



# Objective 2 update: Implementation of OPV2 withdrawal and IPV introduction

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SAGE Meeting | Geneva | 18 October 2016

# Polio Eradication and Endgame Objectives

1. Poliovirus detection & interruption
2. OPV2 withdrawal, IPV introduction, immunization system strengthening
3. Containment & Global Certification
4. Legacy Planning



# Overview of presentation

- Achievements and learnings from the tOPV-bOPV switch
- IPV introduction and global IPV supply
- Progress on use of IPV fractional dose

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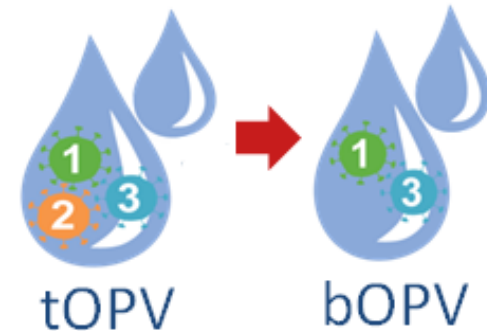
# The OPV switch

## April 2016 report to SAGE

5 day countdown to the global withdrawal of OPV type 2

## October 2016 report to SAGE:

- Global switch occurred **17 April to 1 May**
- **All 155 countries/territories using tOPV switched** to bOPV in a synchronised manner

