

POLIO | GLOBAL ERADICATION INITIATIVE

Programme Update

Transition Independent Monitoring Board

London, 2 November 2017

On Behalf of GPEI - Michel Zaffran, Director Polio Eradication, WHO



Polio Eradication and Endgame Strategy

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



Wild Poliovirus & cVDPV Cases¹ Past 6 months²

**Public Health Emergency
of International Concern**
declared under the International
Health Regulations in May 2014
Last reiterated on 3 August 2017

- Wild poliovirus type 1
- cVDPV type 2
- Endemic country

Country	Onset of most recent WPV1 case	Number of WPV1 cases		Number of WPV1 infected districts		cVDPV current 6 months Number of cases
		Current ²	Same period last year ³	Current ²	Same period last year ³	
Nigeria	NA	0	4	0	3	0
DRC	NA	0	0	0	0	5
AFR		0	4	0	3	5
Pakistan	21-Aug-17	3	4	3	3	0
Afghanistan	02-Oct-17	4	4	3	2	0
Syria	NA	0	0	0	0	47
EMR	02-Oct-17	7	8	6	5	47
Global	02-Oct-17	7	12	6	8	52

²Current rolling 6 months: 01 May 2017 – 31 October 2017

³Same period previous year: data reported from 01 May 2016

¹Excludes viruses detected from environmental surveillance

²Onset of paralysis 01 May – 31 October 2017

Pakistan/Afghanistan epidemiological block

- Lowest number of cases ever (13 in 2017 vs 24 in 2016 - same period)
- Strong surveillance including in security compromised areas

However: continued transmission and detection in Pakistan sewage

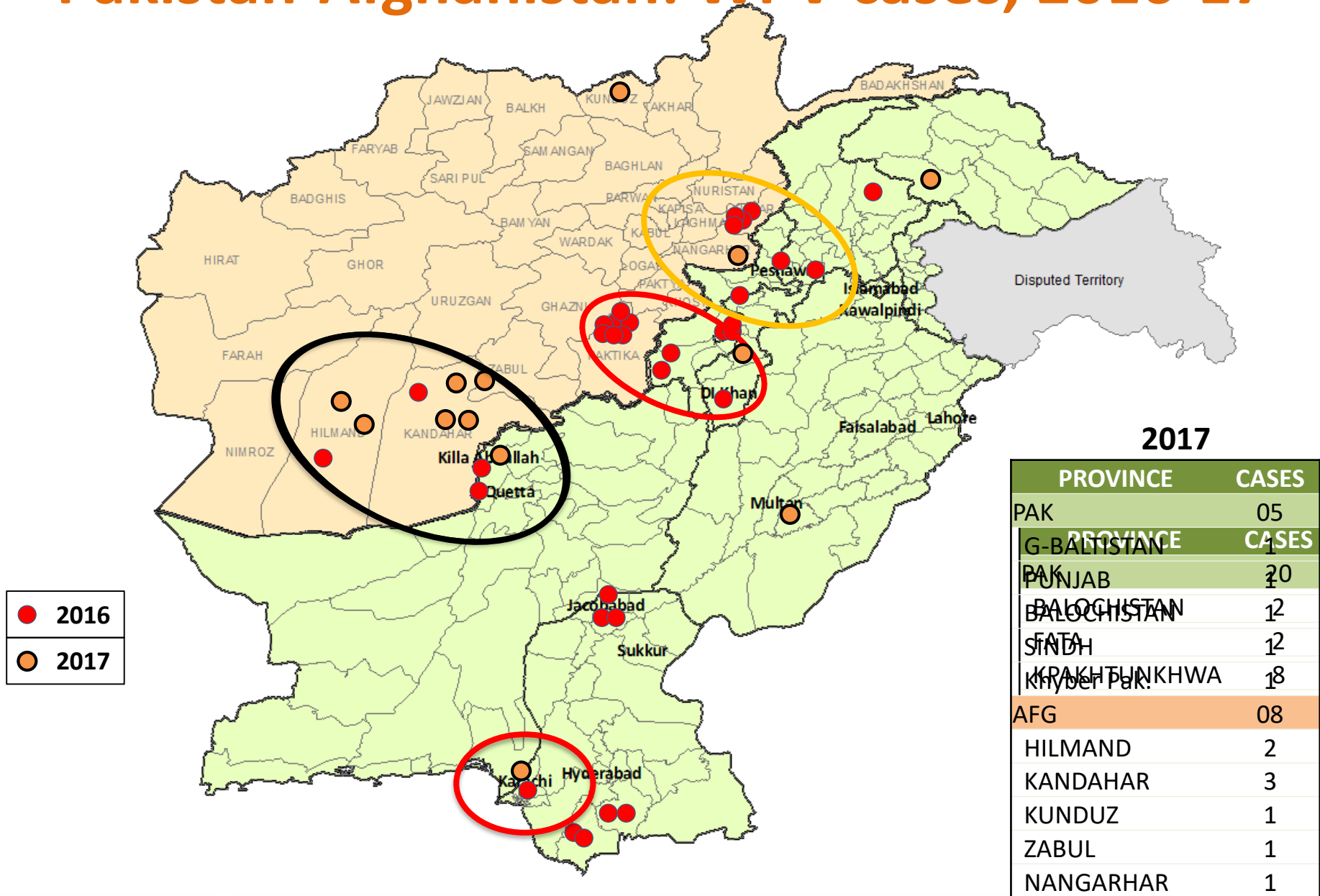
Key risks :

- Deteriorating access in South Region of Afghanistan with pockets of children consistently not vaccinated
- Fatigue and quality of SIAs in Pakistan

Key Strategies

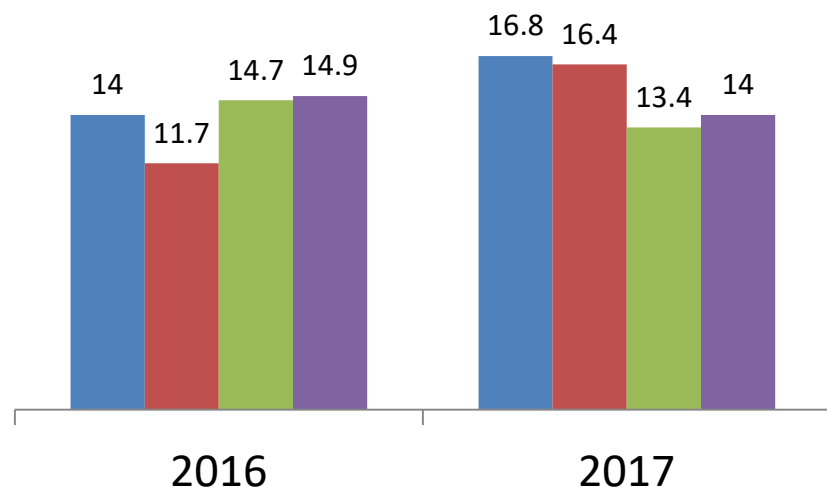
- Focus on the core reservoirs of Quetta, Karachi
- Maintaining Programme Neutrality in Afghanistan
- Accessing all children, including in security compromised areas
- Focus on the Very high risk Districts and High Risk highly mobile population
- Further improving quality of micro plans and SIAs

