

POLIO | GLOBAL ERADICATION INITIATIVE

Overview

SAGE — April 12 , 2016

Michel Zaffran, Director Polio Eradication
on behalf of the Partners of the Global Polio Eradication Initiative



BILL & MELINDA
GATES *foundation*

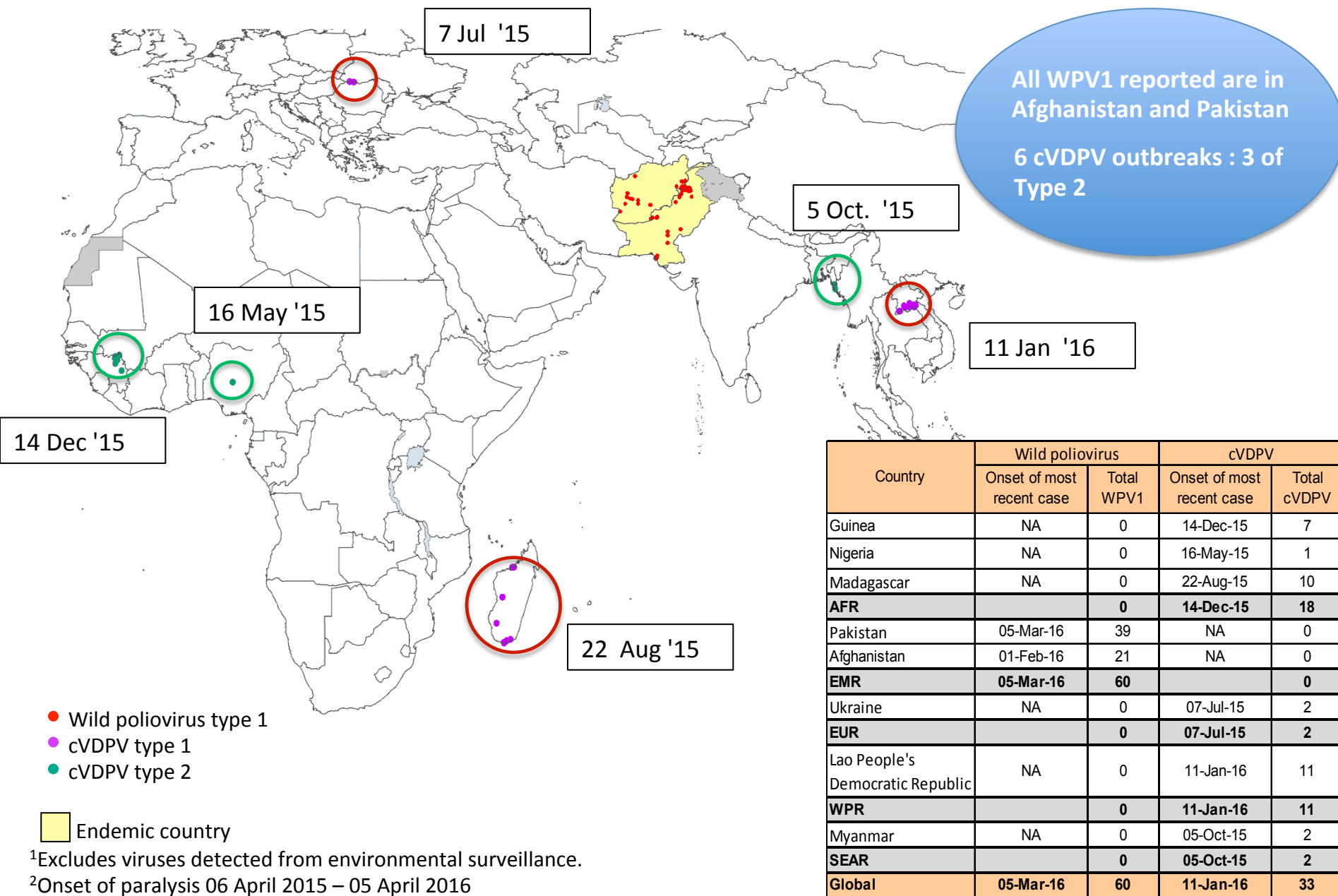


Endgame Plan Objectives, 2013-18

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



Wild Poliovirus & cVDPV Cases¹, Previous 12 Months²



¹Excludes viruses detected from environmental surveillance.

