Cold chain failure 2017: Hawke’s Bay DHB SBIP

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NZ 2017 Immunisation Conference
Why present at national conference?

- Share our story
- Could happen to anyone/anywhere
- Raise awareness for others
- Share the tools and processes we developed
Cold chain management

- Cold chain is the system used to maintain required temperatures for vaccines
- All vaccines must be stored and/or transported with the recommended temperature range of 2°C – 8°C at all times
- Integrity of the cold chain depends on three essential elements that underpin the standards:
  - *The people*
  - *The systems and processes*
  - *The equipment*
Cold chain failure: 9 May 2017

- Phone call from School lead PHN to say data logger had gone down to -1.1°C while completing school based immunisations
- PHN’s had continued to vaccinate during this time
- 26 minutes it remained under 0°C
- 43 minutes it remained under 2°C
- 2 schools and 41 students
- Limited communication occurred between team members
Timeline of events – May 2017

- **9th** Cold chain failure. Local imms coordinator informed
- **10th** Regional advisor IMAC notified
  - IMAC advised HPV vaccine needs to be re-administered
  - IMAC notified MoH
- **11th** GSK advise Boostrix not viable
  - Email to all PHNs
  - Regular meetings commenced
- **12th** Media holding statement written
- **15th** Clinical advice received to revaccinate affected students
- **16th** NMDHB agree to share templates and information
- **17th** Meetings with affected key school staff.
- **17th/18th** Parents contacted
  - GP’s notified of event
- **19th** Emails to parents
- **26th** Action plan sent to MoH
- **29th** Cold chain policy sent to the MoH
### What was in place prior to 9 May

<table>
<thead>
<tr>
<th>People</th>
<th>Processes</th>
<th>Equipment</th>
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<tbody>
<tr>
<td>Data logger training done with all PHNs in 2016</td>
<td>Current local Immunisation guidelines (PHN management of offsite immunisations)</td>
<td>Data loggers are configured to show maximum, minimum, and current temperatures</td>
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<td>Cold chain update at annual PHN vaccinator update</td>
<td>Current cold chain policy and appendices</td>
<td>Data loggers alarm when 2° or below</td>
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<td>Chilly bin log documentation processes were in place</td>
<td>All data loggers are calibrated annually</td>
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<td>All PHNs are authorised non medical vaccinators</td>
<td>Temperature monitoring guides/actions are on the back of all chilly bin logs</td>
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<td>PHN department cold chain accredited Nov 2015 – 2018</td>
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<td>All chilly bin logs are audited on their return to Immunisation/Communicable Disease Resource Nurse</td>
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<td>National standards for vaccine storage and transportation for immunisation providers 2017 circulated to all PHNs by email</td>
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Changes following 9 May

Resources Developed
- Media release – holding statement
- Documentation support from NMDHB
- Phone scripts
- Development of FAQ’s
- Letters to parents
- Letters to GPs
- Re-immunisation plan and documents
- NIR documentation, note written behind to advise compromised vaccine given
- Consent forms verbal and written
- Cold chain policy and appendices updated
- Laminated temp guides and folder
- Cold Chain competency assessment

Actions taken
- Regular communication meetings
- PHNs informed of best cold chain practice by email
- Catch up clinics organised
- Introduction of one to one cold chain assessment for every PHN
- Staff orientation
- Meetings with the affected school principals and key staff
- GPs phoned
Overall learning

- Communication is really important
- Ensure immunisation teams are well staffed and roles are clearly defined prior to immunisation day
- Being transparent and honest with parents demonstrated we had nothing to hide and we were genuinely sorry
- We prepared well prior to interaction with public/schools and parents
- Talking to NMDHB extremely helpful and saved us time and neurons – for that we are extremely thankful
Future recommendations

Local

- Competency assessments 2 yearly
- Staff orientation
- Roster additional staff to SBIP days
- Ensuring someone on the team is allocated the role of cold chain nurse for each clinic

National

- National bank of information and forms from prior cold chain failures
- Timely information – timeline
- Clear communication pathways – IMAC/MoH/DHB
- Clear guidance on responsibilities and who do we go to for support
- National cold chain failure flowchart
Questions?