

# Keeping it cool

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# Who

- Everyone involved in vaccination
  - Vaccinators
  - Immunisation/Cold Chain Coordinators
  - Provider staff

# When

- All the time
  - In the fridge
  - In a chilly bin
  - COVID – air temperature of the room



# Why

**So that every person receives a vaccine that has been stored correctly**

# What

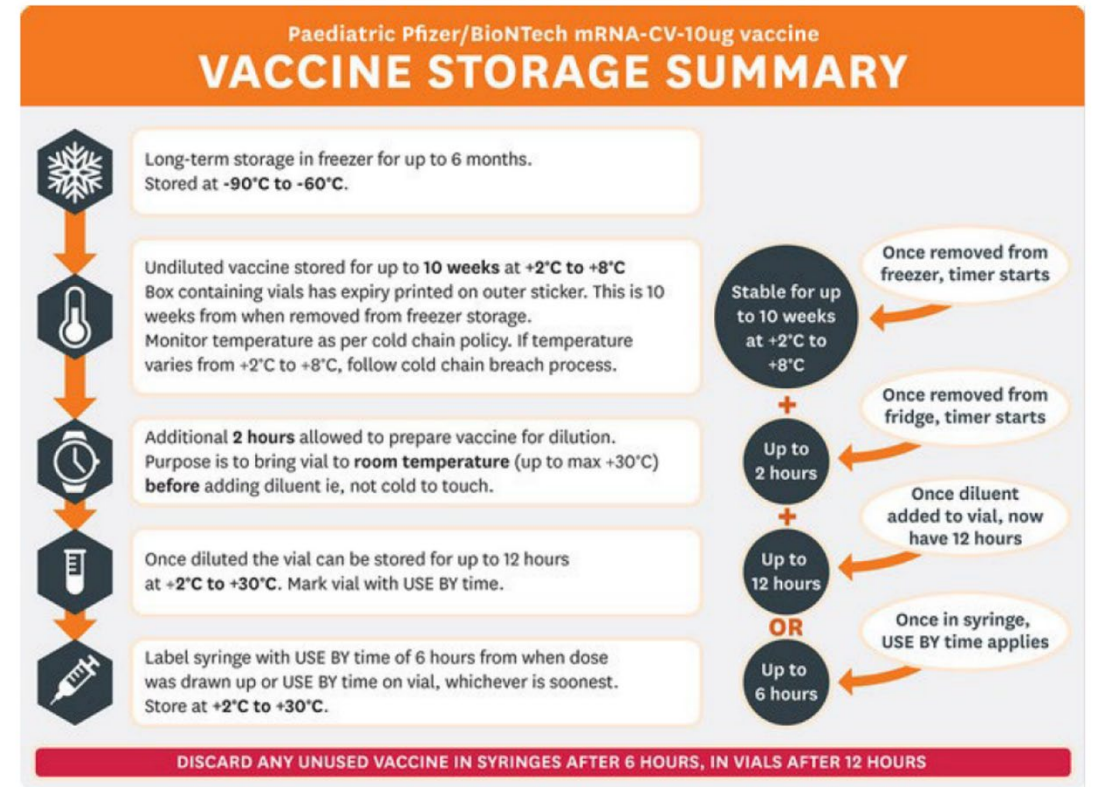
- Cold chain is about the storage of vaccine at the correct temperature to maintain their potency
  - COVID-19 changed the +2°C to +8°C rule
  - Principles remain

# How

- Daily checks when open
  - Minimum and maximum
  - Follow up of daily checks when out of range
  - Follow up of email/text message from monitoring systems
- Weekly
  - Weekly review of datalogger/continuous monitoring data

# COVID-19 vaccines introduced

- Ultra cold
- Frozen
- Short +2°C to +8°C expiry
- Limited transport time
- Room temperature storage
- Extended thermostability data



# National Standards

- There are ten principles that underpin the standards
  1. All Immunisation Providers must have CCA/CCC
  2. All clinical staff must ensure continuity of the cold chain
  3. Providers must have cold chain policy
  4. Stock management process
  5. Pharmaceutical refrigerator
  6. Monitoring systems
  7. Back up storage
  8. Equipment must be tested and maintained
  9. Keep documentation
  10. Off-site appropriate and tested equipment
- Since the standards were written technology and vaccines have continued to evolve
- Significantly more providers and shared provider set ups





# What's going wrong?

- Loggers being stopped and not restarted (2,6)
- Providers not actually reviewing data when it is downloaded (2,6)
- Temperature monitoring in chilly bins not meeting standard (2,10)
- No orientation for new staff to the cold chain – everyone needs to be able to download the logger or access the continuous monitoring (2,3,6)
- Assumption of previous advice applying (2,3)
- No documentation regarding actions taken following fridge alarming (2,6,9)
- Assuming duration of a breach rather than confirming on data logger (2,6,9)

Can you see a theme?