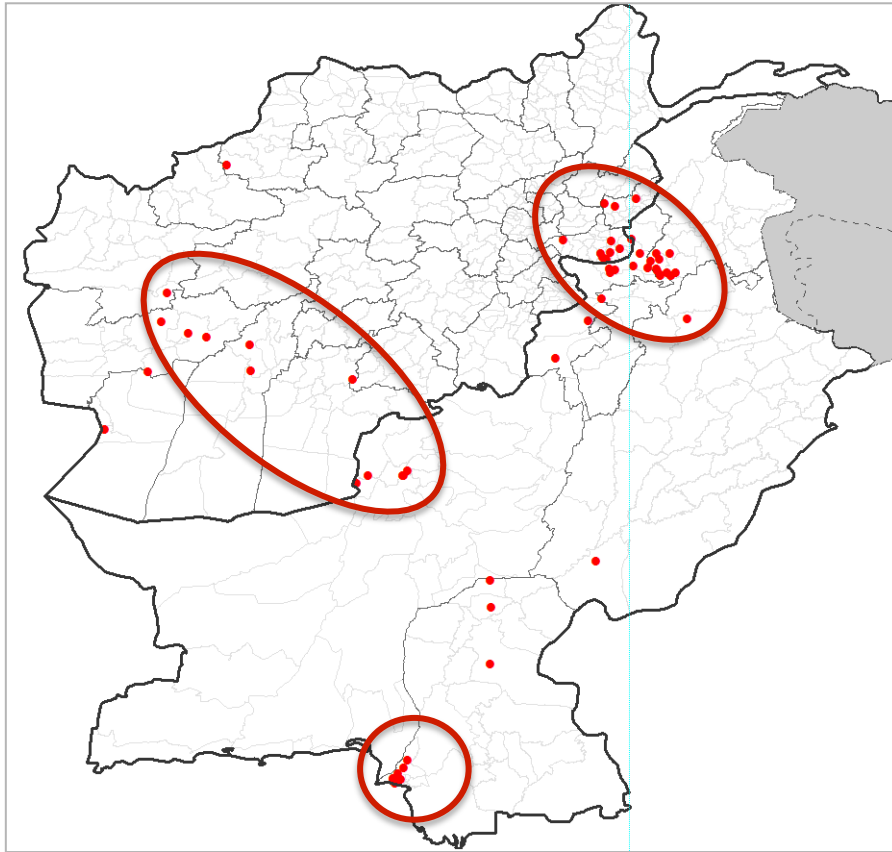
²Onset of paralysis 06 April 2015 – 05 April 2016

Wild Polio Virus transmission

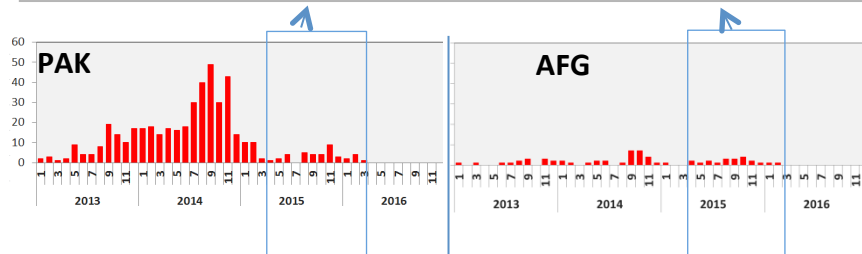
Pakistan and Afghanistan

Pakistan / Afghanistan: One epidemiological block

WPV1 cases, Apr-15 – Mar-16

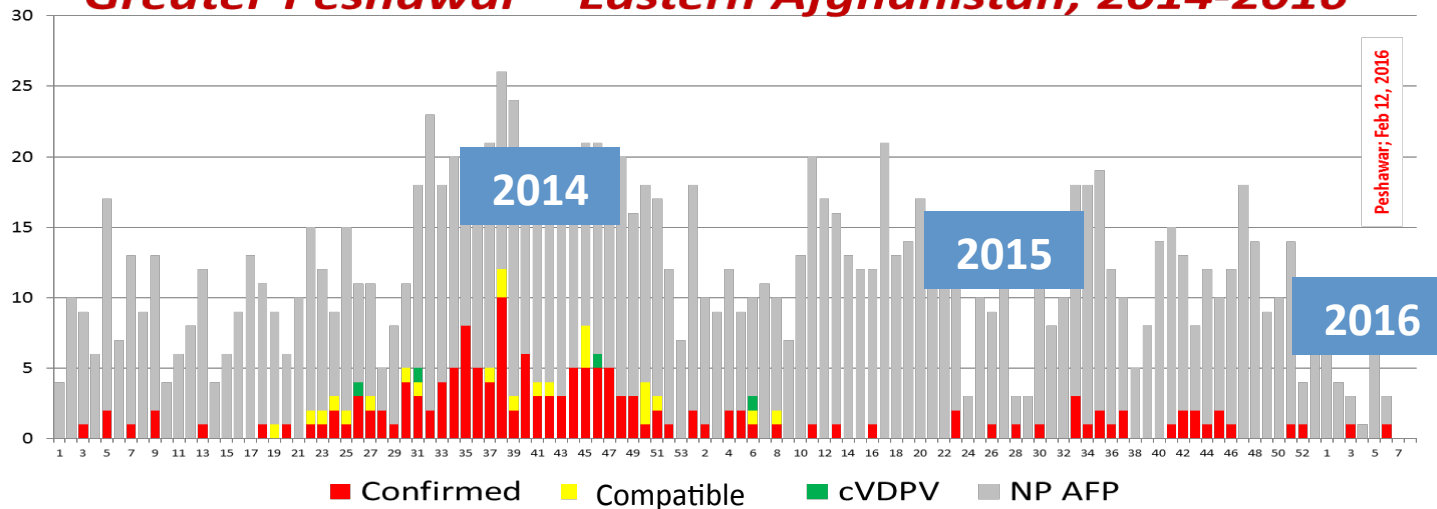


- Corridors of active transmission linking reservoirs on two sides of the border:
 - Nangahar / Kunar - Khyber/Peshawar
 - Kandahar - Helmand/ Balochistan (Quetta block)
- Karachi "centrifuge"

