

Vaccine storage requirement

For Private Doctors

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Background

- All doctors under VSS, i.e. new enrollees and doctors already enrolled.
 - Select and use a Purpose-built vaccine refrigerators (PBVR) to store vaccines. Do not use a domestic refrigerator
 - Ensure all vaccine ordering, storage, transport and management strictly following relevant guidelines and the recommendations

Vaccine storage requirement under VSS

- All doctors under VSS:
 - Monitor vaccine temperature continuously
 - Written protocols for Vaccine Handling and Management of Cold chain breach
 - Designate a trained person for handling of vaccines and the equipment
 - Self-audit the vaccine storage equipment and procedure at least once **every 12 months**

Temperature monitoring device

- The temperature monitoring device should be able to record temperatures to at least 1 decimal point (0.1°C).
- It is a good practice to calibrate the temperature monitoring device regularly.
- A separate battery-operated minimum/maximum thermometer or data logger in PBVR is recommended as a backup in case of PBVR failure.



Temperature record

- Check temperatures of each vaccine-storing refrigerator **twice daily**
 - ❑ Max-min thermometer: manually record twice daily
post the record at visible location
 - ❑ Data Logger: review readings twice daily
generate/download at least weekly
- Temperature records should be kept for at least **1 year**

Management of cold chain breach

- Set up back-up plan in case of a power failure or PBVR out of service
- In case of cold chain breach:
 - Quarantine all affected vaccines from other vaccines (but keep between +2°C and +8°C as soon as possible)
 - Record all the details and contact vaccine manufacturer(s) for advice
 - Report the incident to PMVD (temperature range, duration, vaccine details, etc.) using “***Temperature Excursion Incident Report Form***”

VSS Outreach (Non-Clinic)

- Prepare standard procedure for vaccine transport
- Consider the cold chain (within +2 to +8°C) maintenance and duration of outreach activity
- Proper monitoring of the temperature throughout the activity

VSS Outreach (Non-Clinic)

- Appropriate equipment should be used for vaccine transport and on-site storage
- These includes:
 - Cold boxes
 - Ice packs
 - Temperature data loggers / maximum-minimum thermometers
 - Insulating materials (e.g. bubble wrap, corrugated cardboard)
- The setup should be tested for insulation time and temperature stability before it is used

VSS Outreach (Non-Clinic)

- Cold box packing
 - Prepare sufficient time for packing the cold box
 - Use **conditioned** ice packs for packing
 - Pre-cool the cold box to optimal temperature before placing the vaccine inside



VSS Outreach (Non-Clinic)

- Use a temperature data logger/digital maximum-minimum thermometer to monitor the vaccine temperature throughout the trip.
- Record the time and vaccine temperature:
 - When vaccines are removed from the vaccine-storing refrigerator,
 - **Monitor the temperature every 15 minutes for the first hour, then hourly if the temperatures are stable**
 - Before returning the unused/surplus vaccines to the vaccine-storing refrigerator.

Points to note

- Purpose-built vaccine refrigerators (PBVR) to store vaccines / pharmaceutical products only
- Continuous monitoring the storage temperature
- Keep temperature record
- Regular maintenance and cleaning
- Contingency plan
 - Record the time and vaccine temperature
 - Actions to manage cold chain breach



Thank you!