Pakistan-Afghanistan: WPV cases, 2016-17

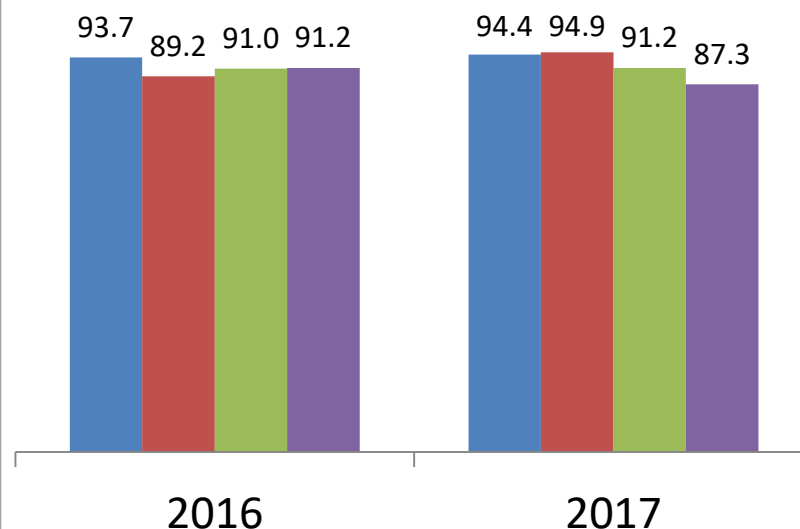


Surveillance in access compromised areas

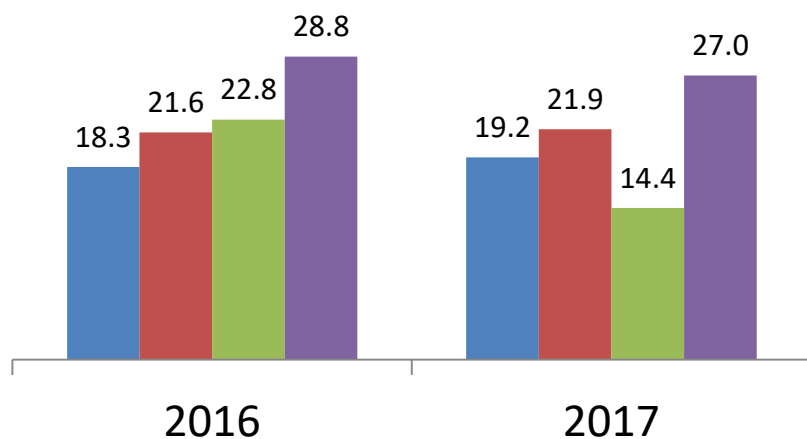
Non-polio AFP rate



% stool adequacy



% NPEV isolation



- Fully accessible
- Partially accessible
- Accessible with limitations
- Not accessible



Lake Chad Basin

- No virus detection since 27 September 2016 in Borno
- Improved access and surveillance with innovative strategies

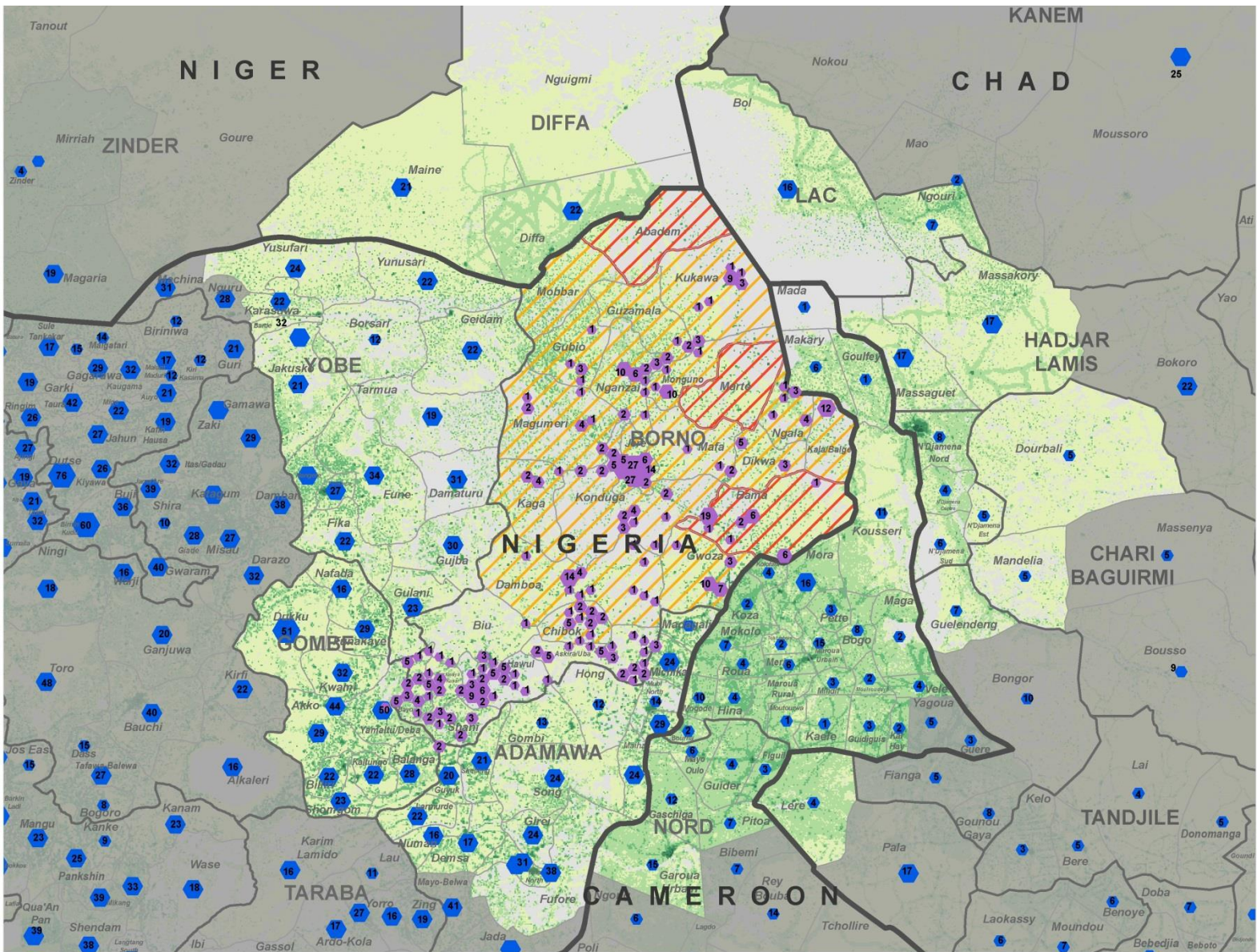
However : 30-40% of settlements and up to 162,000-230,000 children in Borno remain inaccessible to vaccination

- Access to vaccination and surveillance needed to confirm interruption of transmission

Key strategies

- Strategies to reach every settlement in collaboration with military
- Innovations to identify inhabited settlements
- Innovative surveillance strategies (healthy children testing, environment surveillance sweep, use of GIS technology to track reach of team)
- Intensified cross border collaboration
- Focus on Islands of Lake Chad

Lake Chad : AFP cases, Population and Accessibility



Accessibility

- Inaccessible
- Partially accessible

Aggregated Cases

Purple Points = Actual location of cases aggregated to a 10km hexagonal grid

- 1
- 2 - 5
- 6 - 10
- 11 - 20
- 21 - 35
- 1 - 15
- 16 - 50
- 51 - 100
- 101 - 200
- 201 - 500

Blue Points = Cases aggregated to district centers because actual locations are unknown

Population Density

Ppl/Sq Km

- 0
- 1 - 10
- 10.1 - 100
- 100.1 - 1,000
- 1,000.1 - 10,000
- > 10,000

Population estimates are derived from Landsat; a product of Oak Ridge National Lab.