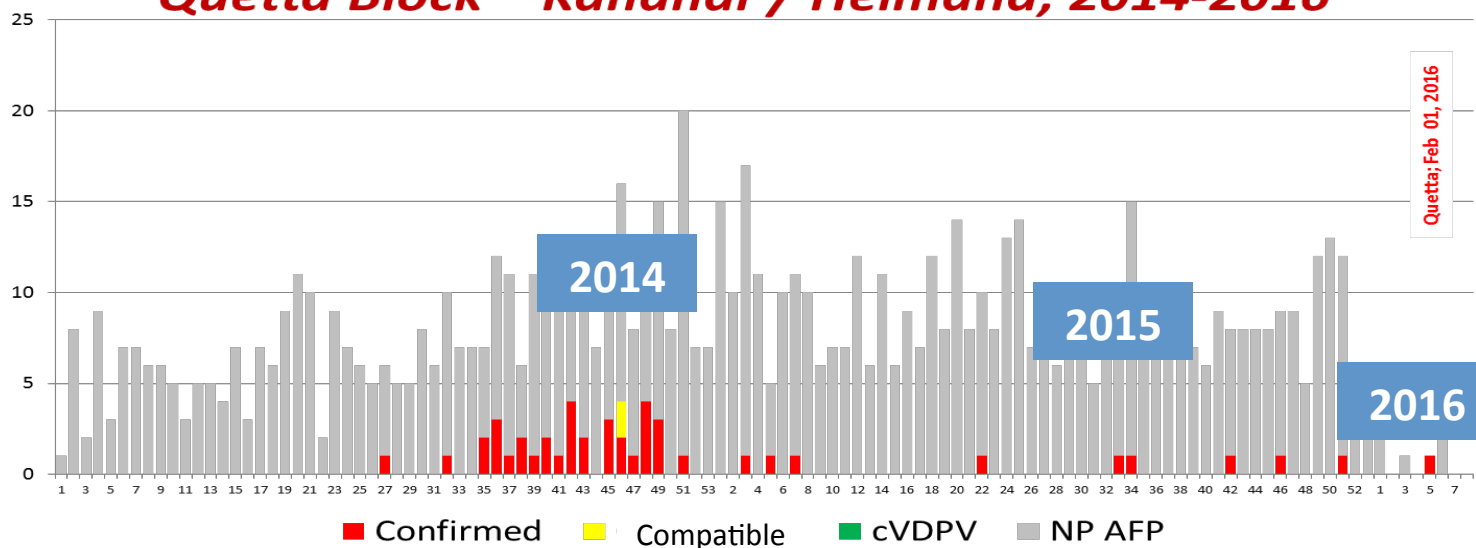


WPV – Continued Transmission in both corridors

Greater Peshawar – Eastern Afghanistan; 2014-2016

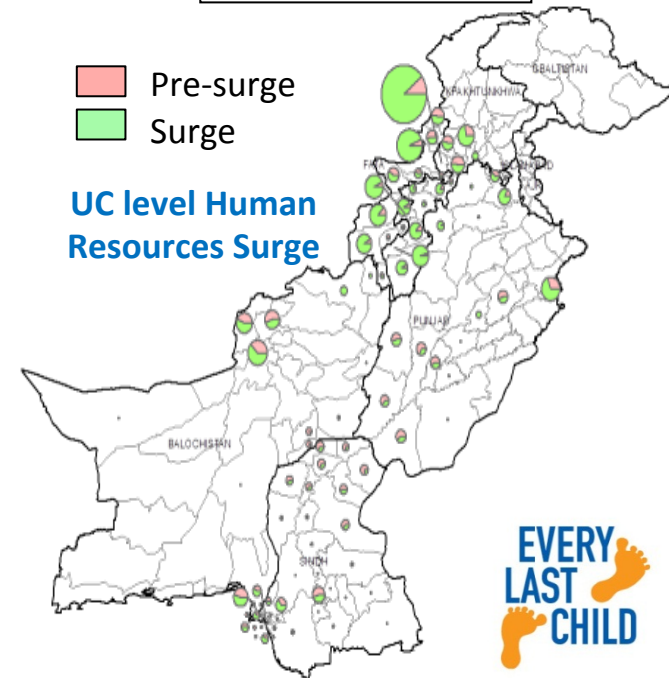
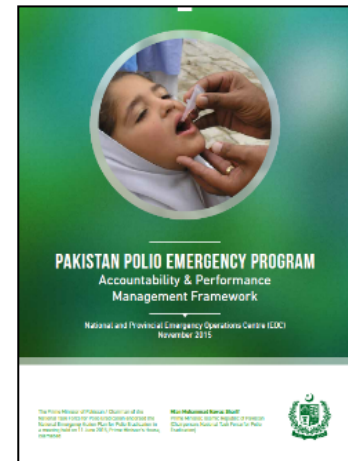


