

Written Process for Vaccine Storage Management

Ensure conditions have been met in **Checklist for vaccine storage**. ref: Strive for 5, p 6

Mandatory Requirements:

- **Immediately** – contact Immunisation Coordinator to report temperatures outside 2°C to 8°C
- **Twice daily** -Record min, max and current fridge temperature on correct graph – available at: <http://www1.hnehealth.nsw.gov.au/hnep/immunisation/ProfessionalsResources.htm>
- **Monthly** (end of each month) for HNE facilities fax graph to Immunisation Coordinator - Fax No: 49246490
- **Annually** – change battery in min/max thermometer Strive for 5, p 4
- **Annually** -calibrate min/max thermometers ref: Strive for 5, p 4
- **Annually** -Vaccine Storage Self-Audit -ref: Strive for 5, p 36

Procedure in event of cold chain breach – ref: Strive for 5, p 26

NB – Please do not discard any vaccines until you have notified the Immunisation Coordinator at Hunter New England Area Health Service on 49246477

All refrigerators containing vaccines should be maintained at 2°C to 8°C. Temperatures outside these temperatures have the potential of damaging the vaccine and thus reducing efficacy. The National Vaccine Storage Guidelines “Strive for 5” should guide management of the cold chain.

- One person in each facility should be responsible for coordinating vaccine storage
- All staff members should be trained in cold chain management, including administration and weekend staff. ref: Strive for 5, p 5

Basic principles of vaccine storage management ref: Strive for 5, p 3

Min/Max Thermometers ref: Strive for 5, p 22

- Digital min/max thermometers can be used to monitor the day-to-day temperature of a fridge. There may be one built into the fridge (purpose built vaccine fridge) or it may be a portable min/max thermometer. Both have a unit (monitor) that displays the temperature and a probe, which is the point where the temperature is recorded. If you have a purpose built vaccine fridge, the probe may not be visible. An additional portable min/max thermometer is recommended even for purpose built vaccine fridges.
- The portable min/max thermometer allows for the recording of temperatures in whatever position the probe is located. They have a monitor that sits outside the fridge that is attached by a wire to a probe that is placed inside the fridge.
- The probe should be taped inside an empty vaccine box. The min/max reading will only reflect what temperature it is near the probe. If you have a lot of vaccine in the fridge, move the probe around periodically to record the temperature in all areas of the fridge.

Process for monitoring and recording temperatures

- Record temperature twice daily; reset min/max after each check and record minimum, maximum and current temperature early am and late pm (if possible 12hrly interval). (see sample temperature graph)
- Initial each recording and record actions taken if readings are outside 2 – 8 °C
- **YOU MUST NOTIFY THE PUBLIC HEALTH UNIT IMMEDIATELY IF THE TEMPERATURE IS OUTSIDE 2– 8 °C**
- Re-set after checking or opening fridge
- The batteries in your thermometer should be changed at least 12 monthly. Flat batteries can give inaccurate readings. Record when you change the batteries.

- Damaged probes or cables can also give inaccurate readings.
- Min/max thermometers should be calibrated at least 12 monthly. ref: Strive for 5, p 4

Computer Data Loggers

Computer data loggers are useful in determining the accuracy of min/max thermometers and also for indicating how long the fridge has remained at a certain temperature. These data loggers require computer software to download the readings.

- They are programmed on a computer and are set to record temperatures at intervals.
- If there has been no obvious breach of temperature, download and save the reading every week. You should coincide this with your immunisation clinics so that you are confident that you are giving viable vaccine
- Data loggers also need to be calibrated annually.

See separate instructions for use of HOBO computer data logger.

Vaccine Ordering & Delivery Protocols

Ordering vaccine – ref: Strive for 5, p 16

Keep copies of vaccine order forms to assist with:

- Accurate completion of acquittal forms when required
- Assists with estimating number of vaccines to be ordered the following year. (add 10%)

Rotation of vaccine stock

- rotate stock to ensure vaccines with the shortest expiry date are used first
- any vaccines used for outreach clinics and returned to fridge must be used first

Delivery of vaccines

- Designate one person to be responsible for receiving and storing of vaccines upon arrival.
- The designated person will have received prior education regarding the cold chain, interpretation of the heat and freeze monitors, and procedures to be followed when a cold chain monitor indicates that vaccines have been compromised. ref: Strive for 5, p 23
- General condition of packaging and vaccines
- State of ice packs
- Heat and freeze monitors
- Expiry date of vaccines
- Is delivery the same as what was ordered

Notify Immunisation Coordinator at local Area Health Service if:

- Heat or freeze monitors compromised
- Dates expired
- Delivered to wrong address etc.

If the freeze and heat monitors are not compromised but the ice pack was thawed and the vaccines felt warm, causing you concern about their temperature, and you feel vaccines need to be discarded due to the Cold Chain being compromised, please ring the Immunisation Coordinator at your local Area Health Service for further details.

After Delivery:

- Immediately place vaccines in practice refrigerator
- Do not remove vaccines from their original packaging
- Ensure vaccine refrigerator temperature is between 2 – 8 degrees

Maintenance of the vaccine refrigerator -ref: Strive for 5, p 16 **Power Failure** -ref: Strive for 5, p 26 **Transporting vaccines** -ref: Strive for 5, p 28-35