Darling Downs
Health

Vaccine Management

Teresa McGorm
Public Health Nurse
Communicable Diseases/Immunisation
Darling Downs Public Health Unit

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Overview

Why is it all so important?

What is the ‘cold chain’?

How do we do all of this?

Vaccine Management Protocol

Cold Chain Breaches

Storm season preparation

Resources

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Why is it all so important ?

- Vaccines are delicate biological substances that become less effective or destroyed if they are:
  - ❖ Frozen
  - ❖ Become too hot
  - ❖ Exposure to direct sunlight or ultraviolet (UV) light, including fluorescent light.
- The loss of vaccine effectiveness is cumulative
- Potential for:
  - ❖ Increase in vaccine preventable diseases
  - ❖ Re-vaccination
  - ❖ Financial cost

  Need to maintain confidence in our immunisation program

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What is the ‘cold chain’?

The ‘cold chain’ is the system of transporting and storing vaccines within the safe temperature range of + 2° and +8° C

The success of the system involves three key elements: **people, processes** and **equipment.**

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Success in Vaccine Management - dependent on 3 key factors:

- **People**

  All people handing vaccines need to receive relevant education, Trained designated person responsible for vaccine management + a ‘back –up’ person

- **Processes**

  Current Vaccine Management Protocol

  Alert processes for after hours

  Timely reporting ‘cold chain breaches’

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- **Equipment**
  - Purpose built vaccine refrigerator/s (number dependent on need) & accompanying monitoring equipment
  - Regular twice daily monitoring reflective of manufacturer's recommendations for that particular refrigerator/s
  - Datalogger
  - Coolers, ice bricks, packing material, min/max thermometer,

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How do we do all of this & who is responsible?

- Education in vaccine management
- Vaccine Management Protocol (VMP)
- Purpose built vaccine refrigerator to store vaccines appropriately
- Twice daily monitoring, recommended specific to the type of purpose built vaccine refrigerator
- Processes for managing cold chain breaches
- Coolers for storage of vaccines in the event of a power outage

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Vaccine Management Protocol

- Protocol specific to VSP and covers:
  - Staff responsibilities
  - Type of vaccine refrigerator/s
  - Monitoring equipment (thermometer/datalogger/ min/max temperature chart)
  - Processes for ordering & receiving vaccines
  - Packing vaccine refrigerator
  - Processes in the event of a power failure both in and out of business hours
  - Packing portable cooler
  - Equipment maintenance
  - Annual audit, review of processes & VMP update
  - Staff education

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Vaccine Management Protocols reviewed:

- every 2 years &
- when a cold chain breach is followed up

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Cold Chain Breach (CCB)

A cold chain breach occurs when the vaccine storage temperature deviates outside the recommended range of + 2 to + 8 degrees C. This excludes deviations/excursions where the temperature reaches max 12 C for 15 mins or less.

- Isolate vaccines, cancel immunisation appointments
- Report to QHIP via online form
- Prepare a list of QH vaccines exposed to the CCB
- Relevant PHU will contact for follow up

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Storm season preparation

Do you have the following:

- ❑ A current VMP and all staff are aware of the procedures during a power outage?
- ❑ Appropriate size cooler/s to store all vaccines?
- ❑ Sufficient number of frozen ice/gel packs?
- ❑ Sufficient insulating material, bubble wrap to separate vaccines from ice/gel packs?
- ❑ A digital minimum/maximum thermometer for each cooler?

VACCINE SERVICE PROVIDERS

ARE YOU PREPARED FOR STORM SEASON?

- The summer storm season inevitably brings with it the risk of powerfailures.
- Now is the time to check that everything is in place and your staff can keep yourvaccines safe during a blackout or temperature fluctuations.

Do you have the following:

- ▫ An up to date vaccine management protocol and all staff are aware of the procedure during a power failure?
- ▫ Appropriate size esky (or eskies) to store all vaccines?
- ▫ Sufficient number of frozen ice / gel packs?
- ▫ Suitable insulating material, i.e. bubble wrap to separate vaccines from the ice packs.
- ▫ A digital minimum / maximum thermometer for each esky? (slush test performed and the battery changed in the last 12 months)?
- ▫ Temperature recording book for each esky to record the temperature of the vaccines whilst in the esky?
- ▫ Torch

If the answer is NO to any of these questions please contact Darling Downs Public Health Unit on 07 4699 8240

How to Pack an Esky during a power failure:

1. Cool Esky first with the ice bricks to between + 2°C and + 8°C then remove.
2. Pack the Esky with the vaccines, and then,
3. Place the protective layer of bubble wrap on top of the vaccines.
4. Followed by the sweated ice bricks.
5. Place the probe of the thermometer in one of the boxes in the centre of the esky.
6. Monitor and record temperature of the vaccines 15 minutely for the first 2 hours then hourly.

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Storm Season Preparation

- Temperature recording book for each cooler to record the temperatures of the vaccines whilst in the cooler?
  Torch

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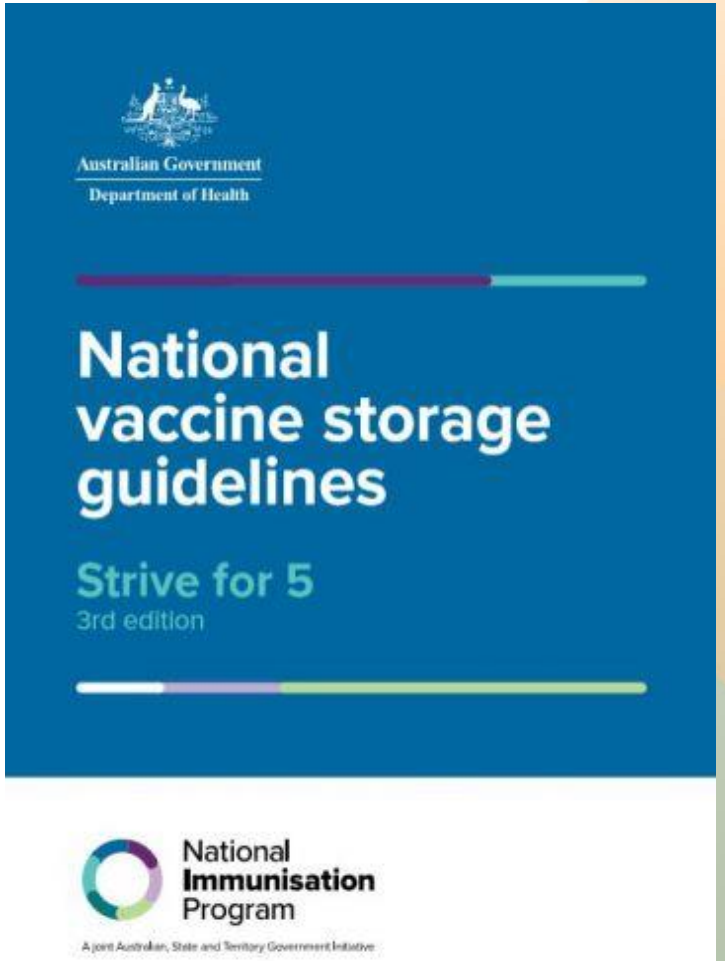

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Questions ?

For further information please contact

Darling Downs Public Health Unit

Phone: 07 46 998240

Remember: we are here to help

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