week period) with a relatively quick turnaround of vaccines. It would therefore be anticipated that a risk assessment of such vaccines subjected to a brief ambient temperature excursion would (subject to stability data relevant to the vaccines involved) likely find the vaccines not to be significantly compromised and therefore to still be safe and effective to use.

(UKHSA, Vaccine Incident Guidance: Responding to errors in vaccine storage, handling and administration)