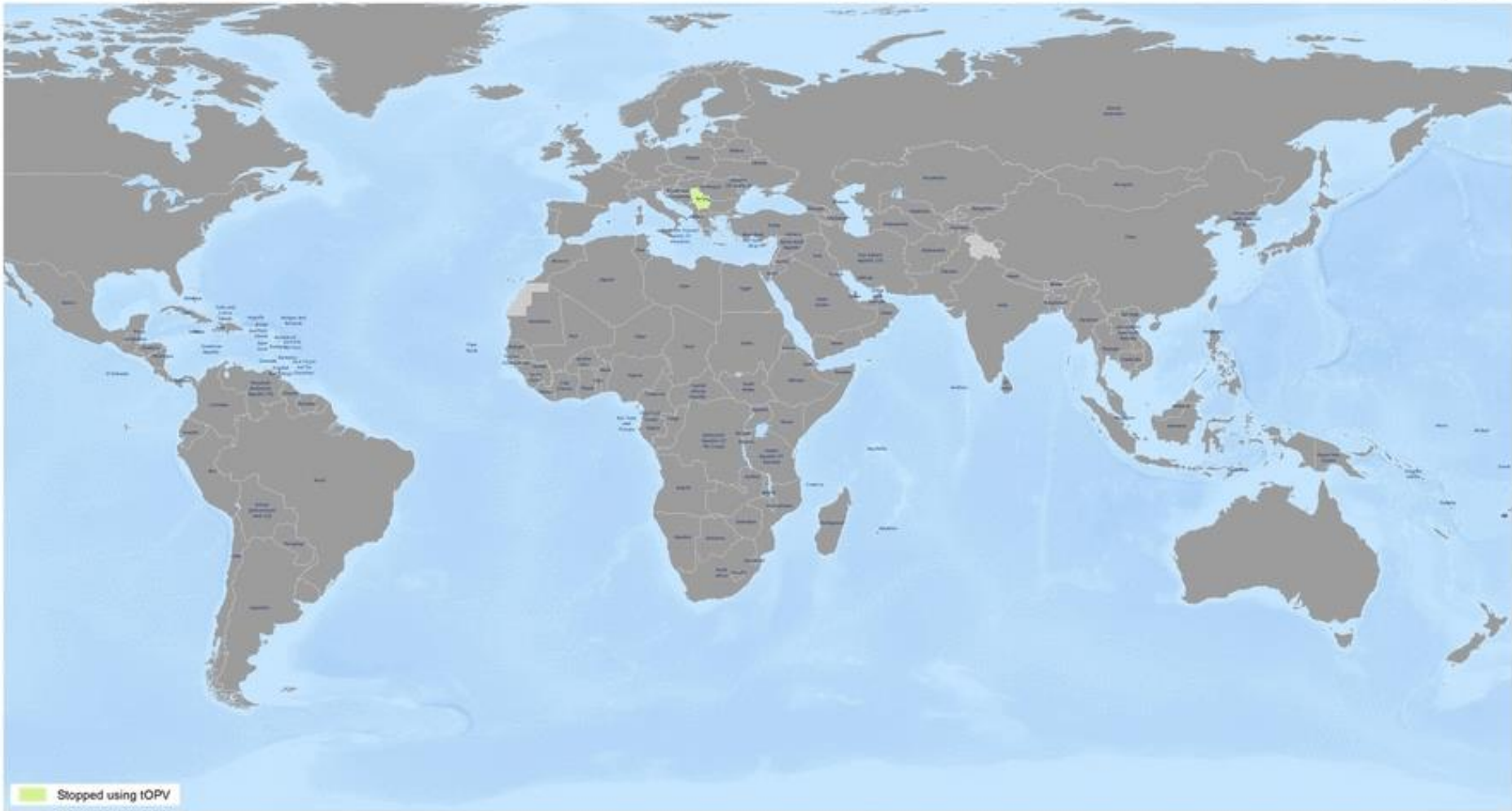


## Media coverage :

- More than 30 top tier global articles, approximately 50 more in national media. All accurate messaging.

# Switch progress over time

Global map showing when countries stopped using tOPV



Map Scale (A3) 1:80,000,000

1 cm = 800 km

Coordinate System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree

Data Source:

Data and Admin. Boundaries: World Health Organization  
Base Map: GEBCO

This map does not include the following islands  
due to constraints in the zoom extent:  
Kiribati, Samoa, Tonga and Cook Islands

25 March, 2016

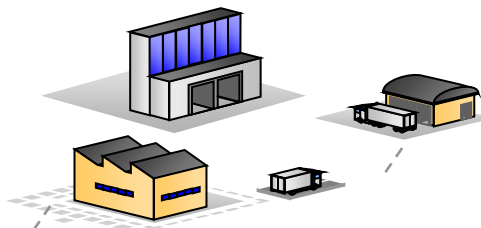
Disputed Areas  
Disputed Borders

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

# Independent Monitoring (within 2 weeks of switch)

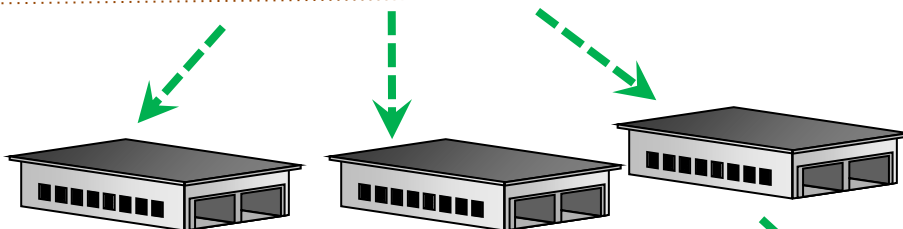
272 National  
stores visited  
(99%)

Primary (national) stores:



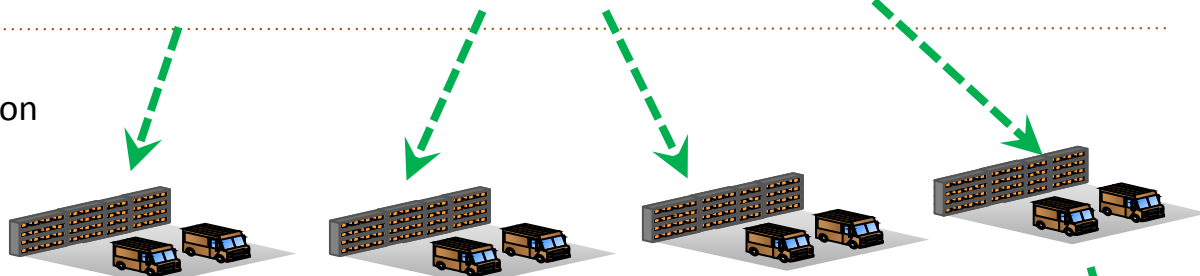
3,741 Regional  
stores visited  
(94%)\*