Quetta Block – Kandhar / Helmand; 2014-2016



Pakistan **National Emergency Action Plan (NEAP)**

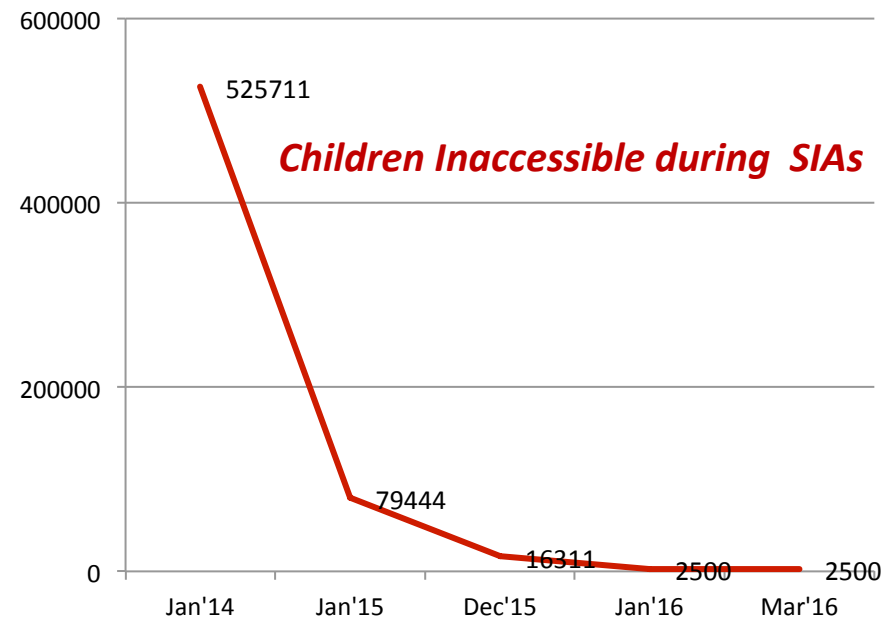
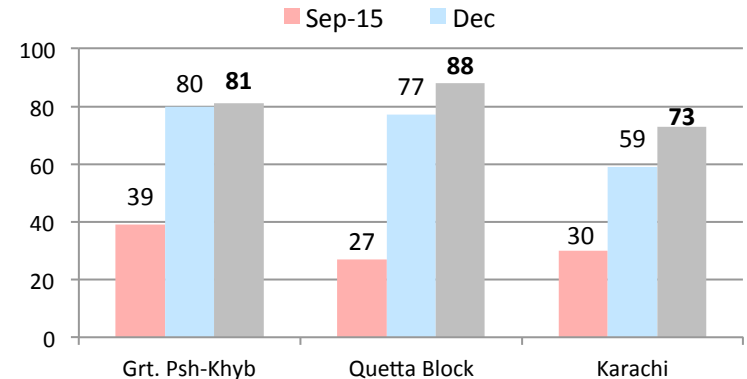
- **National EOC and 5 provincial EOCs functional**
 - Punjab, FATA, Balochistan performing well;
 - Sindh and KP relatively slower
 - Performance & Accountability management framework in effect
 - Regular reviews by National Management Team
- **Partners' Human Resource Surge**
 - Completed at national, provincial, district & sub-district levels
 - Emergency SOPs to address any evolving needs



Pakistan NEAP Implementation

- **Continuous community protected vaccination (CCPV)**
 - Nearly 8000 community volunteers
- **Rigorous and independent post campaign monitoring**
 - Identification of gaps
- **Auxiliary approaches to reach highest risk communities**
 - IPV-OPV SIAs : ~2 million reached in reservoirs; ~ 1 million targeted by May 2016
 - Health camps: reaching >235,000 beneficiaries (130,000 <5 yrs.), including 4,000 Zero Dose

Trends of LQAS Results; Sep-15 – Mar-16



Afghanistan Activities

High level advocacy

- Polio high council meeting; President meeting on Polio with Governors of 9 provinces and key line ministries

Program management

- National & regional EOCs monitor and coordinate all activities against NEAP

Revision of high risk districts

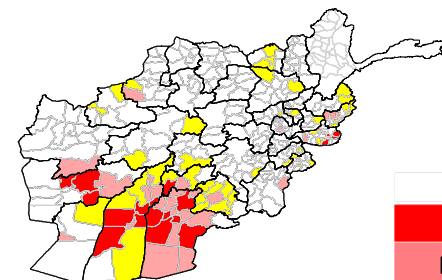
- Strategic interventions defined for each low performing districts

Addressing inaccessibility

- Negotiations through partners to avert bans; Sub-district level mapping of access; Permanent vaccination points Readiness to cover as soon as access is gained.



