IMMUNISATION CHALLENGES IN FIJI AND THE PACIFIC

10th New Zealand Immunization Conference
Litiana Volavola, National EPI Programme Officer, Fiji
Fiji: facts and figures

Total population: 905,776
- Total live births: 19,350
- Total surviving infants: 19,180
- Total no. children < 5 years: 84,103
- Total population < 15 years: 253,651

Health system
- % of Govt expenditure on Health: 4.8% (2012)
- Total Health facilities: 220
- Hospitals (Private): 3, Specialised: 2
- Divisions: 4
- S/Divisions (Districts): 19

Health
- Total fertility: 90.6/1000 (CBA pop.)
- Infant mortality: 13.9% / 1000 live births
- Under 5 Mortality: 17.9% / 1000 live births

Vaccination
- Fully Immunised children: 84% (Routine Coverage)
- Official estimate: 95% (EPI Coverage Survey 2013)
Fiji Islands

A/Birth cohort: 20,000

MR1 95% at 1 Year

DTP 3 93% at 14 Weeks

18,000 (MR2 +Td : Y1 & Y6)
8,000 : Y8 (HPV)
Resource mobilisation dedicated into immunising children and Pregnant mothers
Reaching our areas and Target populations:

Provision of outreach mobile clinics in hard-to-reach areas integration of Nutrition services, Dental, Safe Motherhood & other Child Health Program (IMCI).
Challenges for Pacific Immunization Programmes

• Developmental, demographical and geographical realities, especially logistical challenges for in-country immunization supply chains
• Inadequate human resources
• Monopolistic market of service providers (i.e. only one airline company with limited cargo capacity)
• Challenges in financial flows, especially in provincial and healthcare center levels
• Insufficient and unreliable data (i.e. making harder to estimate wastages)
• Weak cold chain systems with old technologies (i.e. gas powered refrigerators versus solar technology)
• Inadequate capacity on effective vaccine management
Why is “VACCINE SECURITY” important?

Vaccine Security is about “children” and contributes to...

- Increased coverage
- Ensures safety
- Increases immunity
- Reduces chances of disease outbreak
- Reduces child morbidity and mortality
UNICEF VACCINE INDEPENDENCE INITIATIVE (VII)

• Developmental, demographical and geographical realities create very particular dynamics and challenges for vaccine procurement operations in the Pacific Island Countries (PICs).

• VII has been serving the PICs since 1995.

• Currently 13 PICs, namely Cook Islands, Fiji, Kiribati, RMI, FSM, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu are utilizing VII procurement and financing mechanisms. Moreover, New Caledonia has started to benefit from UNICEF Procurement Services for some vaccines starting from 2016.
Immunization Supply Chain in the Pacific

1. Data Analysis
2. Annual Forecasting
3. Forecast Consolidation
4. Order Placement
5. Supplier
6. Shipment to Nadi
7. Regional Cold Room

for every child

Monitoring & Reporting
Immunisation
Health Centre
District/Regional Cold Chain Storage
Shipment to countries
<table>
<thead>
<tr>
<th>Countries</th>
<th>Forecasted birth cohort</th>
<th>MCV 1 Coverage</th>
<th># of Vaccinated Children</th>
<th>Pol 3 Coverage</th>
<th># of Vaccinated Children</th>
<th>HepB Birth Dose Coverage</th>
<th># of Vaccinated Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>356</td>
<td>98%</td>
<td>349</td>
<td>99%</td>
<td>352</td>
<td>99%</td>
<td>352</td>
</tr>
<tr>
<td>Fiji</td>
<td>20,900</td>
<td>94%</td>
<td>19,646</td>
<td>99%</td>
<td>20,691</td>
<td>90%</td>
<td>18,810</td>
</tr>
<tr>
<td>FSM</td>
<td>2,700</td>
<td>91%</td>
<td>2,457</td>
<td>81%</td>
<td>2,187</td>
<td>69%</td>
<td>1,863</td>
</tr>
<tr>
<td>Kiribati</td>
<td>3,179</td>
<td>91%</td>
<td>2,893</td>
<td>79%</td>
<td>2,511</td>
<td>66%</td>
<td>2,098</td>
</tr>
<tr>
<td>Nauru</td>
<td>368</td>
<td>98%</td>
<td>361</td>
<td>95%</td>
<td>350</td>
<td>99%</td>
<td>364</td>
</tr>
<tr>
<td>Niue</td>
<td>30</td>
<td>99%</td>
<td>30</td>
<td>99%</td>
<td>30</td>
<td>99%</td>
<td>30</td>
</tr>
<tr>
<td>Palau</td>
<td>241</td>
<td>83%</td>
<td>200</td>
<td>95%</td>
<td>229</td>
<td>99%</td>
<td>239</td>
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<tr>
<td>RMI</td>
<td>1,640</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Samoa</td>
<td>5,804</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>17,490</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>2,900</td>
<td>67%</td>
<td>1,943</td>
<td>84%</td>
<td>2,436</td>
<td>89%</td>
<td>2,581</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>300</td>
<td>96%</td>
<td>288</td>
<td>90%</td>
<td>270</td>
<td>97%</td>
<td>291</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>8,111</td>
<td>53%</td>
<td>4,299</td>
<td>65%</td>
<td>5,272</td>
<td>80%</td>
<td>6,489</td>
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<tr>
<td>Total:</td>
<td>64,019</td>
<td><strong>86%</strong></td>
<td><strong>55,308</strong></td>
<td><strong>90%</strong></td>
<td><strong>57,313</strong></td>
<td><strong>78%</strong></td>
<td><strong>49,966</strong></td>
</tr>
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</table>
Why Cold Chain?

