



Use of IIS for Program Interventions – Chuuk, Federated States of Micronesia

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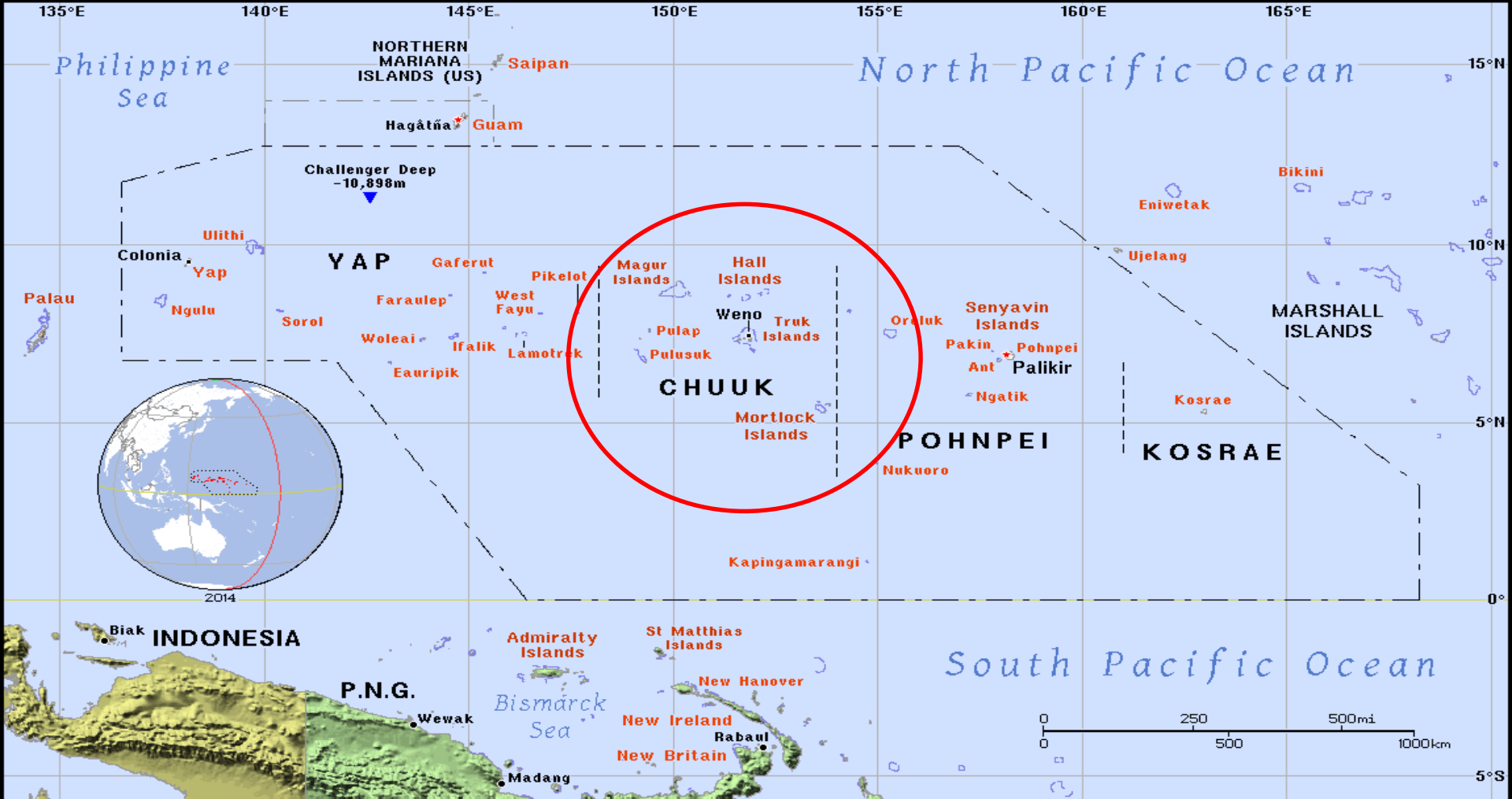
Amy Solsman, MPH