| Category | No. | Activity | No. | Sub-activity | Working Group | Organization noted in Annex 4 | Individual Responsible | Status | Deadline |
|-------------------|-----|---|-----|---|---------------|-------------------------------|------------------------|-----------|-----------|
| Establishing EOCs | 1 | Finalize EOC project proposal with defined functions and structure | N/A | None | SWG | PE Partners | D Parvic | Completed | 20-Nov-15 |
| Establishing EOCs | 2 | Establish EOC functionality - national level | N/A | None | SWG | PE Partners | D Parvic | Completed | 20-Nov-15 |
| Establishing EOCs | 3 | Establish EOC functionality - Eastern + Southern + Western Region | N/A | None | SWG | PE Partners | D Parvic | Completed | 27-Nov-15 |
| Establishing EOCs | 4 | Establish reporting mechanism between the National and Regional EOCs | N/A | None | SWG | EOC | D Parvic | Completed | 27-Nov-15 |
| Establishing EOCs | 5 | Establish coordination between EOC and Polio High Council | N/A | None | SWG | EOC/OPFPE | D Parvic | Completed | 27-Nov-15 |
| Focus on LPD | 6 | Revision of LPD based on agreed criteria for 2016 | 6.1 | Each region will submit the maps and lists of additional districts | SWG | MoPH/WHO | Team Lead WHO | Completed | 25-Nov-15 |
| Focus on LPD | 6 | Revision of LPD based on agreed criteria for 2016 | 6.2 | Include additional risk districts in the LPDs of West, South and East during December SIA | SWG | MoPH/WHO | Team Lead WHO | Completed | 25-Nov-15 |
| Focus on LPD | 6 | Revision of LPD based on agreed criteria for 2016 | 6.3 | Joint revision of LPDs in December | SWG | MoPH/WHO | Team Lead WHO | Completed | 16-Dec-15 |
| Focus on LPD | 6 | Revision of LPD based on agreed criteria for 2016 | 6.4 | Identify highest priority areas as clusters within LPDs | SWG | MoPH/WHO | Team Lead WHO | Completed | 16-Dec-15 |
| Focus on LPD | 7 | Review LPD microplans with GIS and field surveys/ information - phase 1 and phase 2 | 7.1 | Produce a report on the status of microplanning process for all the districts of phase 1 & 2 | DWG/DWG | WHO/PEMIs | Laurance | on track | 10-Feb-16 |
| Focus on LPD | 7 | Review LPD microplans with GIS and field surveys/ information - phase 1 and phase 2 | 7.2 | Complete the microplanning process by end-December 2015 (Develop and use comprehensive microplanning template and joint validation) | DWG/DWG | WHO/PEMIs | Laurance and Shamsher | on track | 10-Mar-16 |
| SIA Pre-campaign | 8 | Hold pre-campaign coordination meetings at National Level and ensure regional and provincial meetings are conducted | 8.1 | Discuss with MoPH for leadership for the National level meeting | DWG | PE partners | Mawand | Completed | 15-Dec-15 |
| SIA Pre-campaign | 8 | Hold pre-campaign coordination meetings at National Level and ensure regional and provincial meetings are conducted | 8.2 | Develop a dashboard for monitoring pre intra & post campaign | DWG | PE partners | Hani Nadi | Completed | 16-Nov-15 |



of Districts = 96

1st priority districts
2nd priority districts
3rd priority districts

| | District | % districts | Cases | % cases |
|----------------|----------|-------------|-------|---------|
| Priority 1 | 19 | 5 | 156 | 66 |
| Priority 1+2 | 47 | 12 | 199 | 84 |
| Priority 1+2+3 | 96 | 24 | 238 | 100 |

Key Risks

Afghanistan

- Failure to sustain high level government commitment
- Deteriorating security situation & access in the Eastern and Northern regions
 - 32/47 priority districts have >50% area under control of Anti Government Elements (21 >80%)
- Missed children in key accessible areas (Kandahar, Kunar)

Pakistan

- Continued presence of WPV in many parts of the country as highlighted by environmental surveillance
- Sub-district level SIAs quality gaps in key areas like Karachi and Peshawar
- Failure to sustain the commitment to polio eradication by the Government
- WPV in North Sindh

Pakistan: **Priority activities**

Core reservoirs : Karachi, Quetta block, and the Khyber-Peshawar corridor

Improve SIA quality

- Finalize the identification of the low performing sub-districts & putting plans in place before the April SIAs
- Fine tune the expanded Continuous Community Protected Vaccination (CCPV) in Khyber, Peshawar & Karachi

Strategic use of IPV

- North Waziristan end-February (done)
- Core reservoirs : end of March, beginning April (in progress)
- Additional rounds in Karachi and Quetta during April and May

Immediately fix the issues in North Sindh (central Pakistan)

- Strengthen the basics i.e. microplanning , supervision & monitoring for the April SIAs
- National EOC to monitor the progress on plans on real time basis

