

How to pack a Domestic Vaccine Fridge

Strive for 5°C

Vaccines must be stored and transported at all times within recommended temp range 2°C - 8°C

If vaccines are exposed to temperature ranges outside the 2°C - 8°C range:

- keep the vaccines refrigerated
- do not use the vaccines
- call your local Public Health Unit for advice (see numbers below).

Store vaccines in original packaging in labelled enclosed plastic containers.

Important Points

Purpose Built Vaccine Fridges recommended



Do not store food or drinks in allocated Vaccine Fridge.



Log fridge temperatures:

- Twice daily - Record minimum / maximum fridge temperatures at start and end of day. Record on temperature log chart.
- Reset the thermometer after checking temperature.
- If closed over weekend, first thing Monday and at the end of the day.

Thermometers must be accurate; change batteries and calibrate yearly or as specified by the manufacturer.



Do not turn off the power or disconnect the Vaccine Fridge.

Do not open Vaccine Fridge unless necessary

Do not allow ice to build up in freezer

Freezer blocks / ice packs / gel packs

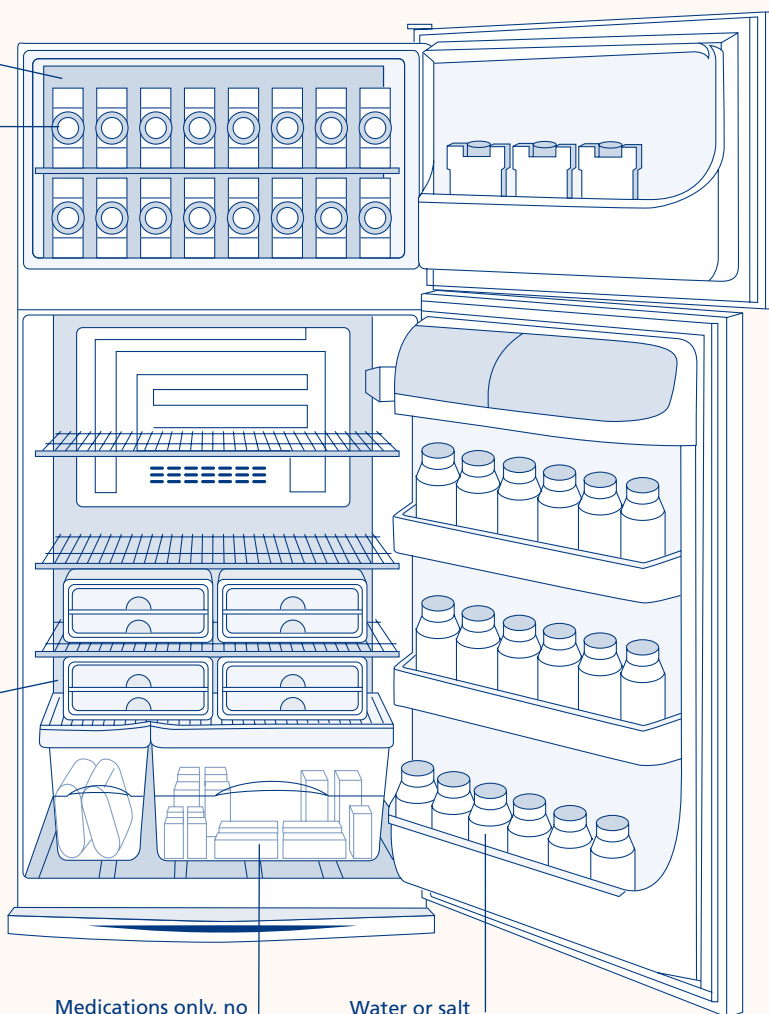
Place thermometer probe:

- inside vaccine packaging once vial used
- inside and near back of enclosed plastic container

Know your fridge.

Identify cold spots by placing thermometer in the front and back of each shelf, and near the cooling plate / cold air outlet (this area often coolest), for at least 24 hours and map temperatures.