American Immunization Registry Association National
Meeting

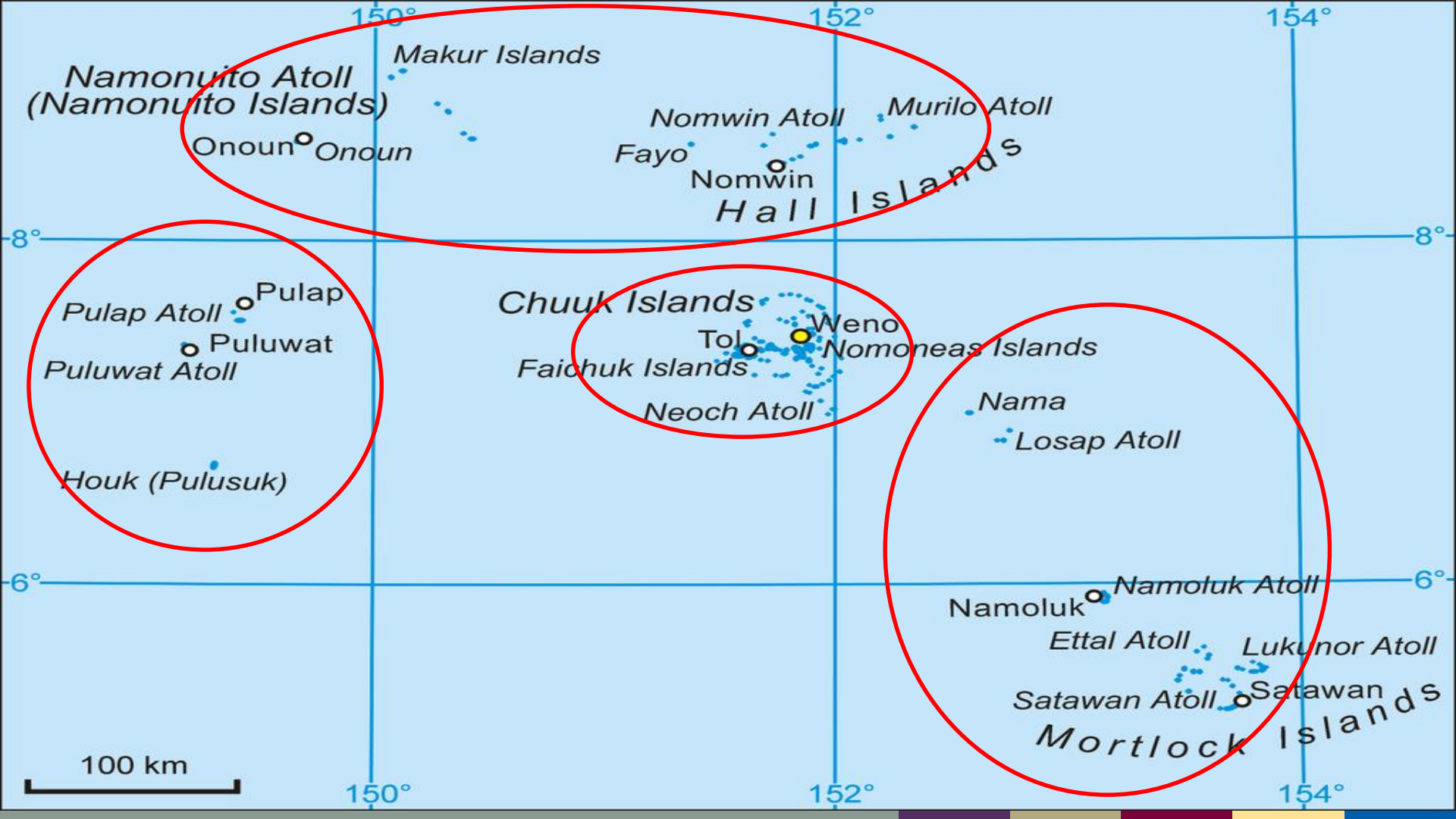
August 15, 2018

Presentation Outline

- Background
- Campaign Activities
- Campaign Evaluation
- Results
 - Vaccination outcomes
 - IIS data quality
- Lessons learned
- Summary



FEDERATED STATES OF MICRONESIA



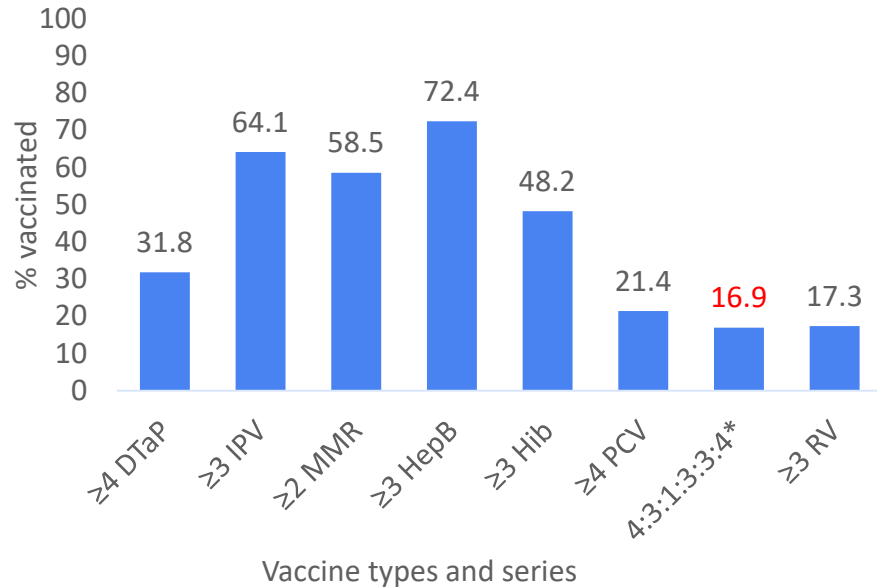






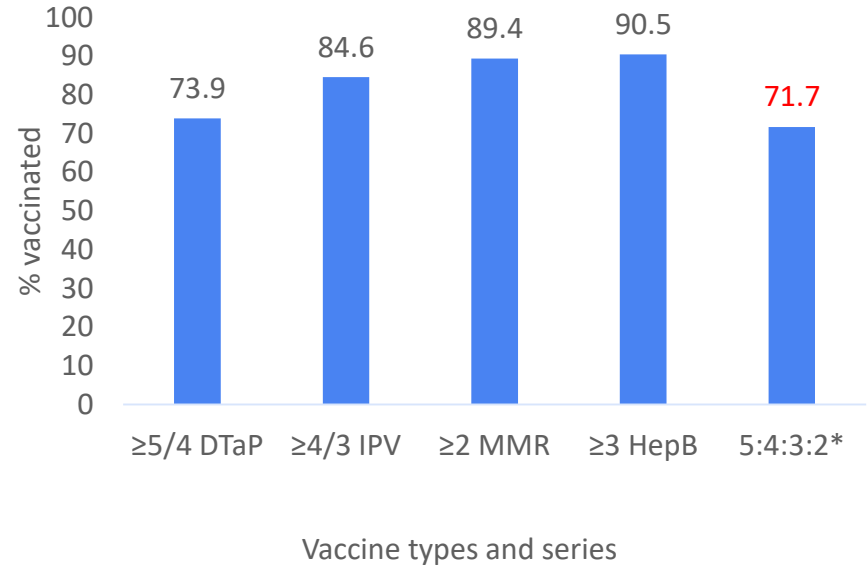
Vaccination Coverage Assessment, 2016

Children 2 years



*≥4DTaP, ≥3 IPV, ≥1MMR, ≥3Hib, ≥3HepB, ≥4PCV

Children 6 years



*≥5/4DTaP, ≥4/3 IPV, ≥3HepB, ≥2MMR

Vaccination Catch-up Campaign, 2017

■ Background of campaign

- FSM staff designed and conducted a state-wide catch-up vaccination campaign targeting children 2 months-6 years in August 2017
- CDC collaborated with FSM National Immunization Program and Chuuk State Immunization Program to develop monitoring and evaluation tools
- After campaign, CDC assessment team performed evaluation of campaign activities