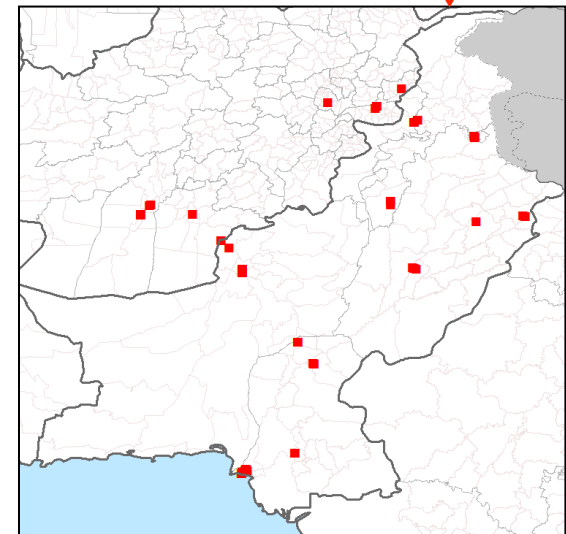
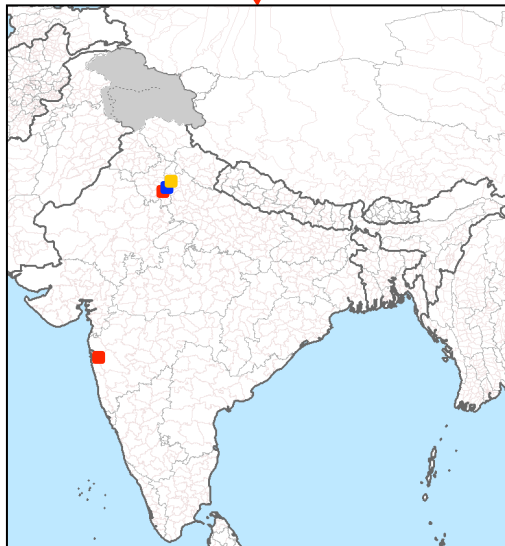
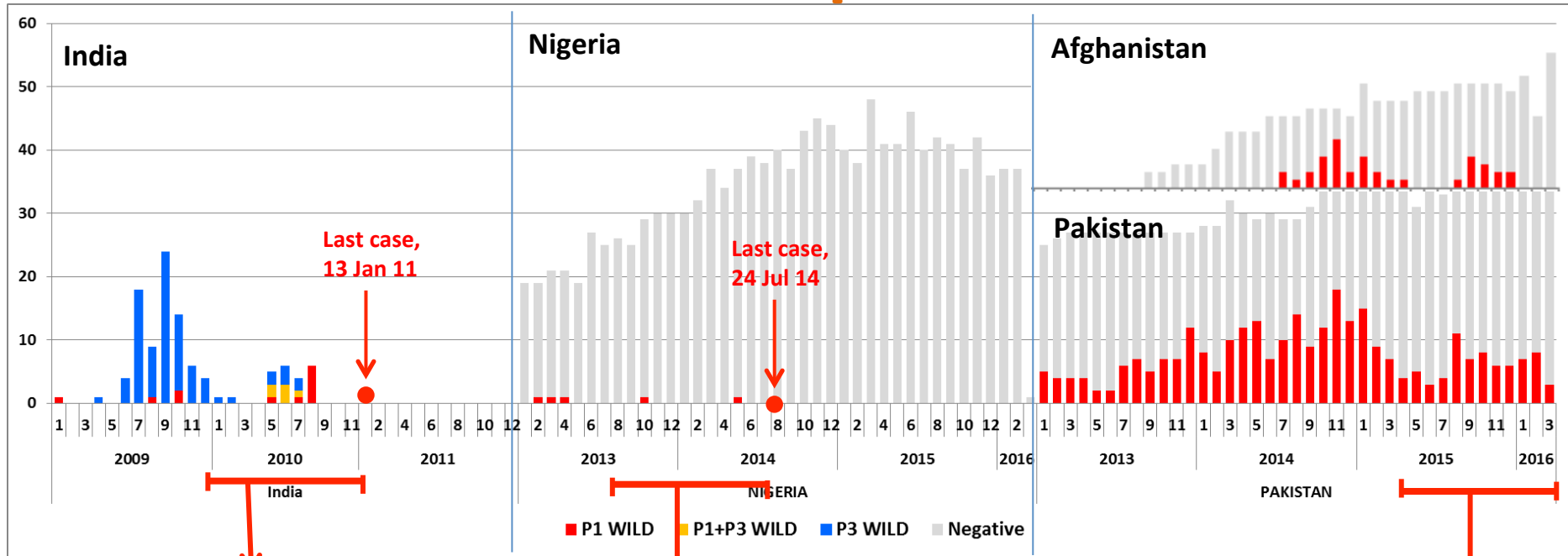
Afghanistan: **Priority Activities**

- Sustain efforts to improve oversight, coordination and implementation through Emergency Operations Center
 - National and regional levels
- Implement all components of the updated National Emergency Action Plan (NEAP), including
 - Scale up human resources in key Low Performing Districts (LPDs)
 - Improve SIAs performance and interventions for reducing missed children (micro-plan revision and validation, revisit strategy, and scale up of Front Line Workers training)
- Intensify collaborative efforts with partner agencies
 - Ensure that resources needed to implement expanded activities of this low season are met.

Summary

- Overall situation significantly improved
 - Decrease in number of polio cases, ES & reduced genetic diversity
 - Improved access & SIAs quality
- Better coordination between the two countries at all levels
- Low performing areas well identified & plans are being implemented towards the end of low transmission season
- Major risks
 - Greater Peshawar – Nangarhar
 - Quetta Block – Kandahar
 - Karachi
 - Inconsistently reached population pockets due to SIAs quality at the sub-district level and inaccessibility in parts of Afghanistan