Polio Eradication and Endgame Strategy

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2. **OPV2 withdrawal, IPV introduction, immunization system strengthening**
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IPV introduction

- 35 countries affected by global shortage
- Supply situation improving: affected countries to be supplied by end of Q1 2018
- Catch up of missed cohort with fIPV now or in 2019 with full dose
- GAVI Board will discuss supporting IPV from 2021

Key risks

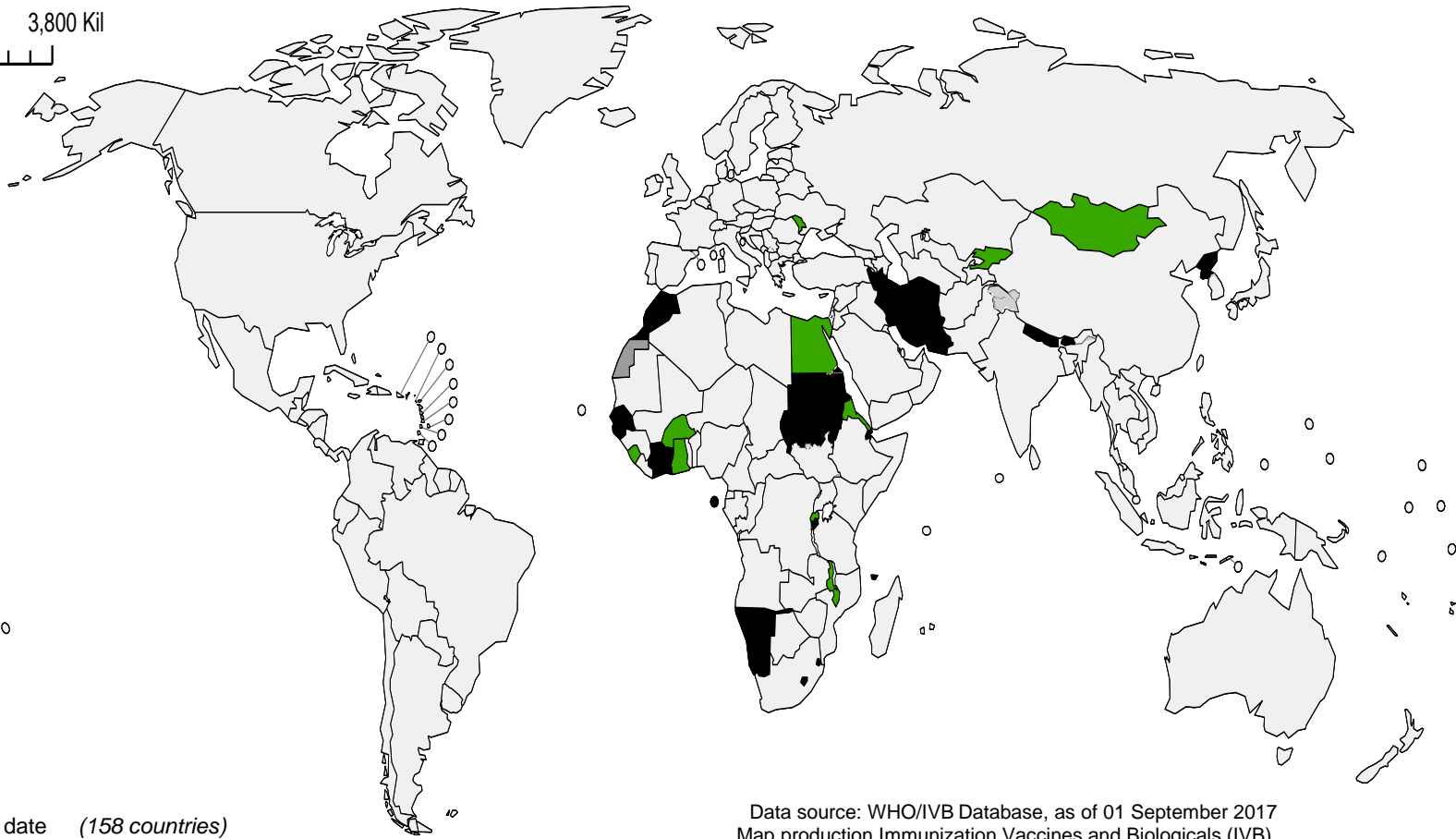
- Further production deterioration

Key strategies

- Allocation of IPV to highest risk countries
- fIPV adopted by India, Sri Lanka, Nepal, Bangladesh and several PAHO countries
- Future pipeline with new manufacturers

Countries using IPV vaccine to date, formal decision to introduce and supply disruptions