• “Cold chain”: Most of the vaccines have to be transported and stored under strict temperature control between 2°C and 8°C degrees.

• Handling and utilization of vaccines requires certain knowledge and skills which we name as “effective vaccine management”.

• While vaccine coverage indicators tell us the percentage of children reached out, strong cold chain systems are required to ensure the effectiveness of the vaccines. Without proper cold chain and effective vaccine management systems, vaccines might lose the potency (effectiveness) and children could be injected but they would not be immunized.
New vaccine introduction plan and impact on capacity

Introduction Plan: Pneumococcal and Rotavirus and HPV vaccines in 2012

Capacity increase

Storage level: 3.6 x

Service Delivery

Shaping Fiji’s Health

MINISTRY OF HEALTH & MEDICAL SERVICES

~4.6 x
TC Winston: came in timely
Support Approach to Fiji after TC Winston

- Appropriate Technology Assessment
- Capacity Building at National Levels
- Analysis of Current Situation and Capacity
- Disaster Resilient Design and Installation

Decision-Making
Expanding to New Vaccines
Disease Burden
Cause of Death in Children Under 5 years in 14 Pacific Island Countries

1661 Pacific children under-five did not survive in 2016
## New Vaccine Introduction Status

<table>
<thead>
<tr>
<th>Countries</th>
<th>PCV</th>
<th>RV</th>
<th>HPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>Red</td>
<td>Red</td>
<td>Green</td>
</tr>
<tr>
<td>Fiji</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Kiribati</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
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<tr>
<td>RMI</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>FSM</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Nauru</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Niue</td>
<td>Green</td>
<td>Piloting 2016 - 17</td>
<td>Red</td>
</tr>
<tr>
<td>Palau</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Samoa</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>Green</td>
<td>Gavi - 2018</td>
<td>Gavi - 2018</td>
</tr>
<tr>
<td>Tonga</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>Red</td>
<td>Red</td>
<td>Pilot Plan - 2017</td>
</tr>
</tbody>
</table>

Legend:
- **Not Introduced**
- **Tangible Plan**
- **Introduced**
A **call** on national governments, global partners and donors –

**Transformative investments** in the next 5 years for routine immunization

Source: GRISP
GRISP Key Principle

Strengthening immunization systems and improving coverage

- Many activities to strengthen routine immunization systems may not result in short term or rapid improvement in immunization coverage.

- Equally, many activities specifically designed to rapidly increase routine immunization coverage may not result in the long term strengthening and sustainability of the program.

Credit: Adapted from Rudi Eggers, WHO
Despite the challenges:

We have managed to overcome by:

- Introducing 3 new vaccines
- Conduct continuous HCW Trainings
- Revised the EPI and Cold Chain Policy (2017-2020)
- Revised Schedules
- Strengthen our Communication strategies
- Install new SDD fridges
- Improve PHIS/CMRIS
- Revise the Child Health Record Card
- Timely payment to VII (UNICEF) & GSK
Acknowledgements:

- GOD
- IMAC
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- UNICEF
- GSK(NZ)

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