■ Campaign objectives

- Increase vaccination coverage
- Improve quality of the IIS

Campaign Activities

Campaign Activities

- Develop implementation plan
- Create Incident Command System (ICS)
- Train staff
- Conduct social mobilization activities
- Generate reminder/recall report from IIS
- Mobilize vaccination teams to each region of Chuuk State

CHUUK STATE CATCH-UP VACCINATION RESPONSE

Incident Command System

SOCIAL & COMMUNITY MOBILIZATION

Chuuk Public Health -

- Multimedia - Island Advertisement
- NCD community workers
- TB DOT (direct observation treatment) workers
- Health Assistants

Chuuk CHC-Community health workers

Chuuk Women's Council

Chuuk Mayors

Churches

ADMINISTRATION

- Finance -
- Staffing -
- Procurement -

INCIDENT COMMANDER
Immunization Program
Manager

SECURITY
CHUUK
PUBLIC
SAFETY

LIAISON
(PHEP)

OPERATIONAL PERIOD: TUESDAY, AUG 01, 2017

MUNICIPALITY/TOWN: WENO

CURRENT WEATHER FORECAST:

OTHER CONDITIONS: **ENTER OTHER CONDITIONS IF
NECESSARY**

PLANNING SECTION

Technical Assistance - FSM Nat'l, WHO, CDC

- Data Entry – Immunization Program staff

OPERATIONS SECTION

*Reference Schedule for Team

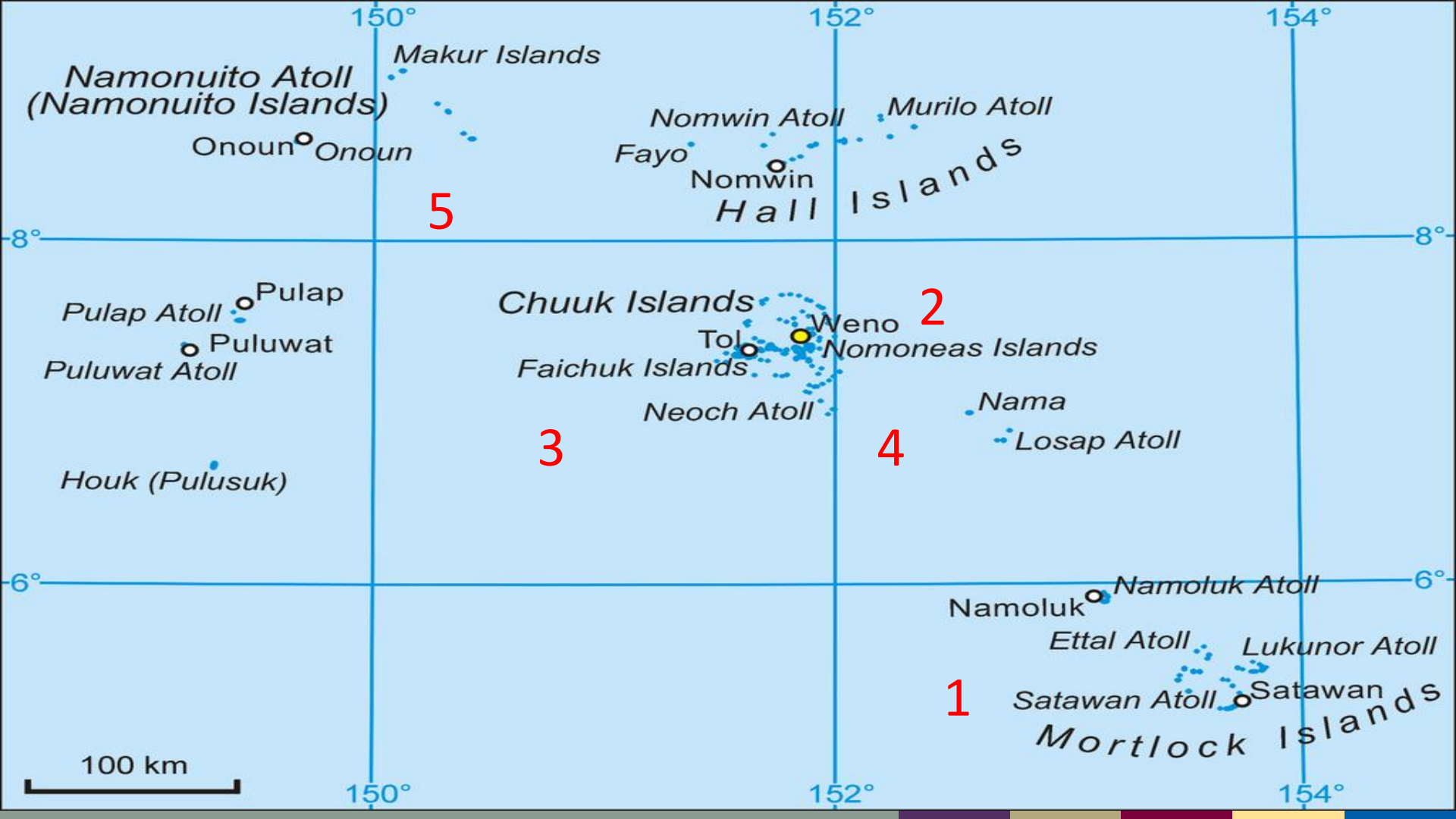
Locations

8 Operations Teams Total

LOGISTICS SECTION

- Supplies/Staging – Program Staff
- Vaccine Inventory – Inventory Manager
- Resupply/Delivery – Inventory Manager

