

Vaccine Cold Chain Requirements in General Practice

Loving look after your vaccines Vaccines bring us closer

Jody Stephenson Clinical Nurse Consultant HNE PHU 12 October 2021 Phone 4924 6477 Email Hnelhd-phimmunisation@health.nsw.gov.au



THANK YOU for protecting your community!!!



vaccines have brought us one step closer to eradicating polio

what are you looking forward to vaccines bringing you closer to?

vaccines bring us closer to a world without cervical cancer

vaccines have brought us one step closer to a fairer world

tag us + your fi

Vaccines
Bring Us Closer

vaccines bring us closer to ending measles deaths vaccines have brought us one step closer to friends + family



The Cold Chain



- 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.
- 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.



What we will cover the essentials



- Storage
- Monitoring equipment
- Essential paperwork
- Cold Chain Breach Reporting



Storage



- 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



Monitoring Equipment's Data loggers



Data logger Must be

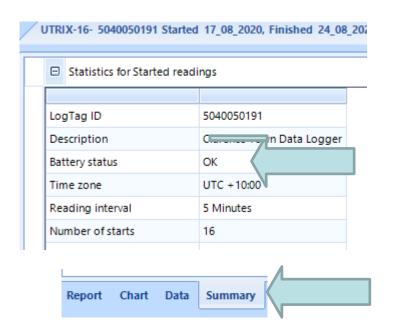
- set for 5 minute recording intervals and set to run continuously
- downloaded & saved on your computer every week and when a breach suspected. Advisable to have on shared drive that all staff can access in you absence
- serviced/calibrated/checked for accuracy every 12 months.
- battery changed as 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



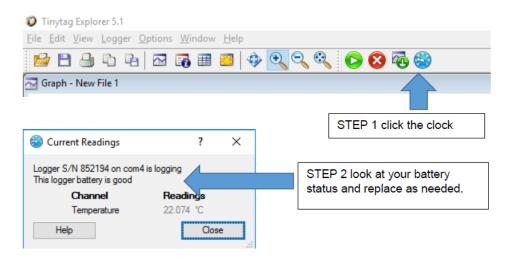
Checking battery on Logtag and TinyTag



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.

	and Erase S/N 852194 on com4		7	×
You may want to exam	rding eince 12 Aug 2020. Launching it will erase the this data before it is erased.	a measurements currently atored in the l	ogger.	
Click on the 🖽 to cha	a options			
Description	Alabel for logger measurements. HNE PHU			
Logging Interval	Taking a measurement every 5 minutes			
Start Options	Delaying for 10 minutes before Starting			
Measurements	Measuring Temperature			
Stop Options	Run indefinitely			
Alarms	No alarms enabled			
With the	ove settings the lagger capacity will be reached aft	er 113 days 6 hours , on 16 Jan 202	1	
Help	sic Settings	Launch	Cancel	1

Monitoring equipment – min/max thermometer



- 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.
- 2. 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 $2\frac{1}{2}$ 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







- 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/ QARS



NSW Health requires GP facilities to use this temperature chart



Minimum/maximum vaccine i

7658876886

Location of refrigerator Fridal

Day of month

Record

temp

You need to **plot and record** the minimum, maximum and current Strive for 5 temperatures on this chart



Downloads

Strive for 5 — Vaccine Fridge Ten

- Download PDF 114 KB , 2 pages
- Download Word 26 KB , 1 page

Order this resource

Vaccine storage troublesheet

Date	Time	Max./min. temperatures	Problem	Action taken	Results	Initials

Order ID: IT0179 You can order this resource by contacting Nationa -2 Email - health@nationalmailing.com.au Record Phone - 02 6269 1080 temp Record current Health temp