Sub-national (regional  
or provincial) stores:



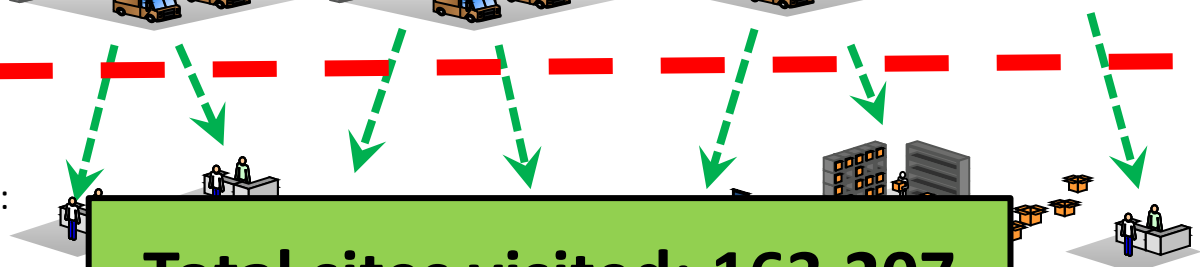
16,144 District  
stores visited  
(78%)\*

Lowest distribution  
level (district)  
stores:



143,050 Health  
Facilities visited

Service points  
(health facilities):



**Total sites visited: 163,207**

Information is representative of 148 countries for which data is currently available

\*Denominator may include sites not stocking tOPV



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# Learnings: Financial support for the switch

## *Achievements*

- ✓ **\$19.4 million** in support provided to 67 targeted countries, over 4 month period
- ✓ 24 additional countries supported with savings from first round of applications
- ✓ Remained under the global envelope – \$4.3 million in savings to GPEI
- ✓ Switch implementation was not compromised in any country due to lack of funds

## *Key Lessons*

- **Global and regional coordination was critical:** Regional participation in vetting of applications and insight to country context was indispensable to the review process
- **Importance of deadlines** (at least 2 months prior to when funds are needed in country) to allow sufficient time for review and disbursement, and for governments to include funds in annual EPI workplans
- Be mindful of potential impediments such as biennium closures that may impact disbursement of funds to country
- Mechanisms for channelling of funds through UNICEF should be established and communicated in advance



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# Learnings: Communications

## *Achievements*

- ✓ Established **strong awareness** at all levels of switch rationale, timelines and actions  
Developed a **complete range of technical guidance** and user-friendly templates
- ✓ **Prevented any potential issues** about vaccine safety related to the global “withdrawal” of a vaccine
- ✓ Managed national level communications via **proactive and targeted engagement of stakeholders and key journalists** in briefings focused on RI and polio eradication
- ✓ Maintained a web site as a core reference for all materials in multiple languages

## *Key Lessons*

- Messaging and materials developed in levels of complexity, in **multiple and adaptable formats and languages for easy local adaptation**
- Very **careful wording** on the “global withdrawal” of a vaccine was essential
- **Regular dialogue was essential** for achieving comprehension, resolving questions and feedback, e.g. workshops, trainings, dry runs, webinars, etc.



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# Learnings: Monitoring and validation

## Achievements

- ✓ **Global guidance for monitoring and validation methodology developed**
  - All national, provincial and district stores to be visited
  - At least 10% of the health facilities sampled and visited
- ✓ All countries conducted monitoring as per global guidelines and submitted validation reports (*Iraq pending*)

## Key Lessons

- **“Minimum standard” approach that was manageable for countries**
  - Setting a global bench mark, encouraging countries to expand on the framework
- **Methodology disseminated widely (webinars and regional workshops)**
- Detail of data reported up to HQ varied considerably across regions – should be more prescriptive next time in detail of information to be collected
- Emphasis must be placed on need to **supplement the independent monitoring with supervisory visits** to ensure complete withdrawal from *all* facilities



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# Learnings: Waste management

