1 February 2021

Position Statement for the vaccination of care home residents using COVID-19 Vaccine AstraZeneca (AZ)

Background
Standard Operating Procedures (SOP) developed by the Specialist Pharmacy Service (SPS) have supported the implementation and administration of COVID-19 vaccination across the NHS.

The movement of punctured vials of AstraZeneca COVID-19 vaccine between multiple sites, i.e. end user locations, presents a greater risk of microbiological contamination and proliferation than a single site delivery. The SPS SOPs aim to balance the need to protect vaccine quality, minimise the risk of harm to the patient from accidentally administering contaminated vaccine and minimise vaccine wastage. SPS advice is that moving a punctured vial of the AstraZeneca COVID-19 vaccine between care homes should only occur in rare circumstances, for example when it is essential to vaccinate a small number of patients in each of several care homes as part of a "mop up" exercise within a 6 hour period to avoid significant wastage.

Risk assessment
The risk of patient harm through administration of a contaminated dose of vaccine is related to a combination of the following:

- there being no antimicrobial preservative contained within the multidose vial
- vaccinator aseptic technique
- the environment within which the dose is prepared
- the number of punctures to the vial; the more punctures the greater the chance of contamination
- the higher the ambient temperature and the longer the interval between first puncture and subsequent doses, the greater the risk of a harmful level of contamination. In care homes consider the likelihood of a higher than average ambient temperature.

Recommendation
When planning a vaccination session for local care homes, the Primary Care Lead Pharmacist and the Lead GP at the PCN Designated Site should undertake an assessment to identify and understand the risk factors associated with the transfer of the vaccine for administration to remaining care home patients. Vaccinators must be made aware of these risk factors and the following risk reduction measures must be considered and be in place.

Risk reduction measures:

- **Aseptic technique is of paramount importance.**
- Minimise the time between the first and last puncture within the maximum 6-hour period.
- Ensure the vial is transported and stored within a validated cool box for the 6-hour period.
- Remove vial from a validated cool box immediately before withdrawing the first dose and replace it immediately after withdrawing the last dose to be administered on any one site (care home).
- Swab the entire vial and then the bung, with a 70% alcohol swab after removal from the validated cool box.
- Swab the entire vial with a 70% alcohol swab before replacing it in the validated cool box.
- Check that the validated cool box temperature stays between $+2^0$C and $+8^0$C at all times.
- If the temperature exceeds $+8^0$C discard all punctured vials.
- If failure of aseptic technique is suspected, discard all punctured vials.