National Vaccine Storage Guidelines resource collection order resources here







In this collection

Collection description

Guidelines

Posters

Stickers

Appendices

Collection description

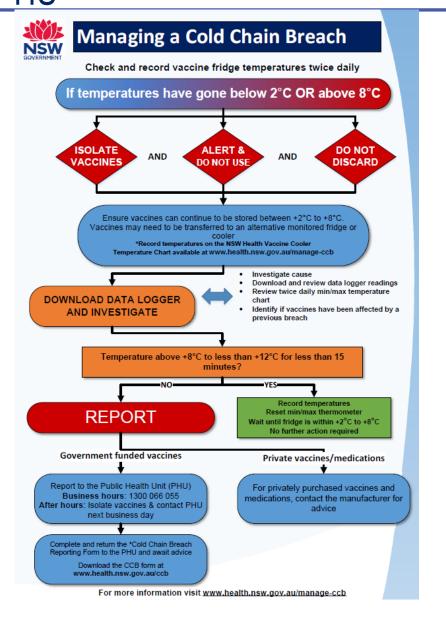
This collection provides links to the full set of our National Vaccine Storage Guidelines 'Strive for 5' resources.

'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







How to complete the cold breach and wastage report form



- Fill this form in online so it can be emailed back to the team
- Complete section 1 and 2 carefully and include reason for the breach. Note if this is their first excursion or breach

ALY)	
NSW	

*SECTION 1: IMMUNISATION PRO	OVIDER DETAILS
Facility Name	Vaccine Account Number
Address	Phone
Number of GPs in the practice	Person Reporting the breach
Email	

*SECTION 2: DETAILS OF COLD	CHAIN BREACH
	Purpose Built Vaccine Specific
1. Type of refrigerator	Refrigerator
	☐ Domestic refrigerator
2. Date of breach	
3. Date breach identified	
4. Reason for breach	



continue



- Only complete section 3 if it was a fridge malfunction or the reason from breach is unknown
- Section 4 vaccine details take your time and get the right Total number of doses exposed to first breach (total number of doses exposed to second breach)

						GOVERNMENT
*SECTION 4	: VACCI	NE DETAI	LS			
Count and enter th	ne <u>exact nur</u>			vaccine brand in the	refrigerato	r at the time of the
Va	ccines evn			n breach. ach should be record	ed as follow	ıs.
				otal number of doses		
Vaccine	*Doses	PHU advice		Vaccine	*Doses	PHU advice
MMRII	5 (5)	Retain 5 (Discard 5)		Infanrix	13 (2)	Retain 13 (Discard 2)
Vaccine	*Doses	PHU advice		Vaccine	*Doses	PHU advice
Act-HIB		Select	·	MMR II		Select
Adacel		Select	·	Neis-Vac C		Select
Afluria Quad		Select	·	*Nimenrix (Provide batch number and expiry date below)		Select
Bexsero		Select	·	Pneumovax 23		Select
Boostrix		Select	·	Prevenar 13		Select
Engerix B (adult)		Select	ŀ	Priorix		Select
Engerix B (paed)		Select	·	Priorix Tetra		Select
Fluad Quad		Select	ŀ	Proquad		Select
Fluarix Tetra		Select	·	Quadracel		Select

*SECTION 4	VACCI	NE DETAI	LS	
Count and enter th	e <u>exact nun</u>			n vaccine n breach.
		osed to a secon		
Total number of Vaccine	*Doses	PHU advice	acn (to	Vaccin
MMRII	5 (5)	Retain 5 (Discard 5)		Infanrix
Vaccine	*Doses	PHU advice)	Vaccir
Act-HIB	5 (9)	Select	·	MMR II
Adacel	7	Select	·	Neis-V
Afluria Quad		Select	·	*Nimer (Provide bat expiry date t
Bexsero		Select	·	Pneum
Boostrix	12 (10)	Select	·	Preven
Engerix B (adult)		Select	·	Priorix
Engerix B (paed)	5	Select	·	Priorix
Fluad Quad	15 (12)	Select	·	Proqua
Fluarix Tetra		Select	-	Quadra



Reporting form continued



Attach the required documents listed on the last page

Attachments required All providers are required to provide the following items on the checklist
☐ Data logging for the duration of the cold chain breach (graph and temp log required)
□ Vaccine refrigerator twice daily min/max temperature chart
☐ Min/max temperature chart used during transfer of vaccines e.g. esky (if applicable)
☐ Last refrigerator service report (required if there has been a fridge malfunction)
☐ Certificates of completion of all staff that have completed the NSW Health Vaccine Storage and Cold Chain Management online training module