## Achievements

- ✓ Developed global guidance on disposal of useable, unopened, non-expired vaccines
- ✓ Identified gaps in waste management policies, strategies and local capacity
- ✓ Global observers did not observe disposal strategies beyond those recommended

## Key Lessons

- Avoiding prescriptive recommendations (**providing options**) allowed for flexibility based on country capacity

### Encapsulation



*e.g. Haiti, Sierra Leone, South Sudan, Philippines, Myanmar, Madagascar*

### Incineration



*e.g. Algeria, Ecuador, Kenya, Mozambique, Uganda*

### Boiling



*e.g. Ghana, Nigeria, CAR, Sierra Leone*

### Autoclave



*e.g. China, Guinea, CAR, Brazil, Colombia*

### Chemical Inactivation (bleach)



*e.g. Mexico, Bolivia*



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# Learnings: Global coordination

## Achievements

- ✓ **Global coordination cell** set up in WHO HQ to monitor progress and troubleshoot any eventualities
- ✓ **Daily switch update** disseminated to partners and regions
- ✓ Dedicated **live website** with real-time maps showing switch progress
- ✓ Great example of **inter agency collaboration** (WHO, UNICEF, and partners) and within WHO (POL, EPI, Outbreaks and Health Emergencies)

## Key Lessons

- *Pre-switch:* Consistency of implementation sub-group calls was instrumental in **maintaining momentum** and keeping **all regions informed** on global progress
- *During switch:* Daily contact with **designated regional focal points** for up-to-date information
- **Dedicated team** at global level to respond to any issues arising
- Data updates streamlined to **4 core process indicators** only



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# Creative launches and events



Official switch launch event and online “countdown” to switch - **Paraguay**

Vaccine parade during Vaccination Week in the Americas - **Guatemala**



Public ceremony in **Philippines**



# Country-designed materials



Switch job aides and handbooks for HWs  
– **Indonesia, Philippines**



Country designed switch stickers and disposal bags –  
**Jamaica, Nigeria, Philippines, China, Pakistan**  
(and many others)

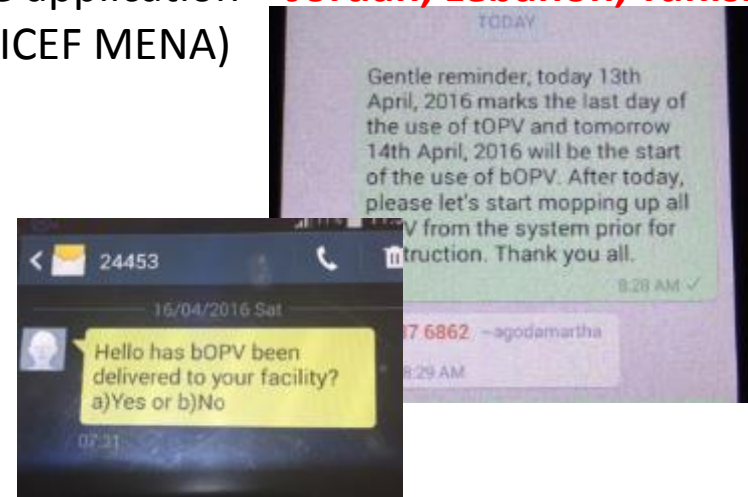


# Using social media and apps

## Use of social media – **Philippines**



## Monitoring mobile application – **Jordan, Lebanon, Tunisia** (developed by UNICEF MENA)

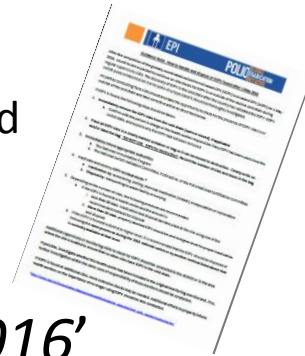


## Use of SMS/WhatsApp reminders – **Nigeria, Ghana, Kenya**

# Potential tOPV use after the switch

## India

- Detection of Sabin like type 2 polioviruses through environmental surveillance in Hyderabad, indicating use of tOPV post switch
- Detailed investigation was launched in Hyderabad and neighbouring Rangareddy district of Telangana state in India
- Over 4400 health facilities have been searched in the two districts
  - 28 tOPV vials found in 13 health facilities - **all private clinics**
  - All tOPV vials left-over from before the switch; labelled and removed