0 950 1,900 3,800 Kil

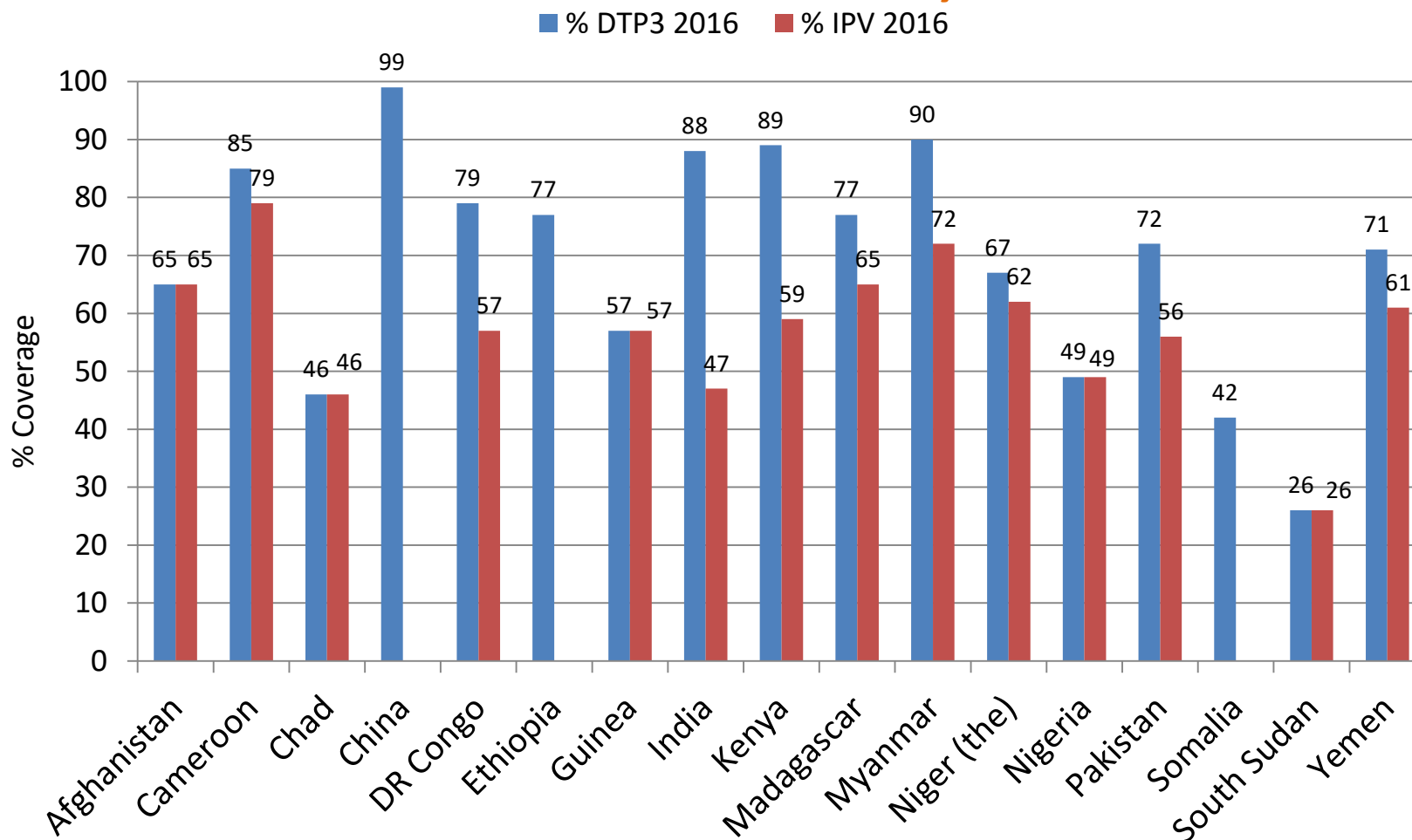


- Introduced* to date (158 countries)
- Introduced to date but with delayed resupply (17 countries)
- Formal commitment to introduce in 2017-2018 (19 countries)
- Not available
- Not applicable

Data source: WHO/IVB Database, as of 01 September 2017
 Map production Immunization Vaccines and Biologicals (IVB),
 World Health Organization



WHO/UNICEF estimates of immunization coverage Tier 1 IPV and DTP3, 2016



Source: WHO and UNICEF estimates of immunization coverage: 2016 revision



Type 2 Events Post Switch

- 6 Type 2 outbreaks since May 2016
- Aggressive responses with mOPV2
- Syria and DRC – ongoing outbreaks with ongoing responses (mOPV2 & IPV)

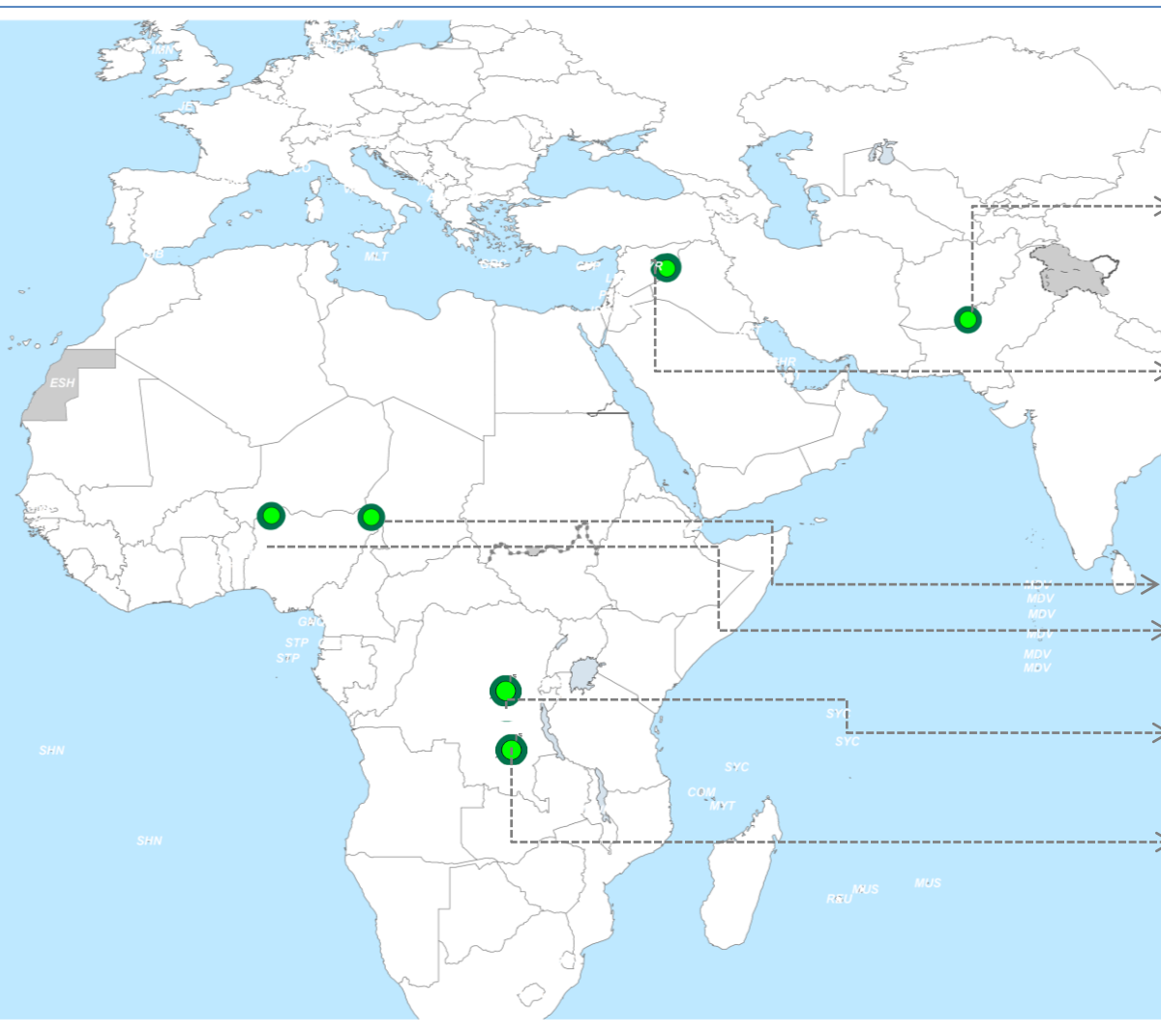
Key risks

- Access issues (DRC and Syria) hamper quality of response
- Low routine immunization coverage and VDPVs

Key strategies

- Intensified surveillance in access compromised areas
- Immediate and effective response with mOPV2 and IPV
- Advocacy for RI strengthening