# It's the people

1. All Imms Provider must have CCA/CCC
  2. **All clinical staff must ensure continuity of the cold chain**
  3. Providers must have cold chain policy
  4. Stock management process
  5. Pharmaceutical refrigerator
  6. **Monitoring systems**
  7. Back up storage
  8. Equipment must be tested and maintained
  9. Keep documentation
  10. Off-site appropriate and tested equipment
- You, me, our colleagues
  - We underpin everything about cold chain,
    - how we respond to equipment failure,
    - the time we take to do that routine stuff,
    - making sure we have all the equipment we need and can use it.

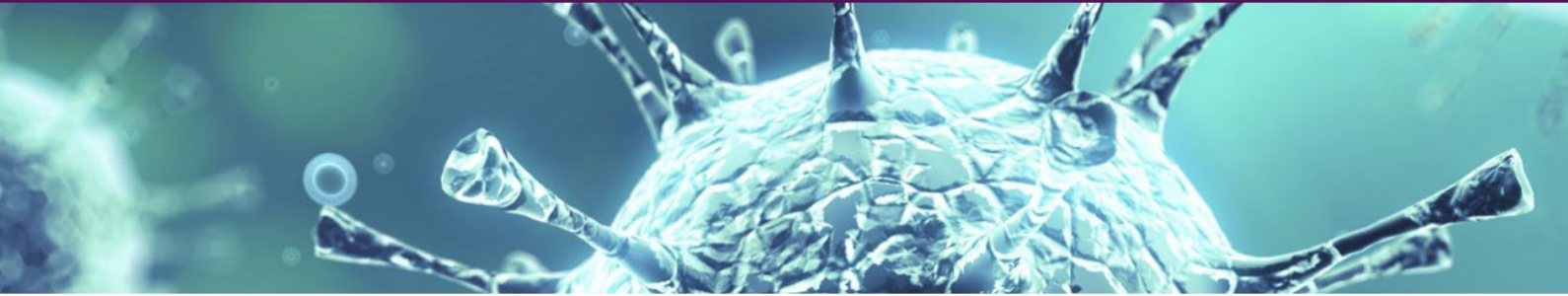


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## Cold Chain

### Vaccine storage and transportation

 Packing Chillbin  
The Immunisation Advisory Centre

# Steps for precooling, packing and monitoring your vaccine cooler.



 **DOMETIC**  
COOLICE 13

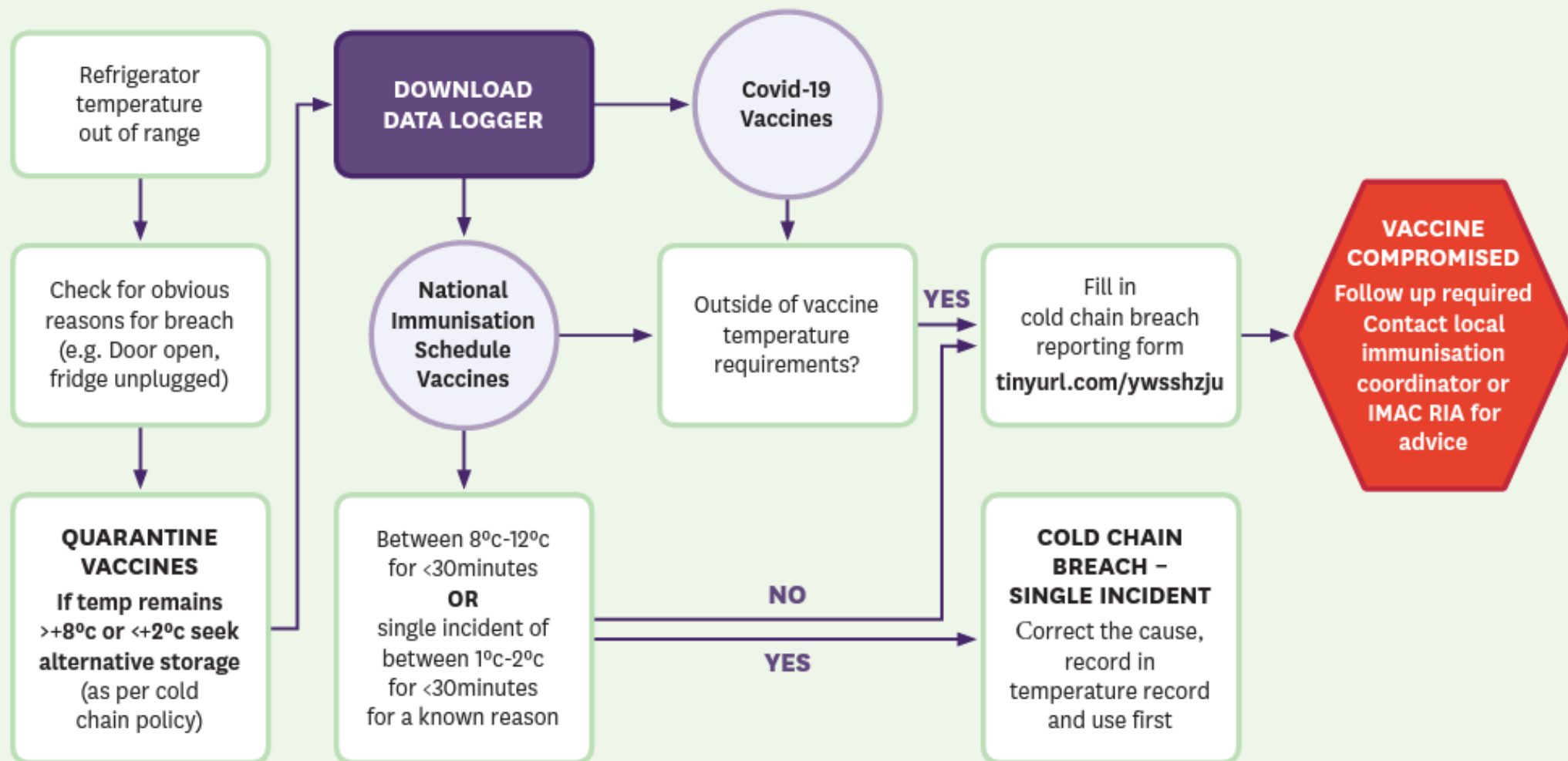
The Immunisation Advisory Centre

 vimeo

## THE COLD CHAIN: AN OVERVIEW

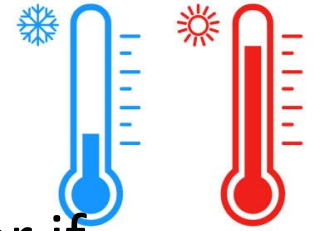
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# Cold Chain Temperature Breach Flow Chart





# Support following cold chain breaches



- Providers always contact your immunisation/cold chain coordinator if,
  - NIS vaccines above 8°C for more than 30 minutes or above 12°C
  - *Comirnaty (Pfizer) more than 30 minutes cumulative storage between +8°C and +30°C. Any cumulative time up to 30 minutes should be taken off of 2 hour dilution time period.*
- Immunisation/cold chain coordinator contact details are in your cold chain policy
- Vaccine must be held in quarantine until clearance is given for them to be used



# Thermostability data

- Immunisation/Cold Chain coordinators will soon have updated thermostability data for all NIS vaccines.
- There are some changes in the process
  - Providers will have to quarantine some vaccines, while additional advice is sort
- For non NIS vaccines – advice is to be sort from HCL (provider and coordinator to discuss who does this).

# Cold Chain Failures – Immunisation/Cold Chain Coordinators

- All cold chain breach events that have the potential to be a cold chain failure must be:
  - Discussed with IMAC RIA
  - Advised to Te Whatu Ora at district level
  - Advised to the National Immunisation Programme Team at Te Whatu Ora  
[NIP.incidentnotification@health.govt.nz](mailto:NIP.incidentnotification@health.govt.nz)