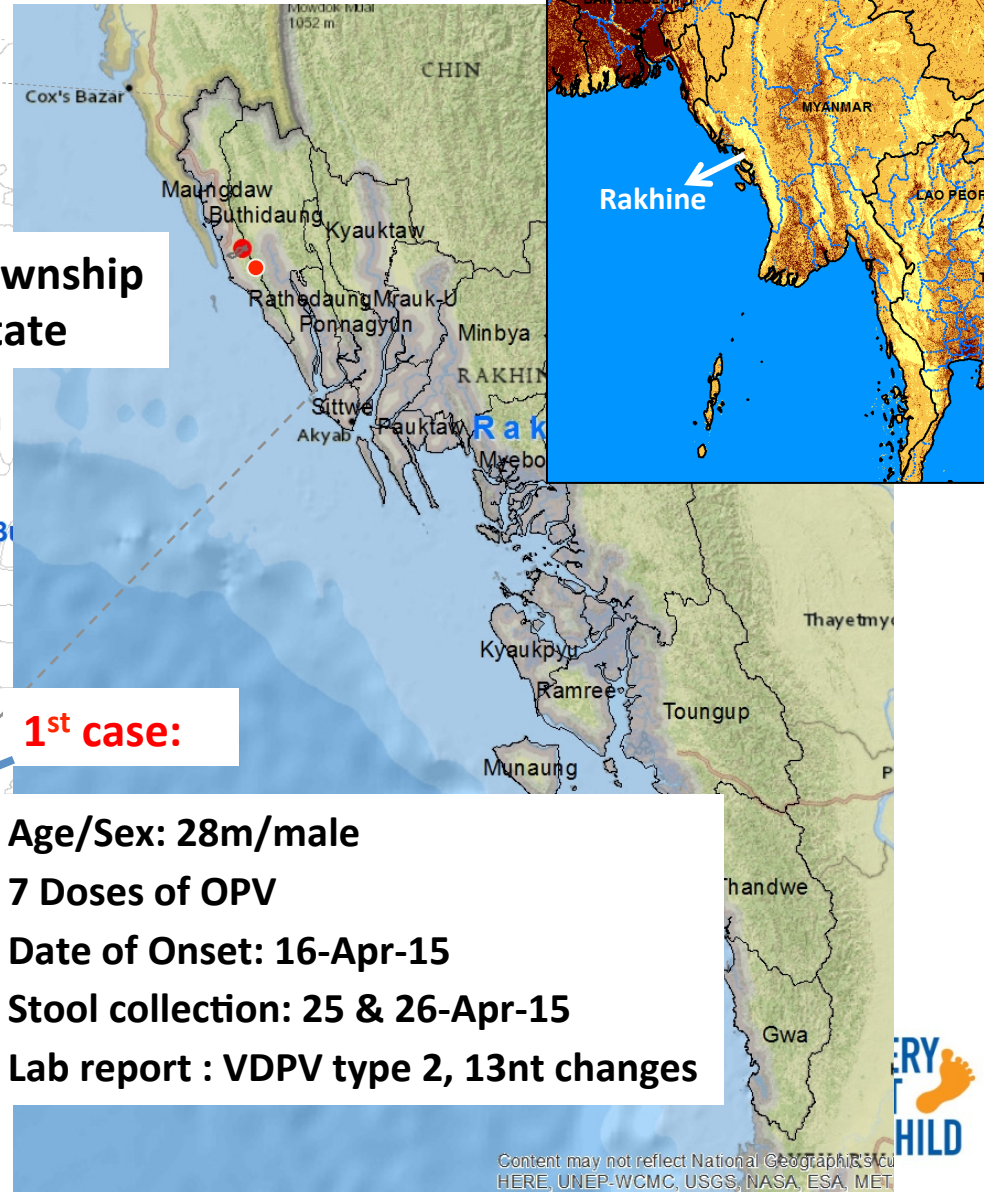
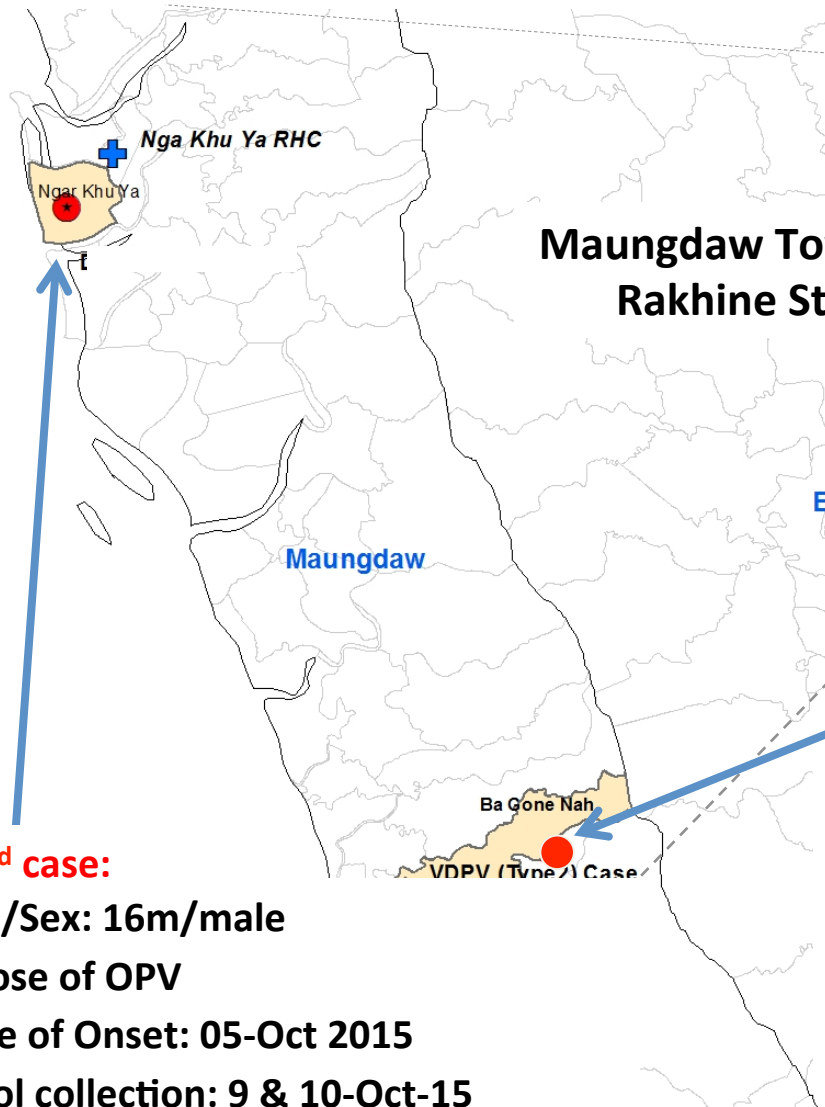
On track to interrupt transmission ?



