

# Cold Chain Requirements in General Practice

-loving look after your vaccines

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- The 'cold chain' is the system of transporting and storing vaccines within the safe temperature range of +2°C to +8°C to ensure the vaccines remain potent and effective.
- We don't know what COVID vaccine thermostability requirements will be but lets get this right





In anticipation of a COVID-19 vaccine being available in 2021 we need to ensure General Practice compliance with Cold Chain Management

COVID vaccines will be scares and precious we need to be able to manage our fridges and be able to report cold chain breaches.



# Why is Vaccine Management Important?

- Vaccines are sensitive biological substances that can become less effective or even destroyed if they are frozen or exposed to temperatures outside the recommended range of 2°C to 8°C, and/or exposed to direct sunlight or UV or fluorescent light.
- The loss of vaccine effectiveness is cumulative and cannot be reversed.





- Storage
- Monitoring equipment
- Essential paperwork

- NSW Health Random Cold Chain Audit
- Cold Chain Breach Reporting







- Vaccines must be stored in a purpose built vaccines fridge
  - Fridge must be serviced every 12 months.
- All vaccines to be stored in original packaging (light sensitive)
- No vaccines to be stored on the bottom shelf need to be raised
- No vaccines to be touching the sides
- Do not crowd your fridge
- Recommended to use open weave baskets



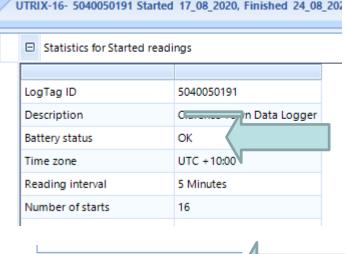


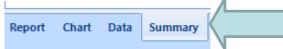
- Data logger Must be
  - set for 5 minute recording intervals and set to run continuously
  - downloaded & saved on your computer every week and when a breach suspected. Advisable to have on shared drive that all staff can access in you absence
  - serviced/calibrated/checked for accuracy every 12 months.
  - battery changed as per manufacturers instruction or when the battery life displayed on either the data logger on the set up screen shows low or every 12 months



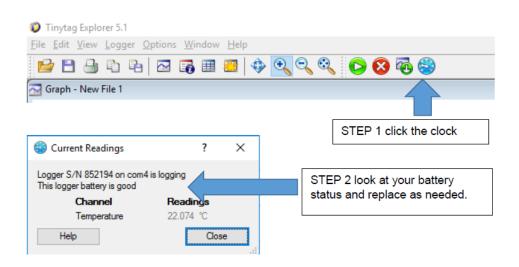
# Checking battery on Logtag and TinyTag

**Logtag** – click on summary and check battery status. Anything other that OK needs replacing now

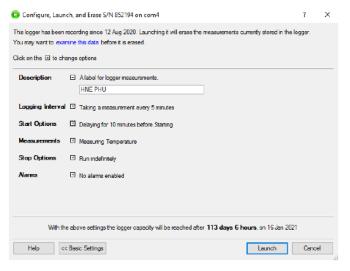








When you relaunch your data logger please ensure that you change your stop options from "when full" to "run indefinitely" This will prevent the data logger from stopping recording once full in case it is not downloaded one week.



- You <u>must have</u> a battery operated min/max thermometer for each vaccine fridge and each alternate cold storage. <u>This is in addition to the</u> <u>built in min/max thermometer on your fridge</u>
- Current, minimum and maximum temperatures must be recorded and plotted twice daily every day your practice is open
- Battery must be changed every 6-12 months
- Accuracy must be checked every 12 months



How to check accuracy of your thermometer

# 4.4 How to check the accuracy of a thermometer ('slush test')

- **1.** Fill a polystyrene or plastic cup with cold water.
- Place the cup in the refrigerator freezer until a fine layer of ice forms on the top and small sections of ice form within the fluid (this may take up to 2<sup>1</sup>/<sub>2</sub> hours). The presence of ice is an indication that the temperature of the water has reached 0°C.
- **3.** Place the temperature probe into the middle of the container (be careful not to let the probe touch the container).
- 4. Observe the temperature on the display screen after 2 minutes.
- 5. Document the date of the accuracy check.