Team numbers/Challenges	Number of eligible children:	HepB.	Pediarix	Hib	PCV	Rota	MMR	DTaP	IPV
T1 – Track 9 out 13,	13	0	2	2	3	1	4	10	7
T2- community not aware, track all 12 kids., no one showed up at fixed site, few children came to site but all were complete.	12	0	3	6	6	2	8	6	5
T3- Bring kids to site 8, webiz not matching maintenance, need cell refill will check with Kazari, 4 kids MOGE, unexpected funeral, 10 kids complete but showed up, not on the list.	12	0	0	4	7	0	7	11	5
T4- track 7, 13 kids MOGE (10 moved to US, 2 moved to Guam, 1 moved to Fefan, 1 moved to sapuk, 1 moved to Nepukos), social mobilization still a concern, need public Hlt IZ contacts for teams to call in, 1 new encounter,	18	1	2	5	5	0	4	10	11
T5- 3 new encounters will catch them on 8/5 Saturday in Iras PCI, no tracking,	23	0	1	3	5	0	6	12	12
T6- not enough drinking water, poor communication to chief, 7 kids MOGE to USA, children on webiz list community are not aware of these kids, not enough calling card? Remove 2 gel ice from cold box due to low temp., no tracking	19	1	3	5	7	0	9	5	8
T7-Frequent calling to PH for verification of children, no tracking	10	0	1	2	5	0	3	6	4
T8-?	18	1	3	9	14	0	7	6	3
T9-Assisted well, no challenges, help by 2 nurses,	11	0	5	4	7	5	3	5	5



Social Mobilization Activities





Vaccination Activities

- Parents bring their children to the mobile sites that were announced via radio and church announcements
- IIS generated reminder/recall lists helped identify children due for vaccination at these sites
- New encounters were tracked and administered doses



Vaccination Activities

- Teams conducted mop-up/tracking activities for children who were not able to come to the mobile clinic site
- Tracking activities also included identifying children who had moved off-island or were deceased



Campaign Evaluation

IIS Driven Campaign Evaluation

- IIS generated reports used to:
 - Assess implementation of campaign activities
 - Assess data cleaning in IIS
- Types of reports generated:
 - Patient detail with services
 - Patient roster
 - Dosage report

Home

Patients

Immunizations

Education

Inventory

Reports

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Patient Detail with Services

Enter the selection criteria and click the 'Run Report' button.



Report Selection Criteria

Provider/Clinic : CHUUK STATE, WENO

SELECT A CLINIC BY TYPING PROVIDER, CLINIC, VFC PIN, OR CLINIC CODE



Vaccination Date Range

From: Through:

Date of Birth Date Range

From: Through:

Vaccination Created Date Range

From: Through:

Funding Source

Note: hold the Ctrl key to select multiple items.

Output Type ☒ PDF ☐ EXCEL ☐ EXTRACT - Delimiter:

Run Report

Cancel

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Patient Roster

Enter the selection criteria and click "Run Report" or click "Cancel" to return to the previous page.



Report Selection Criteria

Provider/Clinic : CHUUK STATE, WENO

SELECT A CLINIC BY TYPING PROVIDER, CLINIC, VFC PIN, OR CLINIC CODE



Municipality of Residence *

(ALL)



Group Report Totals by

☒ Provider/Clinic

☐ County

Vaccination Date Range

From: MM/DD/YYYY



Through: MM/DD/YYYY



Age Range

From: Through: UOM:



☐ Exclude Patients with Less than 2 non- Influenza/H1N1-09 Vaccinations?

Output Type ☒ PDF ☐ EXTRACT - Delimiter: |

Run Report

Cancel

Evaluation Measures

- Campaign implementation
 - Number of children vaccinated, by age
 - Number of vaccine doses administered, by vaccine type
 - Vaccination coverage before and after the campaign
 - Up-to-date for all recommended vaccinations by age
- Data cleaning in IIS
 - Number of children made inactive in IIS
 - Timeliness of data entry in IIS

Number of Children Vaccinated, August 2017 (N=3,166)