Post switch* cVDPV2 outbreaks



6 post-switch cVDPV type2 outbreaks

Province	District	Surv. type	Date (collection /onset)	NT change
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Pakistan

Balochistan	QUETTA	AFP	17-Dec-2016	14
Balochistan	QUETTA	ENV	20-Dec-2016	18
Balochistan	QUETTA	ENV	20-Oct-2016	9
Balochistan	QUETTA	ENV	28-Dec-2016	15
Balochistan	QUETTA	ENV	28-Nov-2016	15

Syria

47 positives AFP – onsets from 3 March to 5 August
(44 in Deir_Al_Zour, 2 in Raqa, 1 in Homs governorates)

Nigeria


BORNO	MONGUNO	Contact	26-Aug-2016	37
SOKOTO	BODINGA	Contact	24-Nov-2016	17
SOKOTO	BODINGA	AFP	28-Oct-2016	12


DRC

MANIEMA	KINDU	Contact	02-May-2017	9
MANIEMA	KUNDA	AFP	18-Apr-2017	7
MANIEMA	KINDU	AFP	26-Mar-2017	7

HAUT LOMAMI	MALEMBA-NKULU	AFP	20-Feb-2017	15
HAUT LOMAMI	BUTUMBA	AFP	08-Mar-2017	16
HAUT LOMAMI	BUTUMBA	AFP	07-Apr-2017	15
HAUT LOMAMI	MUKANGA	AFP	05-Jun-2017	19
HAUT LOMAMI	MUKANGA	AFP	13-Jun-2017	14
HAUT LOMAMI	MUKANGA	AFP	20-Jun-2017	18
HAUT LOMAMI	BUTUMBA	Contact	20-Jul-2017	15
HAUT LOMAMI	LWAMBA	AFP	27-Jul-2017	18

*Switch date: 01 May 2016

 cVDPV2 outbreak (total 6 outbreaks)

 mOPV2 SIA conducted or planned.

Syria: cVDPV2 outbreak

53 VDPV2 cases

Index case

Mayadeen district, Deir Ez-Zor governorate

Onset : 3 March 2017

Most recent case

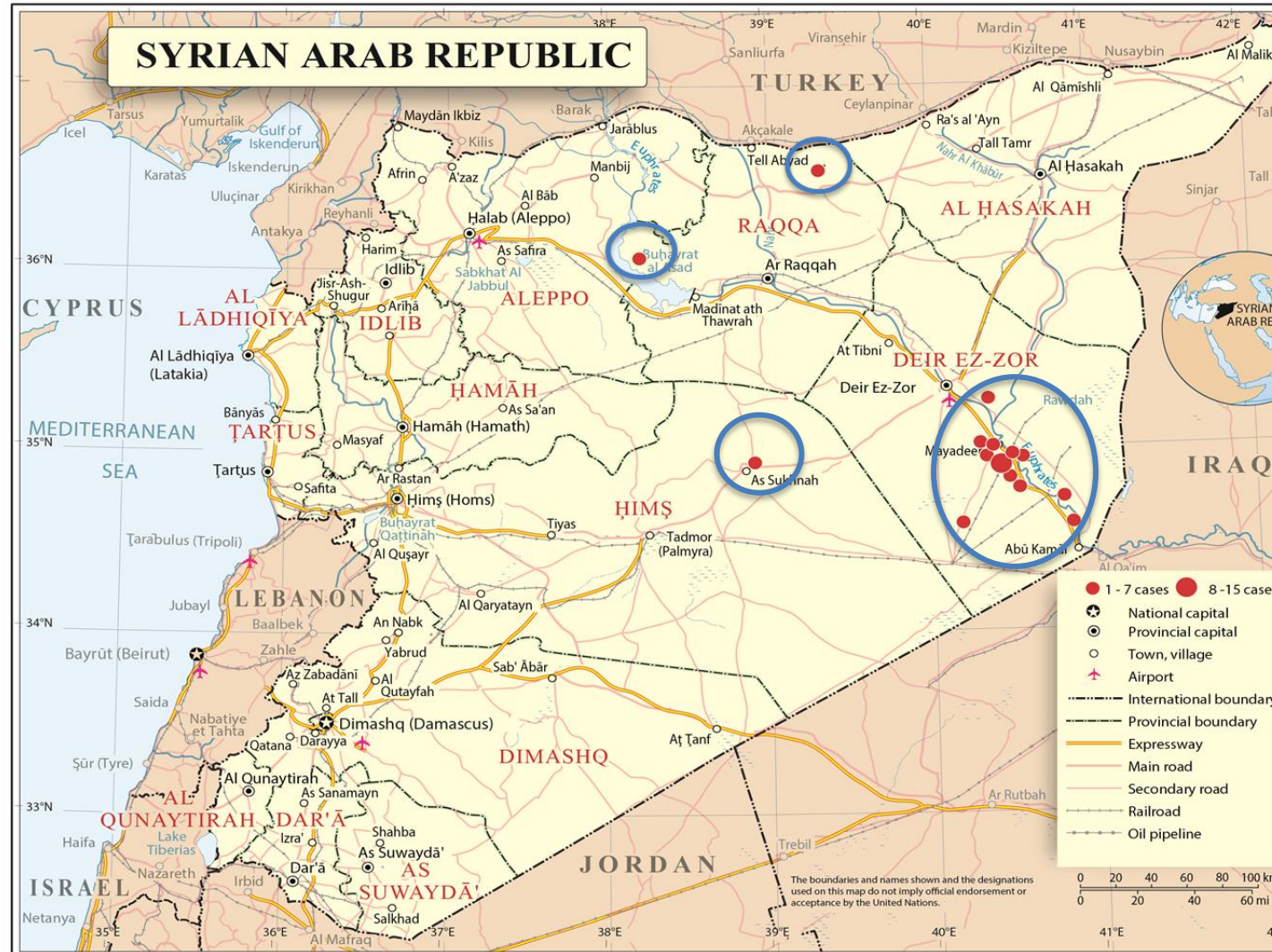
Mayadeen district, Deir Ez-Zor governorate

Onset : 25 August 2017,

Affected districts

Mayadeen, Deir Ez-Zor, Boukamal (*Deir Ez-Zor*)

Tell Abyad , Thawra (*Raqqa*), Tadmour (*Homs*)