## Guidance re-disseminated:

*'How to handle and dispose of tOPV found after 1 May 2016'*

- SOPs require obligatory reporting of any Sabin-like poliovirus 2
- Launch full field investigation in case Sabin-like poliovirus 2 identification

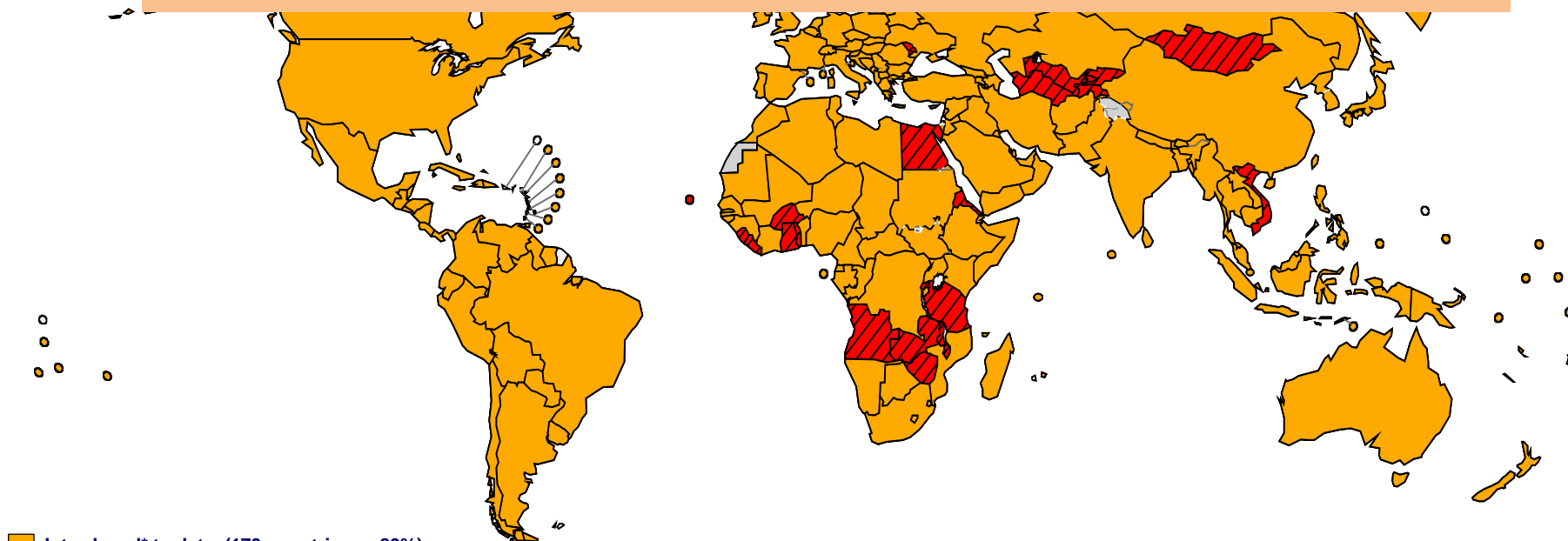


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# IPV introductions 105/126 countries (since 2013)

90% of the global cohort living in countries where IPV has been introduced



\* Including partial introduction in India

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Data source: WHO/IVB Database, as of 07 October 2016  
Map production Immunization Vaccines and Biologicals (IVB),  
World Health Organization

Date of slide: 7 October 2016

# Summary of the impact of short supply on Tier 3 and 4 countries (approx. 22% of birth cohort)

**Suspend IPV supply for 50 countries (to Q4 2017)** of which 29 have already introduced IPV and will face stock outs in 2016