Allow room for cold air to circulate (4cm each side and from back)



Medications only, no vaccines or diluents

Water or salt water bottles

NSW Public Health Units

Greater Southern

Queanbeyan Office 02 6124 9942
Albury Office 02 6021 4799

Greater Western

Bathurst Office 02 6339 5601
Dubbo Office 02 6841 5569
Broken Hill Office 08 8080 1499

Hunter New England

Newcastle Office 02 4924 6477
Tamworth Office 02 6767 8630

North Coast

Port Macquarie Office 02 6588 2750
Lismore Office 02 6620 7500

Northern Sydney & Central Coast

Hornsby Office 02 9477 9400
Gosford Office 02 4349 4845

South Eastern Sydney & Illawarra

Randwick Office 02 9382 8333
Wollongong Office 02 4221 6700

Sydney South West

Liverpool Office 02 9828 5944
Camperdown Office 02 9515 9420

Sydney West

Parramatta Office 02 9840 3603
Penrith Office 02 4734 2022

Freeze Tolerant

Place freeze tolerant vaccines on shelves identified as being coldest.

- MMR

Freeze Sensitive

Place freeze sensitive vaccines on shelves identified as having more stable temperatures (no cold spots).

- HiB
- Influenza
- IPV
- Pneumococcal
- Hepatitis
- Varicella (some)

Alliance of NSW Divisions

A vital link for general practice

GPO Box 5433 Sydney NSW 2001 Australia
Phone 02 9239 2900 Fax 02 9239 2999
info@answd.com.au www.answd.com.au

Managing the cold chain



Delivery of vaccines

- On receipt of vaccines check transport monitors in vaccine storage container and ensure it is not damaged.
- Ensure freezer blocks/gel packs in consignment are still partly frozen on arrival.
- Ensure quantities of the vaccines delivered are correct and have not expired.
- Transfer vaccines to the fridge immediately.
- If freezer blocks are completely thawed, do not use vaccines. Refrigerate vaccines immediately and phone your local public health unit for advice.

Transporting vaccines

Vaccines need to be packed in an insulated vaccine esky with freezer blocks/gel packs.

Power failure

Do not open Vaccine Fridge door, and monitor temperature regularly.

Domestic refrigerator

Less than 4 hours – the vaccines should be left in the vaccine fridge and door kept closed at all times.

Longer than 4 hours (or if the fridge temperature exceeds 8°C) - vaccines need to be packed in an insulated vaccine esky with freezer blocks.

Purpose built vaccine refrigerator

These fridges may not hold temperature for very long. Contact your fridge manufacturer to determine protocols for power failure.

Defrosting

Transfer the vaccines into another working fridge or pack in an insulated vaccine esky (see diagram). Monitor temperature of back up fridge or vaccine esky to ensure vaccines are stored between 2°C - 8°C.

How to pack a vaccine esky

Do not store vaccines in esky for more than 8 hours.

Before using ice or gel packs they must be 'conditioned'. Leave packs out at room temperature to allow the core temp to rise to 0°C. Incorrect

conditioning may cause vaccines to freeze easily because incorrectly or unconditioned packs are too cold for safe vaccine storage.

- Chill inside of the esky prior to use by placing ice packs/gel packs inside for a few hours.
- Place polystyrene chips, shredded paper or other suitable insulating material at bottom to eliminate hot and cold spots. Packaging such as polystyrene chips is preferable to bubble wrap, which stops air circulating near the vaccines. However, if using bubble wrap do not wrap vaccines tightly.
- Pack freeze sensitive vaccines in the centre and freeze tolerant vaccines closest to ice packs/gel packs if available.
- Place a min/max thermometer and freeze indicator (or a dual time-temperature indicator if either is used in your state or territory) in the centre of the vaccine stock.
- Surround vaccines with packing material which allows cold air to circulate.
- Place conditioned ice packs/gel packs on top, close and seal the lid. If using a larger esky, place conditioned ice packs/gel packs around the sides of the esky as well as on top. You will need to experiment to find the correct combination.
- Ensure vaccine stock is not in direct contact with ice packs/gel packs to minimise risk of freezing.
- Monitor temperature before you leave, when you arrive, prior to administering vaccine and regularly throughout (at least hourly).