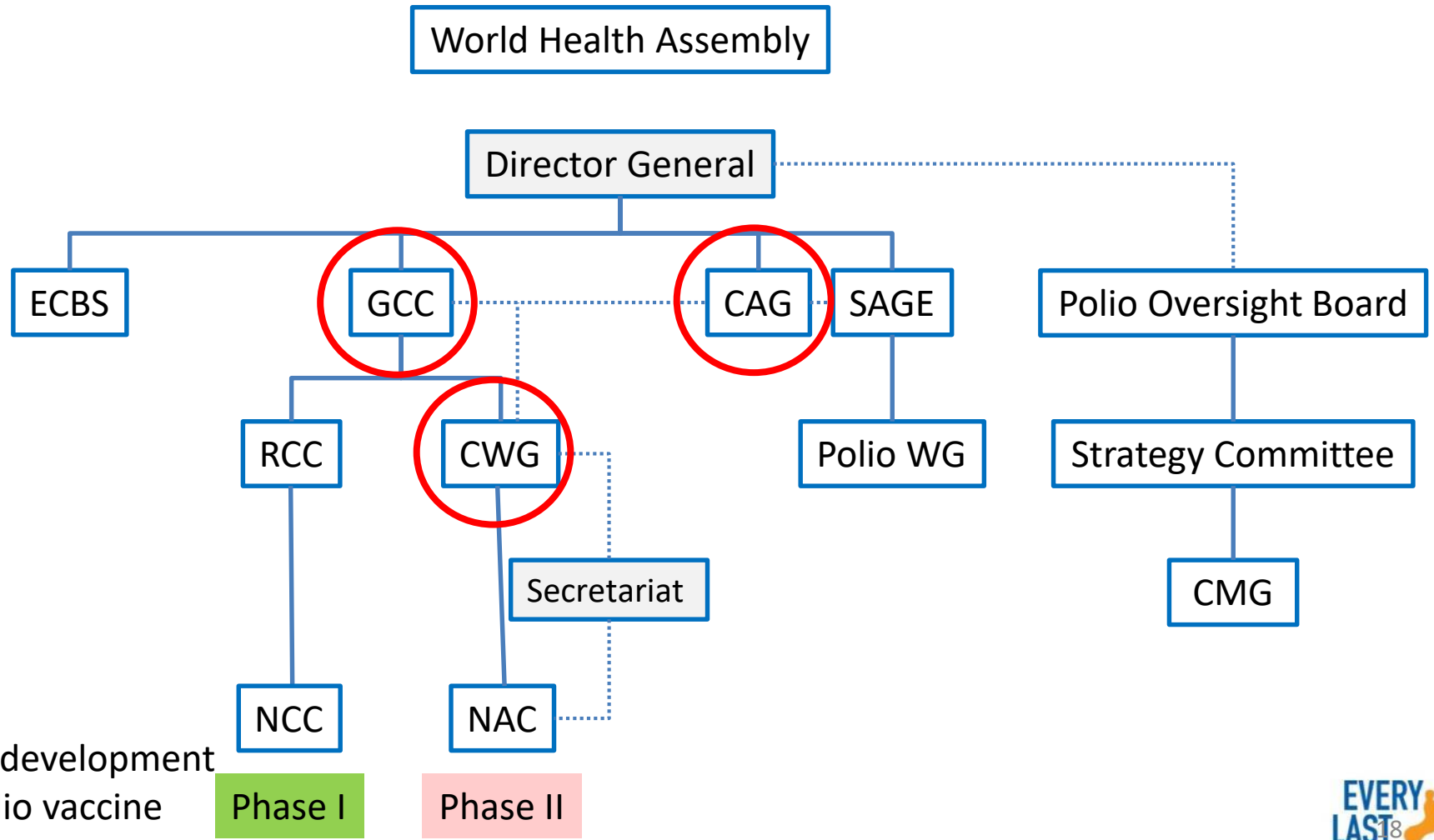
Rounds	Dates	Antigen
Deir Ez-Zor 1	22–26 Jul	mOPV2
Raqqa 1	12–18 Aug	mOPV2
Deir Ez-Zor 2	22–26 Aug	mOPV2 + IPV
Raqqa 2	7–13 Oct	mOPV2 + IPV

Polio Eradication and Endgame Strategy

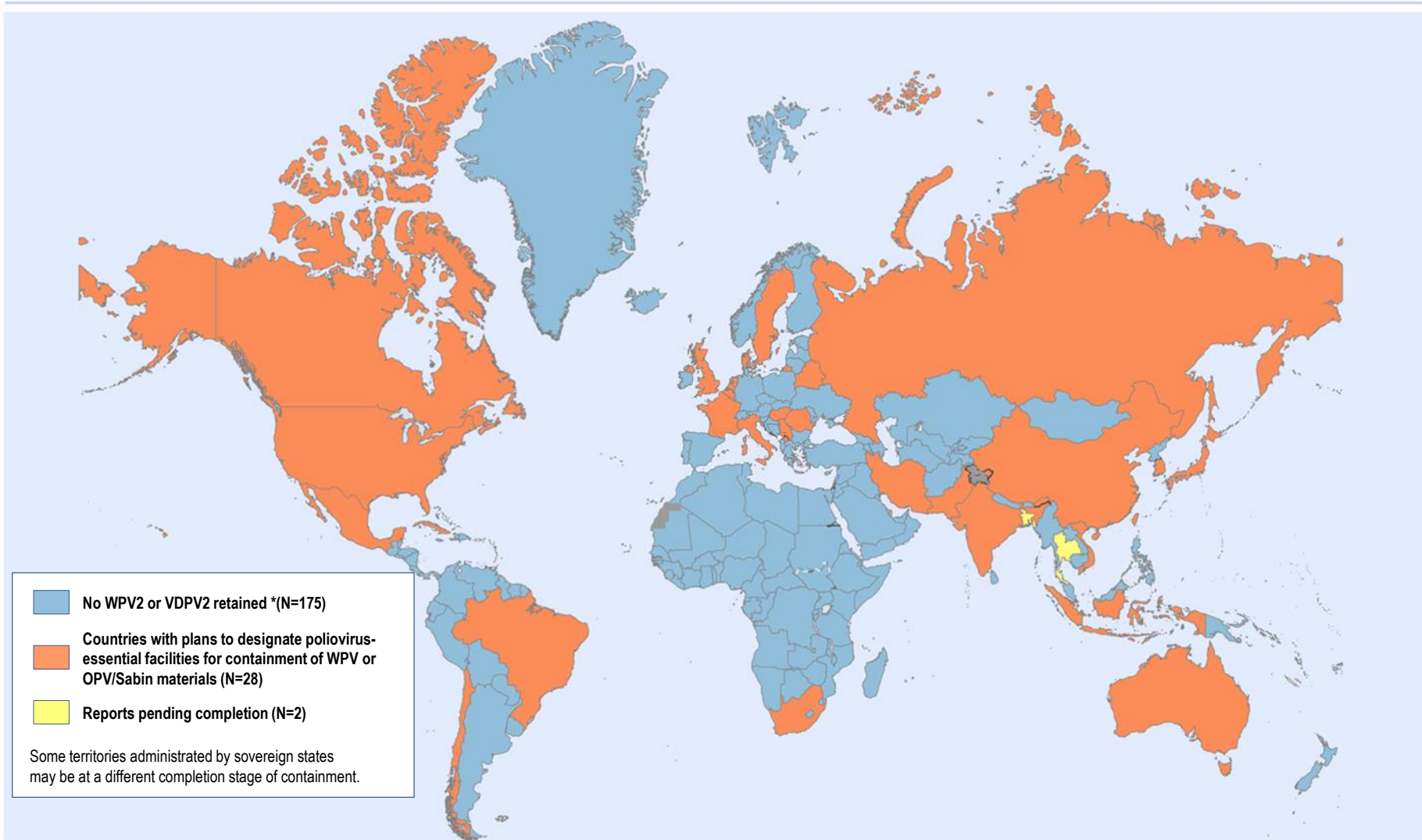
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Certification and Containment oversight