Delayed introductions (10% cohort)	
Tier 3	Tier 4
Angola	Ghana
Burkina Faso	Cape Verde
Eritrea	Malawi
Liberia	Rwanda
Mongolia	Tanzania
Sierra Leone	Togo
Egypt	Zimbabwe
Turkmenistan	Zambia
Tajikistan	Kyrgyzstan
	Moldova
	Uzbekistan
	Vietnam

Delayed resupply (12% cohort)	
Tier 3	Tier 4
Burundi	Comoros
Cote d'Ivoire	Gambia
Guinea Bissau	Lesotho
Senegal	Morocco
Sudan	Sao Tome
Iran	Swaziland
Bangladesh	Djibouti
Nepal	Bhutan
	Namibia
	Sri Lanka
	DPRK
	Maldives
	Seychelles
	Pacific Islands*

\* Eight countries of the Pacific Islands are provided IPV through UNICEF procurement: Cook Islands, Fiji, Kiribati, Nauru, Samoa, Solomon Islands, Tonga and Vanuatu.



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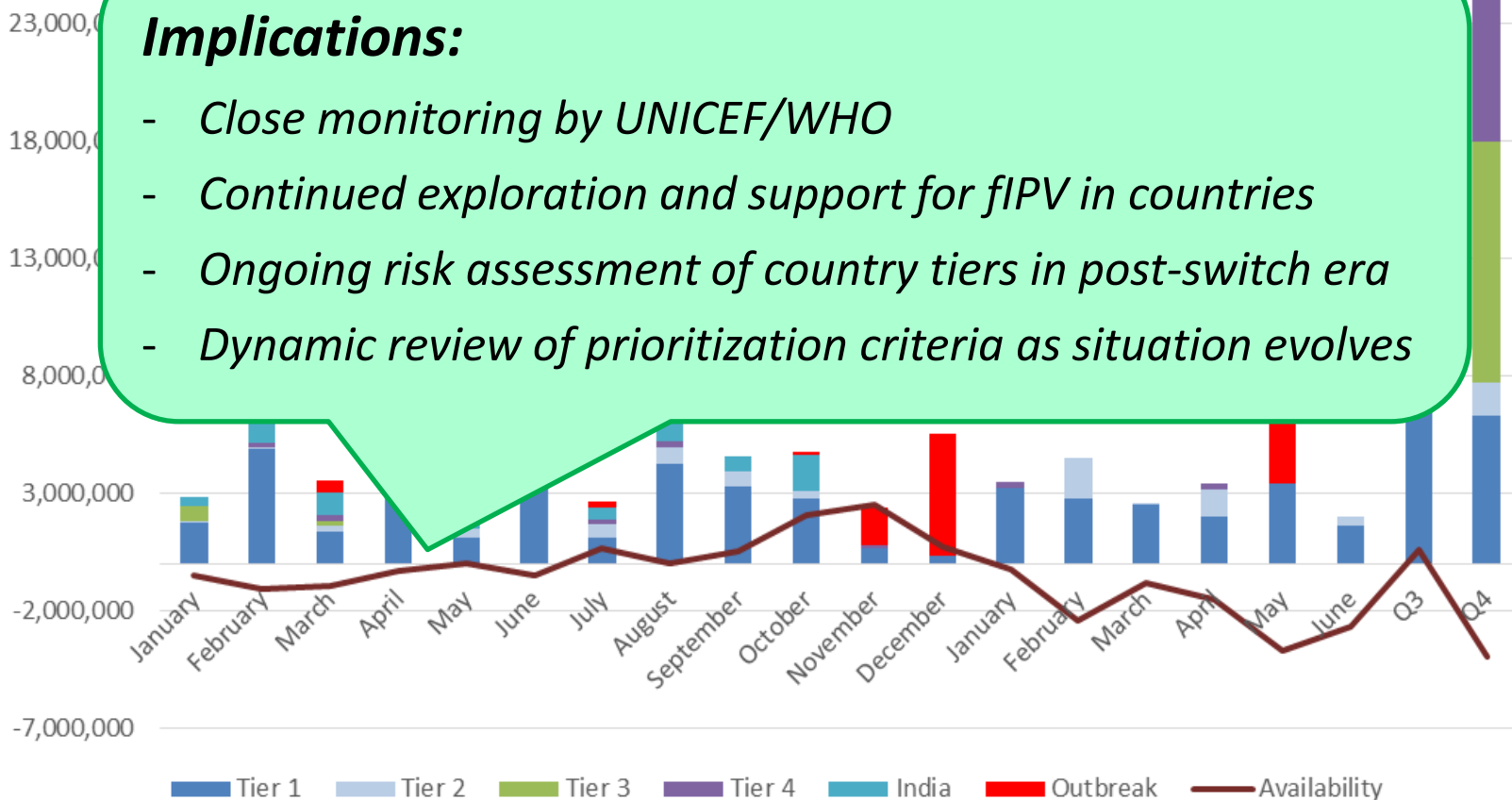
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# IPV supply and demand: Crisis management

