Extract from the WHO/UNICEF training material "Training on handling, storing and transporting Pfizer-BioNTech COVID-19 mRNA Vaccine COMIRNATY® (Tozinameran)", version 07<sup>th</sup> July 2022

## Conditions for UCC Site Readiness

## Setting up UCC hubs at first subnational level: conditions

- According to WHO/UNICEF technical guidance, a UCC hub is recommended primarily for central level vaccine store.
- For some special cases, establishing UCC hub at first subnational level may be supported IF the following strategic and operational considerations are satisfied, which will ensure sustained functionality of ULT freezers and UCC system infrastructure.

- ✓ With extraordinary challenges making storage of vaccine in a freezer or refrigerator impossible.
- ✓ The UCC hub is strategically located in a geographical area so that it can efficiently supply quality vaccine to other local vaccine stores or service points.
- ✓ Decision is based on evidence (and included in the NDVP) that such UCC hub will increase access and coverage in the specified geographical area.
- ✓ Proof that staff that will manage the UCC hub have necessary specialized technical and operational skills.



ULT freezer installation at district and service delivery levels are not recommended and should not be pursued. The lower the levels, the higher the risk of closed-vial wastage due to less reliable electricity and expert support, among others.

## Setting up UCC hubs at first subnational level: operational considerations

- a. ULT freezer is installed in air-conditioned room where the temperature never exceeds 30°C and protected from direct sunlight.
- b. All ULT freezer and air conditioners are connected to a dedicated constant power supply, a backup generator with automatic switch over, UPS and adequate fuel supply. This must be verified by qualified electrician.
- c. Each ULT freezer is equipped with remote temperature monitoring device (RTMD), monitored by the national vaccine store 24/7, as well as ULT 30-day TMD with data download capability. Data should be submitted to the national vaccine store daily.
- d. Each UCC is equipped with an adequate voltage stabilizer.
- e. Properly trained health worker is available 24/7 to monitor of internal temperature daily and supervise packing and unpacking of ULT vaccines.
- f. If ULT phase change material (PCM) is used as coolant pack for vaccine distribution, a separate UCC should be available for freezing of PCM packs.
- g. If dry ice is used as coolant, ensure secured supply of dry ice that will allow replenishment every 5 days.

- n. Officially approved technician is available to:
  - Clean condenser filter on compressor units and vacuum breaker/relief port on all units monthly.
  - Assist with re-gassing on compressor units when required.
  - Clean heat reject fins and door alignment on Stirling piston pump units (if this is used) annually.
- i. A contingency plan that includes availability of alternative storage capacity in case of emergencies, such as:
  - ULT freezer available within 15 minutes travel time, and
  - Adequate thermal shipping containers and dry ice supply for transport), or
  - Availability of -15°C to -25°C freezers to temporarily store vaccine (maximum of 14 days only).
- j. Emergency medical assistance is available on/near site for the treatment of frostbite, carbon dioxide asphyxiation (dry ice) or lithium skin contact or inhalation (PCM packs).