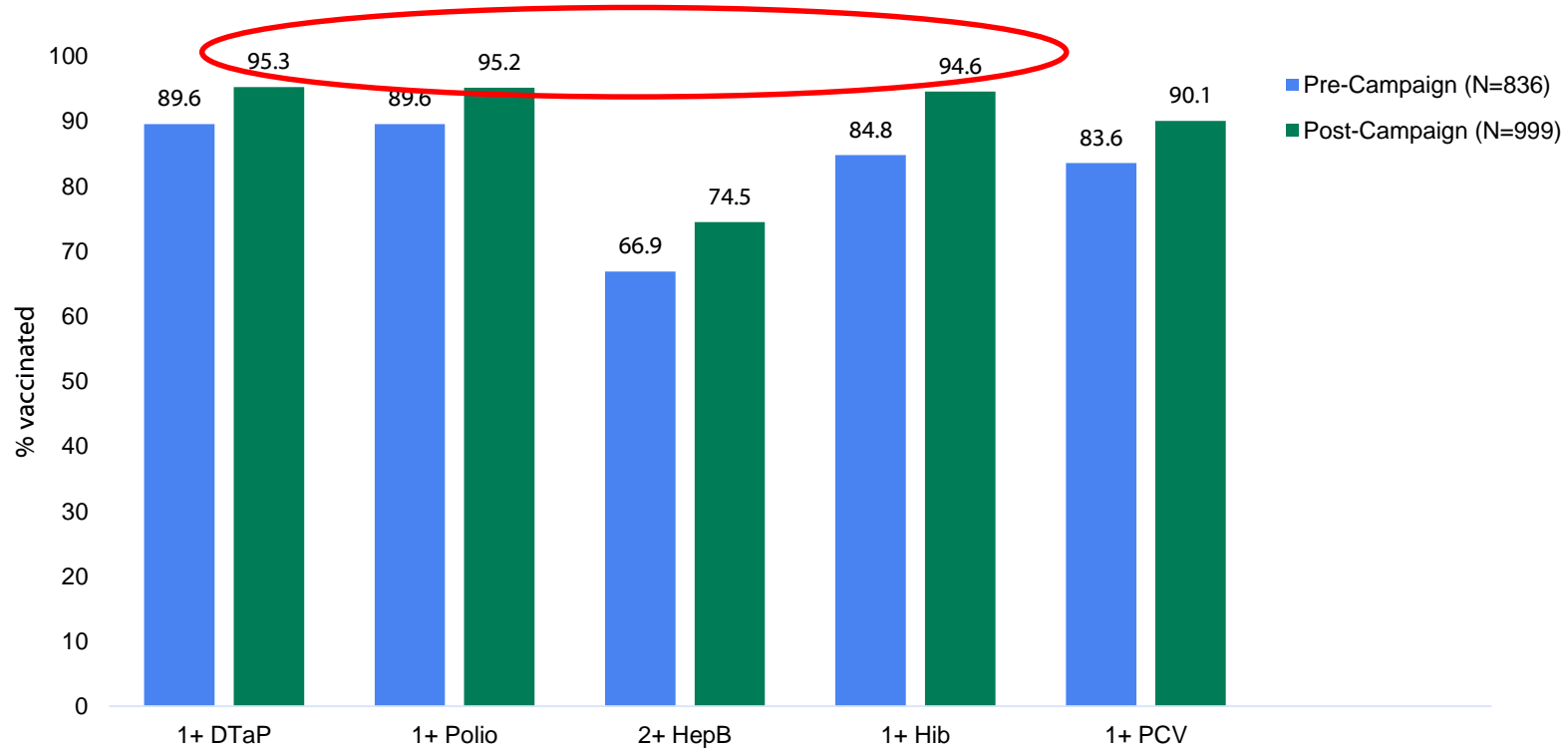
Age	n	% of total
<1 year	527	16.6
1 year	643	20.3
2 years	526	16.6
3 years	378	11.9
4 years	582	18.4
5 years	324	10.2
6 years	186	5.9
Total	3,166	100

Vaccine Doses Administered During Campaign

Vaccine Type	# Vaccine Doses
DTaP	2,550
Polio	2,208
MMR	1,237
HepB	1,335
Hib	1,351
PCV	1,387
RV	176

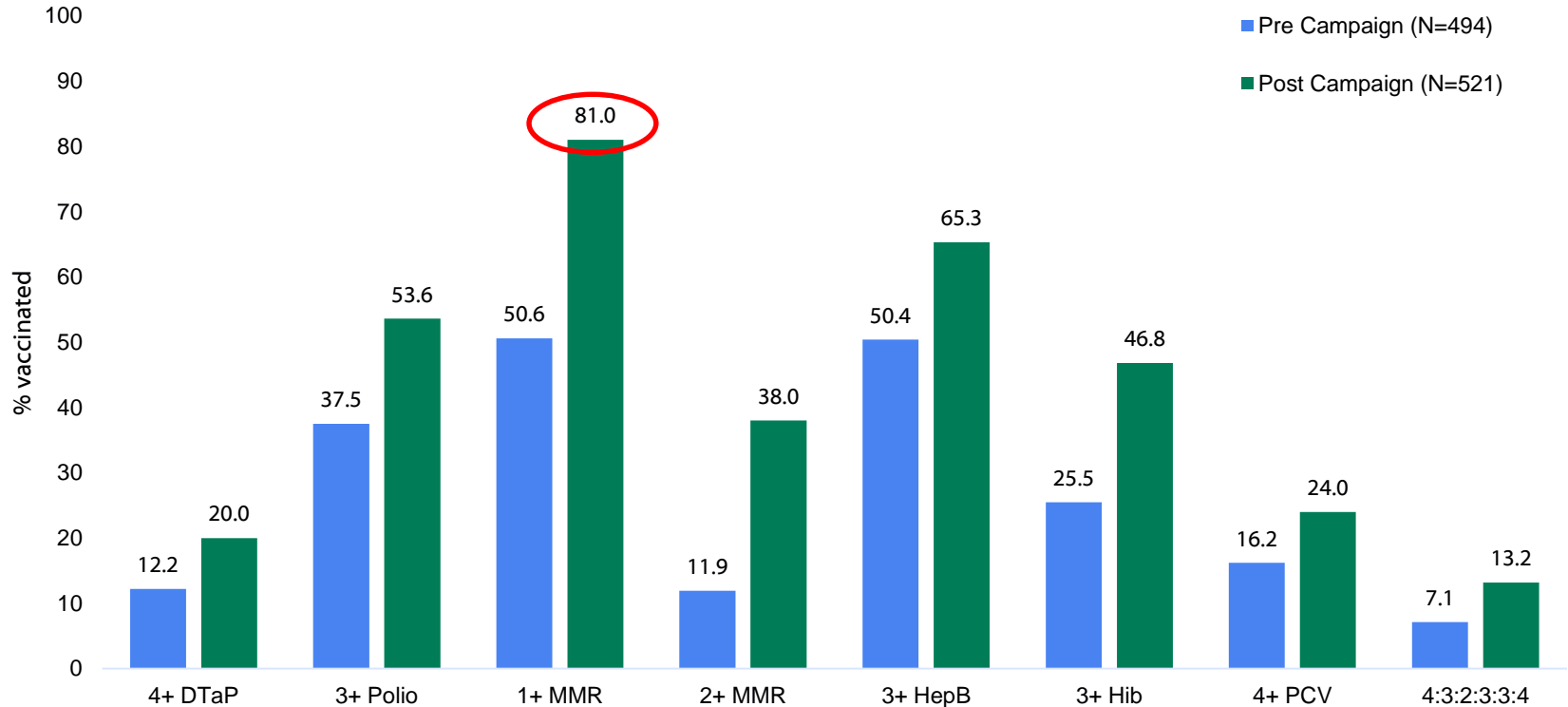
Vaccination Coverage: Before & After Campaign