2016 & 2017 Combined IPV Supply & Demand

## Implications:

- Close monitoring by UNICEF/WHO
- Continued exploration and support for fIPV in countries
- Ongoing risk assessment of country tiers in post-switch era
- Dynamic review of prioritization criteria as situation evolves



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## Applied principles for allocating the IPV supply

*The Polio Oversight Board, which is made up of the heads of agencies of GPEI partners agreed to the following (April 2016)*

1. Ensure adequate IPV supply to meet current and future needs of **Afghanistan, Pakistan, Nigeria** to ensure interruption of WPV transmission
2. Sustain use of IPV in routine immunization programme in **highest risk countries** (Tier 1 and Tier 2)
3. Ensure sufficient quantities of IPV are available for **outbreak response post-switch**
4. Provide **clarity to Tier 3 and 4 countries** regarding supply availability so they can adequately plan

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# Use of fractional dose of IPV

## WHA resolution A 69.25, May 2016

- Member States to explore the feasibility of instituting dose-sparing strategies, such as intra- dermal administration of fractional-dose IPV

## Routine Immunization

- **India** has introduced fIPV in 14 states (2 additional states by end October)
- **Sri Lanka** began fIPV in routine programme as of 15 July
- **Bangladesh** to begin fIPV in 2017

## Outbreak response

- **India** vaccinated 312,000 children (6 wks - 3 yrs) with fIPV in Hyderabad and Rangareddy districts (Telangana state), June 20-26 2016
  - Area already using fIPV in routine immunization
  - Used 10 dose presentation with 40-47 doses extracted (5-20 % wastage)
  - No adverse reports with multiple punctures of vial stopper
- **Other countries** responding to an outbreak must consider fIPV approaches

# Devices for administration of ID fractional dose

## Syringe adapter for auto-disable (0.1 ml syringe)

- Plastic adapter attached to regular needle to optimize the dose

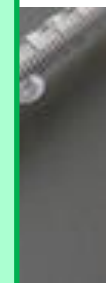
### ***To support national decision-making:***

- *Information pack with evidence-base on fIPV disseminated*
- *Guidance on programmatic considerations in development (financing, training, comms., schedule, wastage, etc.)*
- *All materials + documentation of experiences using fIPV available on a dedicated web page*

## Need

- National
- Available Q4/2016 or early 2017

ectly



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# Conclusion

- Continue vigilance on preventing inadvertent use of tOPV
- Document lessons learned to inform future bOPV withdrawal
  - **Journal of Infectious Diseases supplement , 2017** to document lessons learned from the work of the IMG for the eventual bOPV withdrawal
  - **Vaccine:** Upcoming supplement on the switch for African region. (Polio Eradication Initiative Best Practices in the WHO African Region, *Volume 34, Issue 43, 10 October 2016*)
  - **A photo story** is now live: [http://maps.who.int/OPV\\_switch/](http://maps.who.int/OPV_switch/)
  - **Video stories** being produced by several regional offices
- Initial planning of the OPV withdrawal under Immunization Management Group
- Ongoing monitoring of the global IPV supply and refinement of risk-based allocation approach

# THANK YOU - MERCI



Goodbye tombstone  
to tOPV, April 2016

**Myanmar**



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