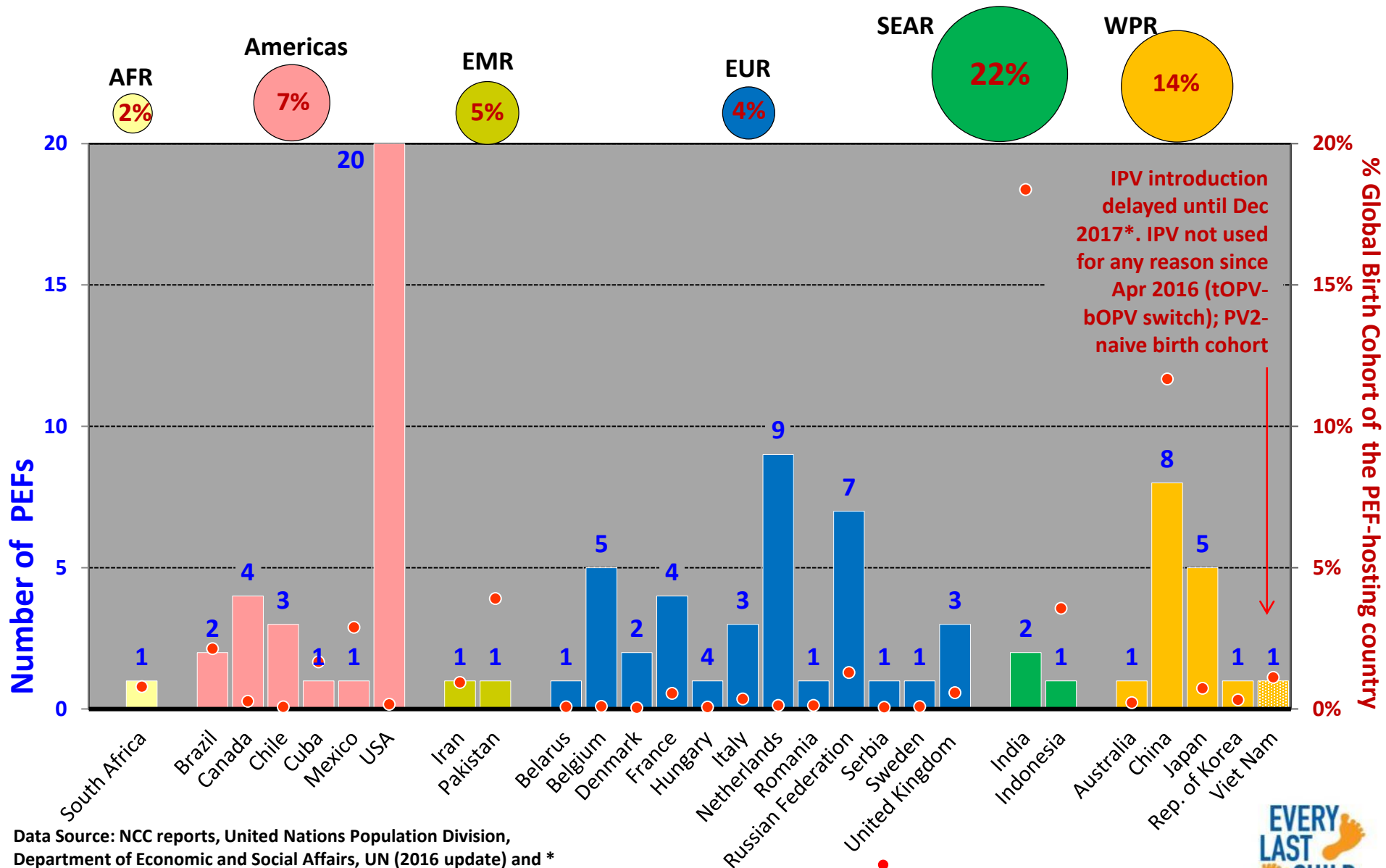
28 countries plan to retain poliovirus materials* in 91 designated PEFs



Includes WPV/cVDPV and OPV2/Sabin
Data reported by WHO Regional Offices as of 21 October 2017
and subject to change
*for the Americas, this includes WPV - and cVDPV types 1 to 3

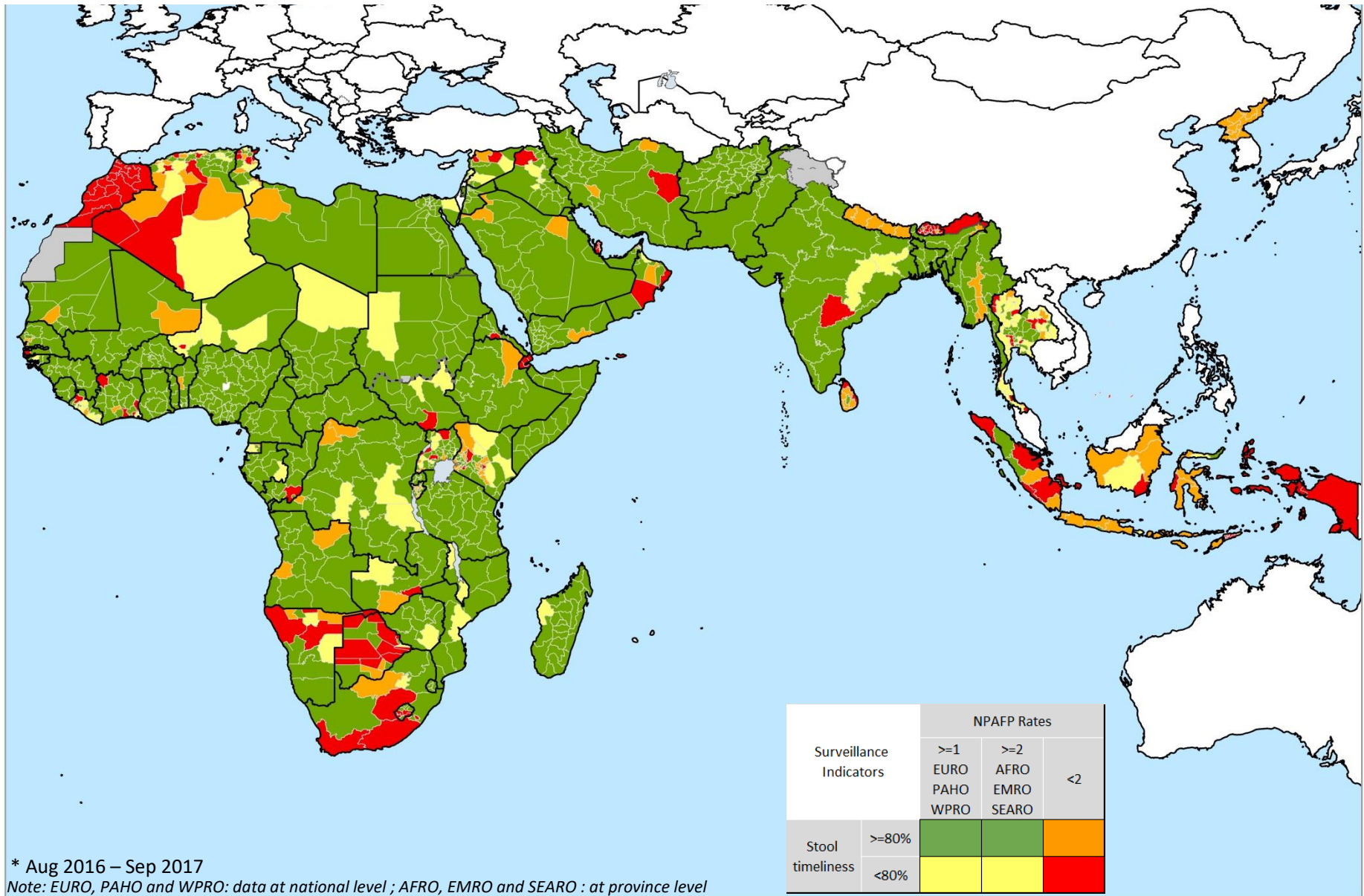
NACs: : 18 of 28 PEF-hosting countries have NACs 'nominated'