Children <1 year



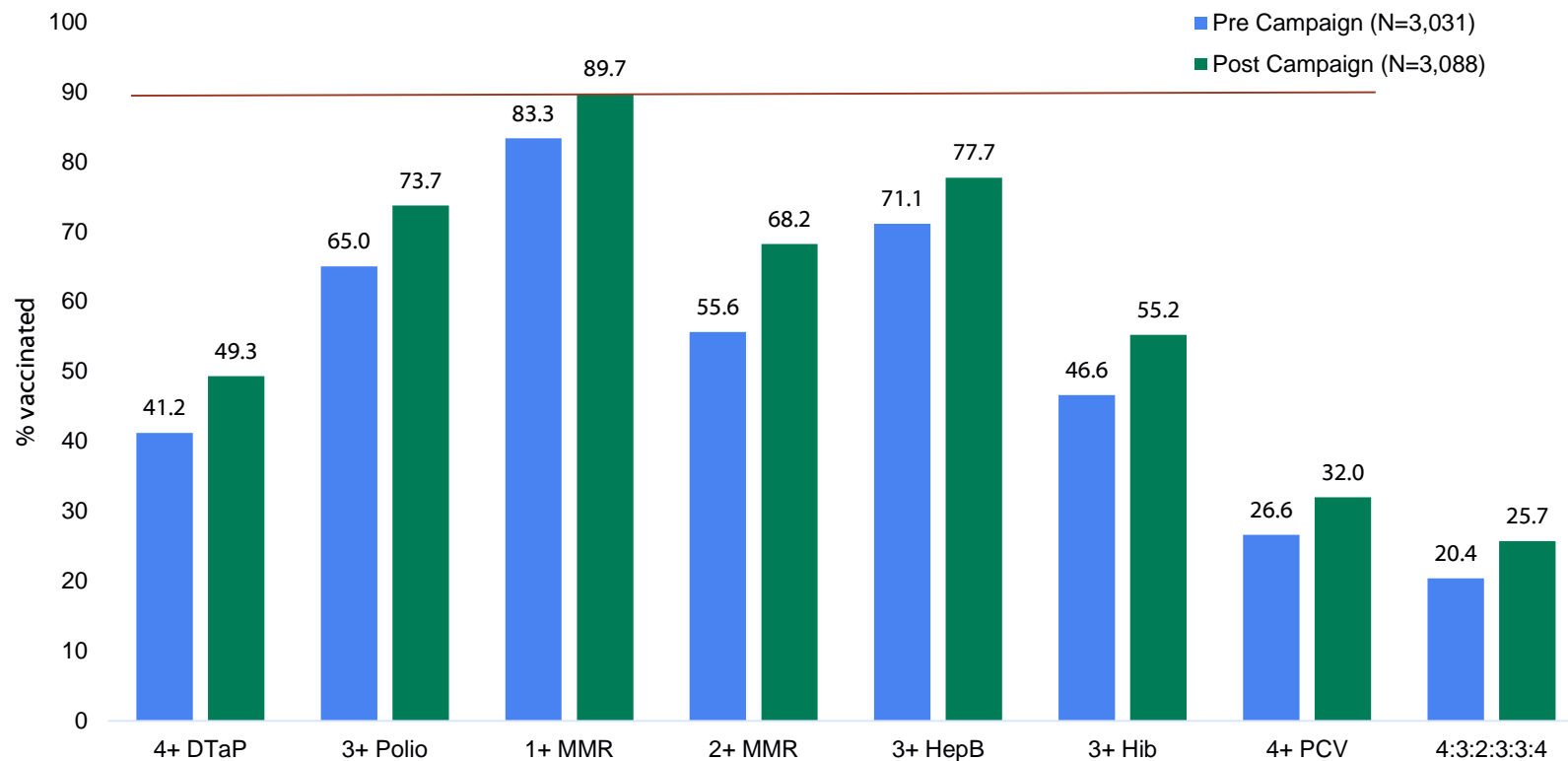
Vaccination Coverage: Before & After Campaign

