VACCINE MANAGEMENT PROTOCOL [VMP] 2019

Name of Practice here

Address, phone, fax email details.

**Vaccine Service Provider (VSP) Number**

Contents

[Equipment 1](#_Toc507494482)

[Communications 3](#_Toc507494483)

[Managing a Cold Chain Breach 5](#_Toc507494484)

[Education in Vaccine Management 7](#_Toc507494485)

# Equipment

**This Surgery has a Purpose Build Vaccine Refrigerator (PBVR) - Add fridge/s type/s (include make model capacity) and year/s purchased** that isfully compliant with ‘*National Vaccine Storage Guidelines 2019 - Strive for 5’, 3rd Edition*, including:

**(Delete dot points below that are not applicable to your PBVR)**

* + - High/low temp display with reset button oversighted by practice nurse
    - Audible alarm system which is tested weekly **(add name or position)**
    - **(state number) adjustable shelves**
    - Has 2 levels of temperature evidence
      * Inbuilt digital display measures temperature of fridge
      * Measures temp of vaccines - **(name and type of data logger or similar)**
    - Only permits the storage of blood and blood products in the PBVR ***(pathology specimens must be stored in a separate fridge***)
    - Has an easily recognised alarm and safety features which alert to irregular temperature fluctuations in the cabinet.
    - **Alarm is left ONand tested at least monthly by (add name or position)**

**Temperature monitoring**

**Min/Max thermometer**

* Manual temperature monitoring is recorded **twice daily and signed** - on commencement and prior to closure of the practice by **(add** **name or position)** (this chart can be ordered or downloaded from the Australian Government Department of Health website: www.health.gov.au/ immunisation).
* Thermometer is **reset** after each temperature recording
* Records are kept (**Add where these records are kept)**
* If using Min/max thermometer and data logger, they are co-located in the PBVR
* Alarm systems activated to alarm outside +2°C to +8°C
* Has an annual report that states the PBVR temperature monitor is fully functional (**Add company and date last checked).**

***NB: Fluctuations up to +12*°C, lasting no longer than 15 minutes, as may occur during stock take or restocking, are acceptable and do not need to be reported *(*section 2.2*, Strive for 5 3rd Ed)***

**Data Logger**

* Data logger is set to record **how often** to monitor temperature performance
* Data logger is downloaded **Add how often e.g. daily/weekly – or twice daily if Quirks fridge**
* Data logger downloads are kept **Add where kept e.g. in electronic or paper file**
* When using AQ box data logging devices, please observe product temperature (not cabinet temperature), **(delete if not applicable)**
* All staff are trained on how to download data logger and interpret readings
* The instructions for **add type of data logger** data logger use are kept in **add where instructions kept**
* Data logger is checked regularly, and batteries changes according to manufacturer instructions -last changed **add date.**

**PBVR Maintenance**

* Any problems are reported to **name and phone number** for repairs.
* PBVR seal checked regularly and kept clean by **name/position of** **who is responsible**
* Has an **annual report** that states that all components of the PBVR are checked and audited yearly **add company and date last checked** (appendix 2, p.75 *‘Strive for 5’ 3rd Ed*)
* All supporting equipment i.e. digital thermometers, Esky and ice/gel packs are audited yearly by **name/position of who is responsible**

**PBVR Location – (Section 5.2, p.34 *‘Strive for 5’ 3rd Ed*)**

* The PBVR is located **add where it is located** room near an internal wall
* Not exposed to sunlight or heat
* Placed with adequate air flow to the back and sides of the PBVR

**Signage**

Power source is labelled ‘DO NOT TURN OFF’ clearly i.e. **list 3 places where displayed: e.g. power box, refrigerator door and power point** (section 5.3 p.35, *‘Strive for 5’, 3rd Ed*)

* Has minimum correct signage on refrigerator door (appendix 6, p.85 ‘*Strive for 5 3rd Ed’*)
* Has internal signage that is easily seen without opening door
* Has current National Immunisation Program schedule easily visible

**Thermometers**

* **How many** thermometers to monitor the **how many** large Esky to monitor all vaccines held in the fridge in the event of a power failure (NB: you should have more thermometers than eskies, as a thermometer will be needed in the fridge when the digital display is lost due to power outage)
* Has additional batteries and changed yearly, last changed – **list date battery last changed**

**Cooler-boxes, ice/gel packs and insulation**

* All Esky are solid walled (NOT a polystyrene box) in order to hold correct temperatures (‘Cooler', Glossary, p.8 ‘*Strive for 5’ 3rd Ed*)
* The practice has **list how many** large Esky to correctly store all vaccines in the fridge
* **List how many ice packs** are stored in the freezer. **If more are required where are they kept** and has sufficient bubble wrap to protect vaccines (**state where stored)**