54% of the Global Birth Cohort are in Countries Hosting PEFs



Data Source: NCC reports, United Nations Population Division, Department of Economic and Social Affairs, UN (2016 update) and * WHO/UNICEF Status updates on country planning for IPV introduction (Nov 2017)

Surveillance indicators, Rolling 12 months*



* Aug 2016 – Sep 2017

Note: EURO, PAHO and WPRO: data at national level ; AFRO, EMRO and SEARO : at province level

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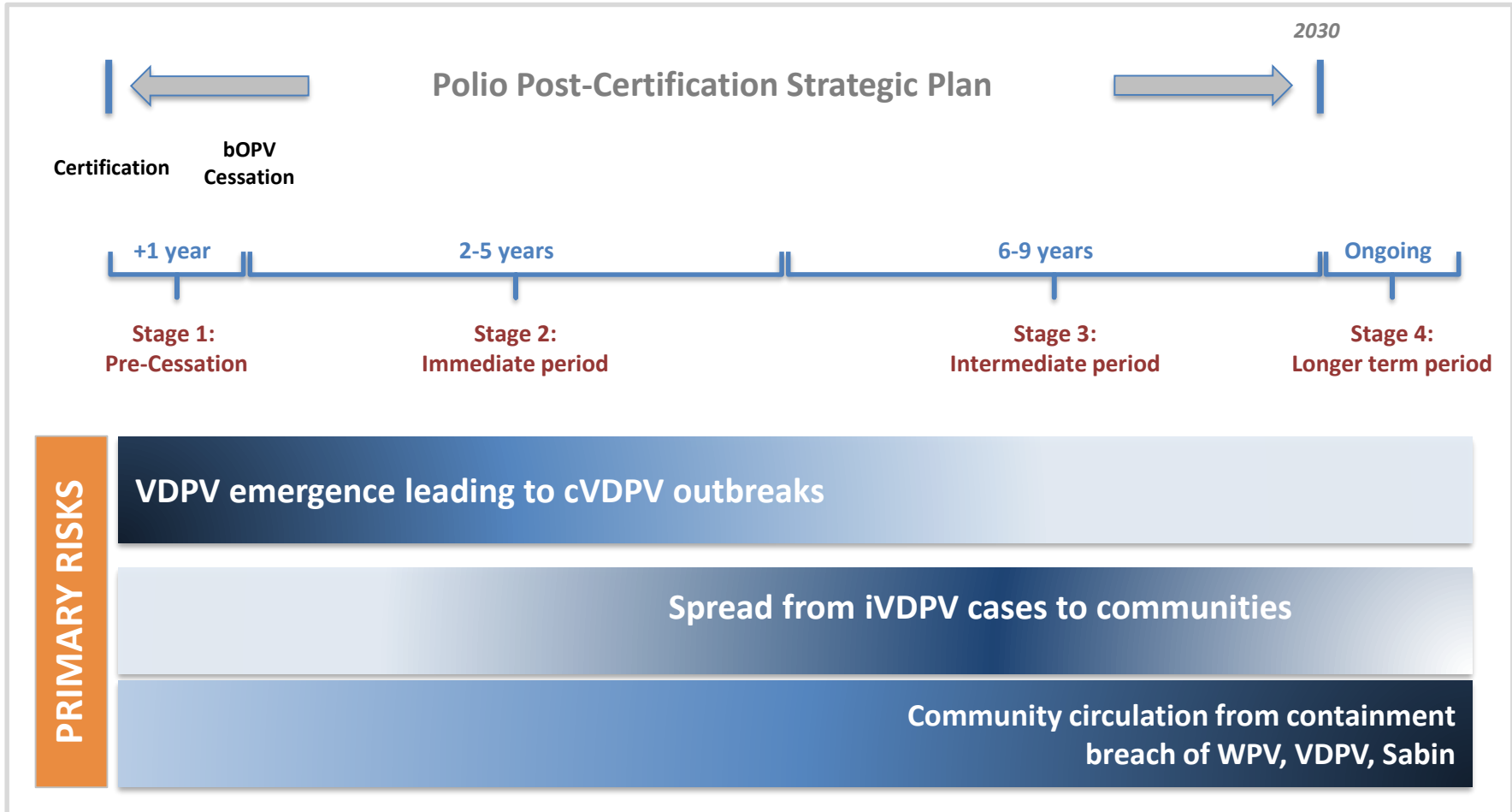
Objectives:

- *Mainstream polio-essential functions to sustain global eradication*
- Support country transition planning
- Capture lessons learned



Focus of the *Post-Certification Strategy*

What are the poliovirus risks after certification?



Post-Certification Strategy 2021-2030: Goals

Purpose: Sustain a polio-free world

<p>Goal 1: Contain Poliovirus Sources</p>	<ul style="list-style-type: none"> ▪ Ensure potential sources of poliovirus are properly controlled or removed
<p>Goal 2: Protect Populations</p>	<ul style="list-style-type: none"> ▪ Withdraw the oral live attenuated polio vaccine (OPV) from use and immunize populations with inactivated polio vaccine (IPV) against possible re-emergence of any poliovirus
<p>Goal 3: Detect and Respond</p>	<ul style="list-style-type: none"> ▪ Promptly detect any poliovirus reintroduction and rapidly respond to prevent transmission

<p>Enabling and Cross-Cutting Areas</p> <ul style="list-style-type: none"> ▪ Essential functions should be embedded into existing institutions and programmes ▪ Governance and management , monitoring framework, financial model should be developed with these institutions in the lead
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Priorities - Next 6 months

1. Interrupting WPV and cVDPV Transmission

- Pakistan, Afghanistan, Nigeria (Lake Chad), DRC, Syria

2. High Quality surveillance

- Endemics and access compromised areas e.g. Syria, Somalia, South Sudan, Iraq, Yemen ...

3. Financial management

- Plan budget to extend through 2020

4. But also...

- Accelerate efforts for containment
- Engage broader constituency in Transition
- Engage non-polio programmes in Post Certification strategy implementation



Thank you