Children 12-18 months



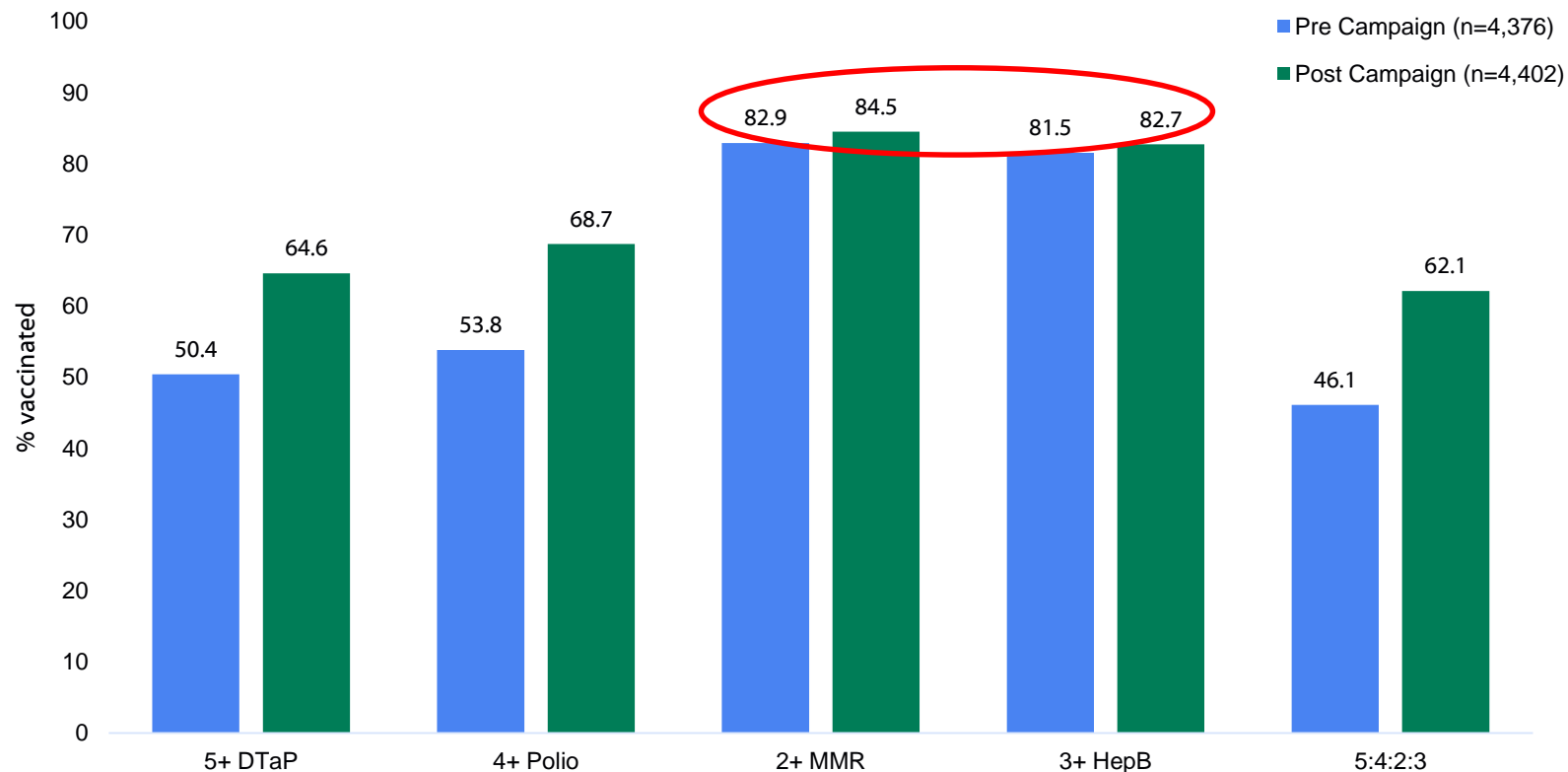
Vaccination Coverage: Before & After Campaign