# Communications

**Current contact details displayed**

* Queensland Health Immunisation Program (QHIP), Public Health Unit, Primary Health Network, power supplier and fridge mechanic and/or technician phone numbers clearly displayed on or near PBVR and kept current **where are they stored.**
* Nominated person’s name and nominated reliever’s name clearly documented **where.**

**People Involved**

* Primary person responsible for vaccine management is **name of** **who is responsible**
* Secondary person is **name of** **who is responsible**
* Recording the PBVR both am and pm is **name of who is responsible or position**
* Checking and rotation of vaccine stock is **name of** **who is responsible**
* Ordering vaccines is **name of who is responsible**
* Receiving is **name of who is responsible**

**Ordering vaccines**

* Ordering is done **when** (e.g. 1st week of each month)
* Vaccine orders must include:
* VSP name, VSP number and contact details
* Confirmation that vaccines have been stored between +2°C and +8°C
* Vaccine stocktake including quantity and expiry date and number needed to order
* Advise QHIP if the Practice will be closed when delivery is expected and arrange another delivery time.
* Keep vaccine stock to a minimum
* Note: QHIP and the PHU do not provide cold chain advice for private vaccines

**Receiving Vaccines**

* Vaccines are received and signed for by **who, name or position**
  + Unpack immediately checking that the correct type / number of vaccines have been received
* Check that the vaccines have been packed correctly
* Check that the cold chain has not been broken by checking the cold chain indicator
* Rotate stock so that oldest expiring vaccines are moved to the front and used first
* Do all of this as quickly as possible so that fridge door is not open long

**Disposal of Vaccines**

* QHIP vaccines can only be disposed of on advice from QHIP and/or the Public Health Unit. This includes expired vaccines and vaccines degraded due to a cold chain breach.
* The Practice uses correct waste disposal containers
* The Practice uses Sharps containers and disposal using **name of** **company** in accordance with the Environmental Protection (Waste Management) Regulation 2008.

**Reporting**

* Striving for +5°C is recommended for vaccine storage, i.e. vaccines are stored, monitored, and transported within the recommended temperature range of +2°C to +8°C at all times, within a maximum of five degrees range in temperature variation.
* Temperature fluctuations up to +12°C, lasting no longer than 15 minutes, as may occur during stock taking or restocking, are acceptable and do not need to be reported (see section 2.2, p.13 *‘Strive for 5’ 3rd Ed*)
* **However, if the temperature is outside +2°C to +8°C for a greater amount of time, *report to QHIP, phone 3328 9888 or fax 33289720 immediately, and ‘DO NOT USE’***

**Documentation related to vaccine management**

* This Vaccine Management Protocol is current at **add date** easily accessed and seenand stored next to the PBVR
* All QHIP documentation is current with the latest contact details, easily accessed and seen **add where they are stored**
* All equipment and the PBVR Product Information and warranties are easily accessed and seen **add where they are stored**
* All audits, reference materials i.e. Strive for 5 3rd Edition and Clinic vaccine management procedures is easily accessed and seen. **add where they are stored**

**Care of vaccines in the PBVR**

* The PBVR is only for vaccines.
* Most vaccines are destroyed by freezing.
* All vaccines are degraded by light so are kept in their packaging and PBVR light is kept off.
* Vaccines are stored in baskets that have fenestrated openings to allow space between baskets for good air circulation. The baskets must indicate the name of vaccines that it holds.
* It is a legal requirement for vaccines to be left in their original packaging
* Leave a 5cm space free at the back of the fridge for airflow and to ensure that no vaccine box can adhere and be frozen against the back wall of the fridge.
* Diluents must be used at the same temperature as the vaccine. Diluents that are warmer will affect the potency of live vaccines.
* To meet the minimum thermal mass requirement of the PBVR (check product guideline) or where there is only a few vaccines in the PBVR, consider a bottle or 2 of salty water in the bottom of the PBVR to assist with maintaining the desired temperature (Section 5.4, p.36 *‘Strive for 5’* 3rd Ed)
* Apply the *Strive for 5, 3rd edition* recommended stickers on the perimeter of the glass door i.e. warning stickers etc. Aim to leave the glass door free of too many occluding pieces of documentation so the vaccines are easily seen.
* Always restock vaccines into a PBVR when it is at the correct temperature and do so as quickly as possible.
* Always note the time the PBVR takes to recover to +5°C (ideally 5-10 mins)

# Managing a Cold Chain Breach (checklist p.94 *‘Strive for 5’, 3rd Ed*)

**Most PBVRs have glass doors and it takes approximately 20 minutes to exceed +8°C degrees in the event of a power failure.** The Practice uses **note type of insulation** as insulating material to cover the glass door to retain chill. The Practice places ice bricks in empty spaces, taking care not to place them in immediate contact with the vaccines, keeps the door closed to prolong the correct temperatures and prepares for decanting the vaccines into monitored esky/ies.