## Essential paper work



Stickers on your fridge, power point and meter box

DO NOT TURN OFF POWER OR DISCONNECT THIS REFRIGERATOR DO NOT TURN OFF POWER BEFORE CONSULTING THE PERSON RESPONSIBLE FOR VACCINE MANAGEMENT



- Certificates of completion of NSW Health Vaccination and Cold Chain Management online training
- Vaccine management policies that are reviewed every 12 months
- Written procedures for what to do during a power failure
- Daily temperature graph
- ANNUAL STRIVE FOR 5 SELF AUDIT



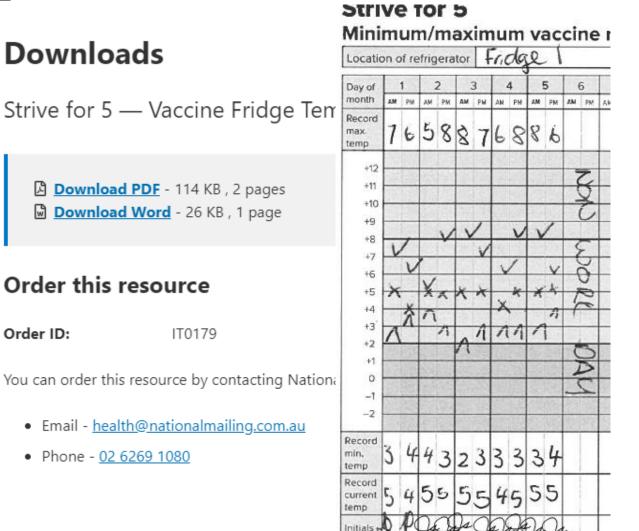
# NSW Health requires GP facilities to use this temperature chart

# You need to **plot and record** the minimum, maximum and current temperatures on this chart

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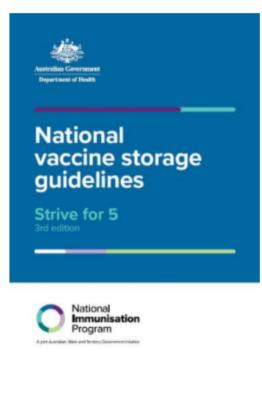
#### Vaccine storage troublesheet

Date	Time	Max./min. temperatures	Problem	Action taken	Results	Initials
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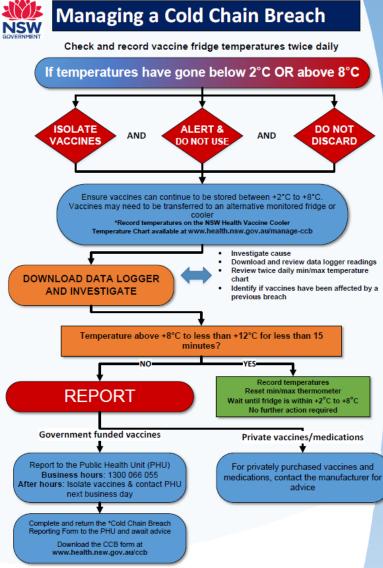
### In this collection Collection description Guidelines Posters Stickers Appendices

### **Collection description**

This collection provides links to the full set of our National Vaccine Storage Guidelines 'Strive for 5' resources.

'Strive for 5' refers to 5 degrees Celsius (°C) — the point midway between +2°C and +8°C which is the temperature range recommended for vaccine storage. Many vaccines are damaged or destroyed at temperatures outside this range.

# Reporting a cold chain breach- do not discard any vaccines until you speak to the PHU





For more information visit www.health.nsw.gov.au/manage-ccb

- Ensure surgeries at compliant with the requirements of Strive for 5 and NSW Cold Chain Toolkit for Immunisation Provider
- Conduct random cold chain audits on 50% of GP surgeries in HNE by December 2020





- Random cold chain audits assist in identifying GP's who require assistance with management of vaccines.
- The random audits will identify practices as either <u>compliant</u> or <u>non compliant</u>
- This enables HNE Immunisation team and PHN to work in partnership to ensure community confidence in the delivery of vaccines in our area.