Children 19 months-3 years

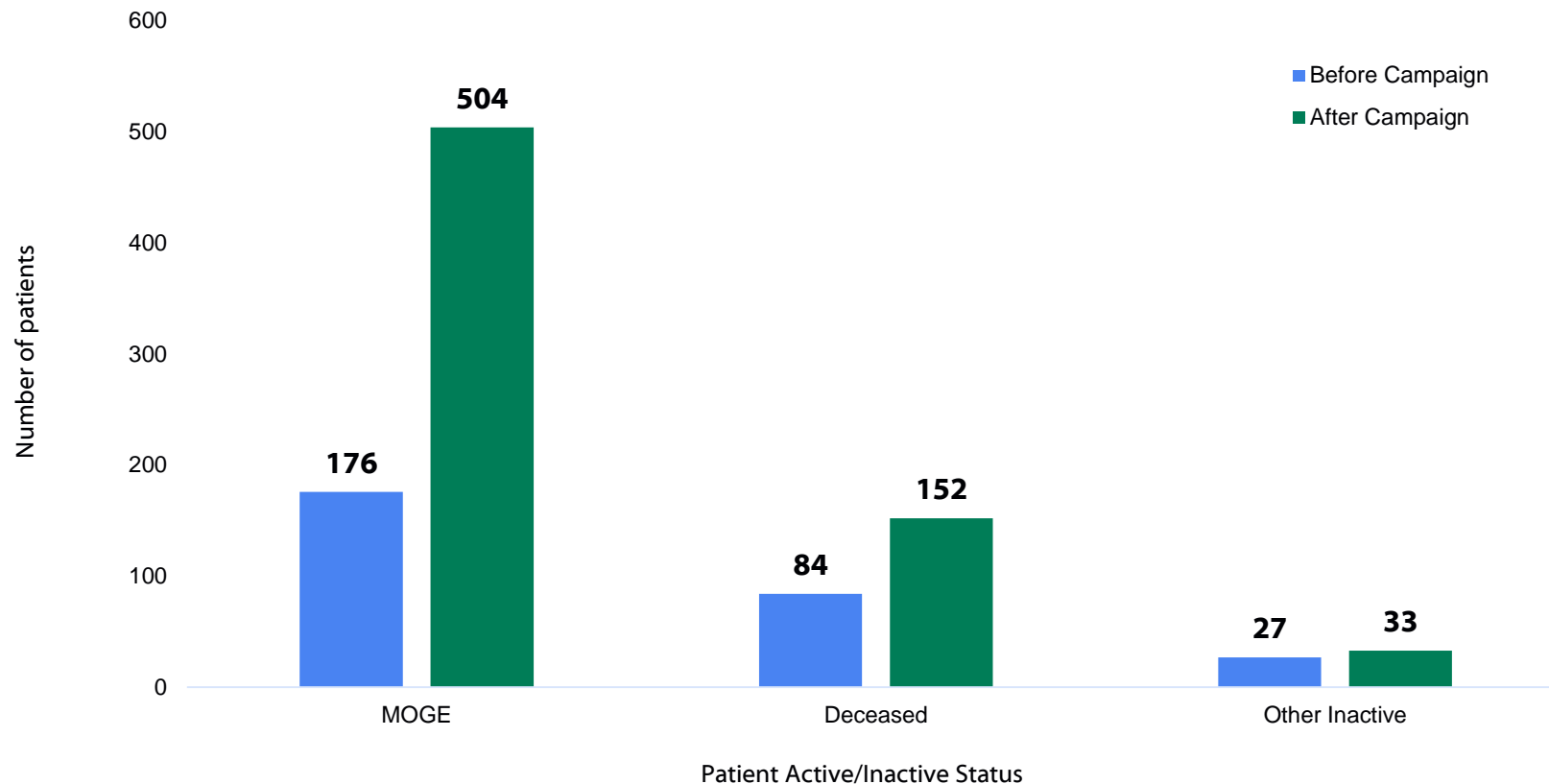


Vaccination Coverage: Before & After Campaign

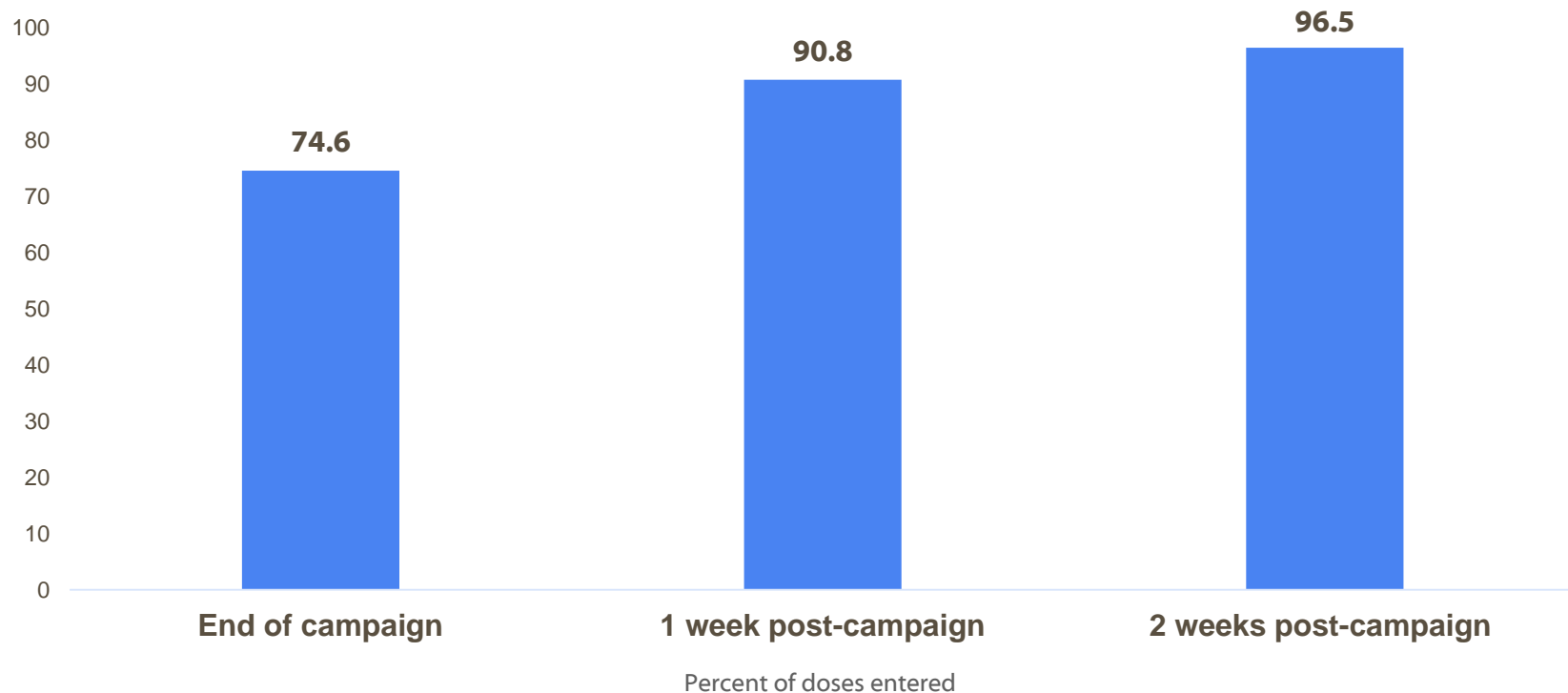
Children 4-6 years



Inactive Patients in the IIS – Before & After



Timeliness of Data Entry into IIS (N=7,779)



Lessons Learned

Lessons Learned

- Use of IIS in low resource and remote regions like Chuuk may improve vaccination coverage
- IIS can be used to implement and assess a vaccination catch-up campaign
- IIS is valuable to different stakeholders in each program
 - FSM: able to conduct catch-up campaign
 - CDC: able to evaluate campaign and monitor coverage
- Using the IIS can help guide and improve other immunization program interventions and outcomes

Lessons Learned

- Conducting and evaluating programmatic interventions using IIS is dependent on quality and completeness of the system
- Accurate and reliable data must be present in IIS
- Ways to increase completeness and reliability of IIS
 - Timely data entry
 - Complete and accurate demographic information
 - Regular identification of duplicate records
 - Monitoring patient active/inactive status

Summary

Summary

- Overall, campaign activities, such as staff training, community engagement, and mobilizing vaccination teams, were successfully executed
 - 3,166 children 2 months-6 years were vaccinated during the campaign
- Vaccination coverage increased due to campaign activities and data cleaning in the IIS

Summary

- Campaign allowed staff to identify children who were off-island or deceased, and new children on-island
 - Increase in data quality improves IIS reliability
 - More complete IIS can be used for other programmatic evaluations

Acknowledgements

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 - Ashley Tippins
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Thank you!

Questions?

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