 The amazing PHU staff will email you back with information on what vaccines can be retained and labelled and which vaccines need to be discards and other actions required

Vaccine	*Doses	PHU advice
Act-HIB	5 (9)	R&L 5 dis (9)
Adacel	7	Retain and label
Afluria Quad	20	Discard
Bexsero		Select
Boostrix	12 (10)	R&L 12 dis (10)
Engerix B (adult)		Select
Engerix B (paed)	5	Retain and label
Fluad Quad	15 (12)	R&L 15 dis (12)



NSW Health resources



Home > Immunisation programs

Immunisation programs



Alerts

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



Immunisation providers

- > More information
- Immunisation Toolkit for GPs -NEW
- GP updates
- > Public Health Units 1300 066 055

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- 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	Purpose-built vaccine refrigerators (PBVR) are the only suitable option for vaccine storage.
	 If your practice does no 	t have a PBVR you will be required to order a new PBVR.
	Domestic fridges and be vaccine storage.	ar fridges are not built to store vaccines and must not be used for
	Vaccine Storage	Vaccines MUST be stored in their original packaging
	 Store vaccines in their of temperature fluctuation 	original cardboard packaging as they are sensitive to UV light and s.
	 Vaccines must not touc 	h the sides of the fridge
	·Vaccines must not be s	tored 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 ach has been identified.
	Data loggers MUST be potential cold chain bre Current, minimum and	set at 5 minute intervals with a report downloaded weekly and when a
_	Data loggers MUST be potential cold chain bre Current, minimum and every day the practice i	set at 5 minute intervals with a report downloaded weekly and when a ach has been identified. maximum temperatures MUST be manually recorded twice daily,
_	Data loggers MUST be potential cold chain bre Current, minimum and every day the practice i Review temperature of	set at 5 minute intervals with a report downloaded weekly and when a ach has been identified. maximum temperatures MUST be manually recorded twice daily, s open. Thermometer to be reset after temperatures are recorded. fridge before removing vaccines for administration.
	Data loggers MUST be potential cold chain bre Current, minimum and every day the practice i	set at 5 minute intervals with a report downloaded weekly and when a ach has been identified. maximum temperatures MUST be manually recorded twice daily, s open. Thermometer to be reset after temperatures are recorded.
	Data loggers MUST be potential cold chain bre Current, minimum and every day the practice i Review temperature of Vaccine expiry	set at 5 minute intervals with a report downloaded weekly and when a ach has been identified. maximum temperatures MUST be manually recorded twice daily, s open. Thermometer to be reset after temperatures are recorded. fridge before removing vaccines for administration. Rotate stock and discard expired
	Data loggers MUST be potential cold chain bre Current, minimum and every day the practice i Review temperature of Vaccine expiry Check the vaccine expire	set at 5 minute intervals with a report downloaded weekly and when a ach has been identified. maximum temperatures MUST be manually recorded twice daily, s open. Thermometer to be reset after temperatures are recorded. fridge before removing vaccines for administration. Rotate stock and discard expired vaccines ry before administering vaccines and discard all expired vaccines. and bring vaccines with the shortest dates to the front of the
	Data loggers MUST be potential cold chain bre Current, minimum and every day the practice i Review temperature of Vaccine expiry Check the vaccine expire.	set at 5 minute intervals with a report downloaded weekly and when a ach has been identified. maximum temperatures MUST be manually recorded twice daily, s open. Thermometer to be reset after temperatures are recorded. fridge before removing vaccines for administration. Rotate stock and discard expired vaccines ry before administering vaccines and discard all expired vaccines. and bring vaccines with the shortest dates to the front of the

- •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 – rotate your stock



- 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 or QARS



Please look after each other



- Stay off social media if you are feeling overwhelmed
- People are get vaccinated for all sorts reasons including just wanting to go to the pub. Any reason is valid
- We appreciate all the efforts you are making to keep our community safe



Additional resources



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

NSW Health Online Cold Chain Learning Module - https://nswhealth.seertechsolutions.com.au/public_c ontent/HETICP/HETI/CCMWebv3/story_html5.html