## **NSW Health resources**

Home > Immunisation programs

### Immunisation programs



- Immunisation Toolkit for GPs <u>NEW</u>
- NSW Immunisation Schedule 1 July 2020
- 2020 flu vaccine information for providers
- Vaccination advice during COVID-19
- Pharmacist vaccination



- More information
- Immunisation Toolkit for GPs <u>NEW</u>
- GP updates
- Public Health Units 1300 066 055
- Adverse events following immunisation
- Vaccine ordering link
- Cold chain management
- Cold chain learning module (with certificate of completion)

Cold Chain Toolkit for Immunisation Providers

August 2020

NSW Health



GOVERNMENT

#### Safe Vaccine Storage Checklist

Follow the principles of safe vaccine storage management to ensure safe and effective vaccines are given to your patients. Strive for 5°C and report ALL cold chain and light exposure breaches to your local public health unit on 1300 066 055.

#### Vaccine refrigerators

### S Purpose-built vaccine refrigerators (PBVR) are the only suitable option for vaccine storage.

If your practice does not have a PBVR you will be required to order a new PBVR.

 Domestic fridges and bar fridges are not built to store vaccines and must not be used for vaccine storage.

#### Vaccine Storage

#### Vaccines MUST be stored in their original packaging

 Store vaccines in their original cardboard packaging as they are sensitive to UV light and temperature fluctuations.

- ·Vaccines must not touch the sides of the fridge
- ·Vaccines must not be stored on the floor of the fridge
- Annual vaccine storage self-audit completed and up to date.

### Temperature monitoring

#### Vaccine fridge temperatures MUST be continuously monitored using a data logger

Data loggers MUST be set at 5 minute intervals with a report downloaded weekly and when a
potential cold chain breach has been identified.

•Current, minimum and maximum temperatures MUST be manually recorded twice daily, every day the practice is open. Thermometer to be reset after temperatures are recorded.

Review temperature of fridge before removing vaccines for administration.



### Rotate stock and discard expired

#### vaccines

Check the vaccine expiry before administering vaccines and discard all expired vaccines.

•Regularly review stock and bring vaccines with the shortest dates to the front of the refrigerator so they are used first.

Staff education

### Ensure ALL staff are trained in vaccine management

·Provide regular vaccine management orientation and education training sessions for all staff.

. Ensure one member of staff is responsible for vaccine management and a back up person.

 The NSW Health Vaccine Storage and Cold Chain Management online training module may be used to train all staff that are responsible for vaccine storage and monitoring, visit

 $https://nswhealth.seertechsolutions.com.au/public_content/HETICP/HETI/CCMWebv3/story_flash.html$ 



## Take home to do list



- Ensure you have battery operated min/max thermometers
  - Batteries changed every 6-12 months
- Ensure your fridge is serviced every 12 months
- Ensure your data logger is set for 5 minute recording, battery is replaced and serviced as per manufacture instructions or every 12 months and is set to run continuously
- Ensure no vaccines a stored on the floor of your fridge and always in their original packaging
- Ensure you and another staff know how to down load your data logger AND attach this file to an email
- COMPLETE YOUR ANNUAL STRIVE FOR 5 SELF AUDIT
- Consider purchasing extra PBVF now if you need additional storage. This will need to be logger for 72 hours before vaccines can be stored in it



## Additional resources

- NSW cold chain toolkit for Immunisation Providers
- Strive for 5
- Temperature Graph
- <u>https://www.health.gov.au/resources/publications/national-vaccine-</u> <u>storage-guidelines-strive-for-5-vaccine-fridge-temperature-chart-poster</u>
- Safe Vaccine Storage Checklist
- <u>https://www.health.nsw.gov.au/immunisation/Documents/safe-vaccine-storage-checklist.pdf</u>
- Better Health Centre: Email. nslhd-bhc@health.nsw.gov.au Fax. 02 9887 5452

NSW Health Online Cold Chain Learning Module - <u>https://nswhealth.seertechsolutions.com.au/public\_c</u>ontent/HETICP/HETI/CCMWebv3/story\_html5.html