- Vaccines administered following a breach where vaccines have been subject to temperatures outside known thermostability information.
- If you are waiting on additional thermostability advice, ensure that the vaccine company is aware that the vaccines have been administered.



And there are still things I see for the first time after 18 years of looking at and in fridges.

NO AMPUTATED BODY PARTS IN THIS FRIDGE PLEASE.

- Please place amputated part on damp gauze in a sealed specimen bag that is patient labelled.
- That bag is then placed inside another patient labelled specimen bag that has been filled with ice. (paeds freezer has ice)
- The labelled bag should then stay with the patient.

**Rollexx MEDICAL**

**MEDICAL REFRIGERATOR WARNING**

Cold Chain Compliant Storage for Vaccines, Insulin, Laboratory Samples, Pharmaceuticals

**OPEN DOORS / OVERLOADING CAUSES ICE**

- ✓ Record max/min air temperature daily using the following steps:
  - Press **↑** to display STATISTICS
  - Press **↔** to display Tavg (average temp) since last reset
  - Press **▼** to display Tmax (maximum temp) since last reset
  - Press **▼** to display Tmin (minimum temp) since last reset
  - Press **▼** to display data (total samples) since last reset
  - Press **▼** to display reset option
  - Press **↔** to reset the Min/Max temps
  - Press **↑** (3 times) to return to normal operating conditions.
- ✓ **ALARM MANAGEMENT**  
Press the **↔** key to acknowledge the alarm, press the **↔** key again for alarm details, press the **↔** key a 3rd time to clear the alarm.
- ✓ Ensure door is closed properly after use.
- ✗ Never switch off.
- ✗ Avoid opening the door to store insulin or vaccines will not circulate properly
- ✗ Don't use solid containers to store insulin or vaccines will not circulate properly
- ✗ Don't stack stock directly bottom of the fridge because air cannot circulate as efficiently
- ✗ Not for staff food and drinks
- ✗ Using pens or other sharp objects to check monitor settings can cause damage. Please use your fingertips to check settings.
- ✗ **PLEASE DO NOT ATTEMPT TO CHANGE FRIDGE CONTROL SETTINGS UNLESS DIRECTED BY ROLLEX.**

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**FOR SERVICE** Email: [service@rollexmedical.co.nz](mailto:service@rollexmedical.co.nz)  
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**DO NOT LEAVE**  
Fridge Items in the