**During a power failure the PBVR digital temperature display is lost.** In this situation the Practice needs to insert a battery-operated minimum/maximum thermometer probe into the VPBR to continually monitor the temperatures during the power outage prior to applying insulation over the glass door to help hold in the chill. The probe needs to be contained in an empty vaccine box with the Product Information insitu (section 9.2 dot point 5. p.65 *‘Strive for 5’ 3rd Ed*)

**The Practice:**

* **Does/does not** have a back-up power supply e.g. generator or battery/solar back-up
* Has **add how many** Eskies (‘Cooler’, p.8, *‘Strive for 5’, 3rd Ed*) – sufficient to store all the vaccines
* Has insulating material e.g. polystyrene chips and/or bubble wrap
* Has **add how many** minimum/maximum thermometers (one for each PBVR and one each for the Eskies).

**Cold Chain Breach**

* Vaccines are immediately isolated in the fridge and kept refrigerated between +2°C and +8°C
* Place sign on refrigerator door **‘*Power out. Do not use vaccines. Keep door closed.*’**
* Insert min/max batterie operated thermometer as fridge thermometer is now non-operational
* Place insulating material over glass to retain chill and minimise rate of temperature rise.
* Inform all staff in the Practice immediately
* Closely monitor the refrigerator temperature i.e. eyes on as temp rises quickly, in minutes.
* Prepare esky, and sweat ice bricks
* If the temperature rises to +8°C, and rapidly approaching +14°C degrees:
  + Decant vaccines to a prepared Esky. Ensure all vaccines are packed, insulated and monitored with a digital thermometer in situ in an empty vaccine box (section 9.3,p.64 ‘*Strive for 5’, 3rd Ed*)
  + **WARNING:** The Esky can rapidly reach the desired temperature but is **prone to freezing in the first 2 hours** so monitor every 15 minutes until temperature has stabilised.
* **Report to QHIP, phone *3328 9888*** and keep monitoring.
  + State VSP number, time and date of CCB
  + Report min and max temps and duration of the CCB or how long the PBVR has been out of normal temperature range
  + When the PBVR thermometer was last reset
* Probable cause of CCB i.e. power outage due to storm or electrical works or door left open overnight etc
* Report any other concerns
  + If there has been a power failure also check:
  + Reason why power off
  + Ring power provider to determine how long the power will be out **add power supply company and phone number**
  + If the power switch has just tripped on the mains circuit breaker reset. If unsuccessful contact the electrician and report to **name and phone number**
  + Hard walled Eskies are stored **where**
  + Ice/gel packs in **where stored**
  + Bubble wrap in **where stored** and if not enough use polystyrene chips

**Conditioning ice/gel packs –** (Section 9.2, p.63 *‘Strive for 5’, 3rd Ed*)

* Take from **where** and lay out on a tea towel to sweat (about 20 mins) then suitable for use
* If no time put packs in a sink of cold water for 5 minutes, then use.

**When power is returned**

* Record the refrigerator temperature immediately
* Reset the temperature monitor and record temperatures
* Record the time power is returned
* Ensure the refrigerator temperature has returned to between +2°C and +8°C before returning vaccines
* **Do not use or discard vaccines until advice from the Public Health Unit is given**
* **Metro North Public Health Unit - phone 3624 1111**
* Monitor the refrigerator closely in case damage has occurred and temp fails to return below 8c

# Education in Vaccine Management

**Education and training in Vaccine Management**

* All staff should understand the rationale for storing vaccines at the correct temperature.
* All staff recognise that recall for re-vaccination can be prevented by a high standard of vaccine management process by each person in the Practice.
* Records are kept for staff attending an initial and annual education and training session in vaccine management
* Contact your Public Health Unit or Primary Health Network for availability of education and on-line training sessions
* Access QHIP for routine vaccine ordering

**Refer to ‘*Strive for 5’ 3rd Ed’* best practice guidelines in conjunction with this practice’s VMP**

<https://beta.health.gov.au/sites/default/files/national-vaccine-storage-guidelines-strive-for-5_0.pdf>

**Signature of primary person responsible Signature of Practice Manger**

**for vaccine management**

**Name of Practice Nurse: Name of Practice Manager:**

**Date: Date:**