Vaccine derived type 2 virus outbreaks

- Myanmar
- Guinea
- DRC

Myanmar - cVDPV2 Outbreak

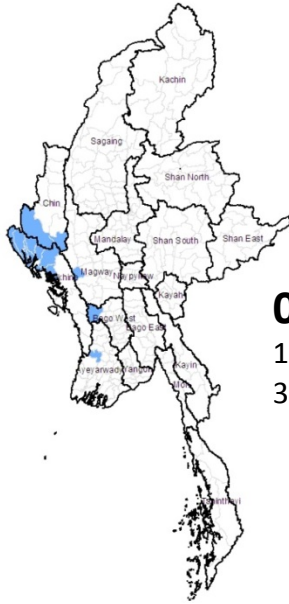


Content may not reflect National Geographic Society
HERE, UNEP-WCMC, USGS, NASA, ESA, MET



Myanmar- SIAs response

SIA 1



05-07 December 2015

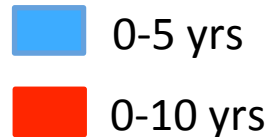
15 townships;
360,000 children (0-5 years).

SIA 2

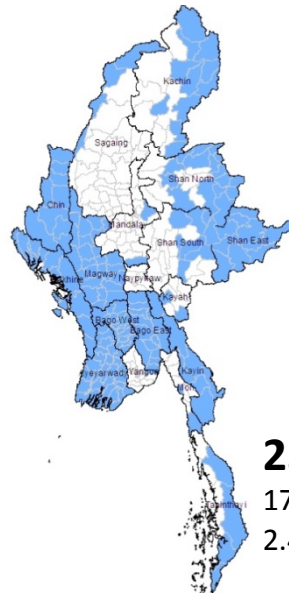


26-28 December 2015

20 townships -> 0-5 years
2 townships -> 0-10 years
~ 580,000 children



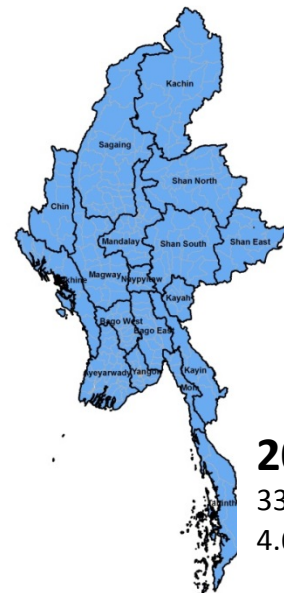
SIA 3



23-25 January 2016

171 townships
2.4 million children (0-5 years).

SIA 4



20-22 February 2016

330 townships
4.6 million children (0-5 years)

Summary : Myanmar cVDPV2 outbreak

Outbreak Response Assessment

- Strong and appropriate response by national authorities (National public health emergency declared by MoH - national and state outbreak response cells established)
- Good SIA quality
- Adequate financial and human resources
- **Surveillance gaps**
- **Routine immunization coverage sub-optimal in outbreak area**
- cVDPV2 transmission may have been interrupted, however uncertainty remains due to gaps in surveillance
- Note: IPV was introduced in RI in December 2015

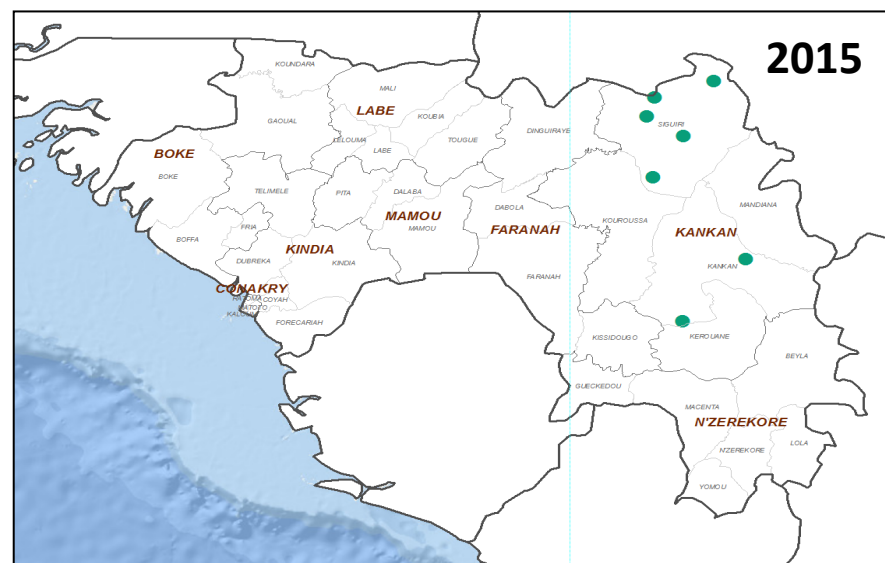
Recommendations

- One additional SIA in selected high risk townships of Rakhine before Switch
- Improve AFP surveillance at National and sub national levels
- Improve Routine Immunization in areas of low coverage



Guinea- cVDPV2 Outbreak

- 7 cases in 2015: genetically linked to August 2014 case
- Currently confined to Kankan Region (2 districts)
- Surveillance activities adversely affected during the Ebola outbreak
- Emergency outbreak response ongoing
- Risk: reappearance of Ebola cases could affect quality of surveillance



Guinea - Challenges and Progress

- **National Commitment:**
 - Ebola factor and national priority
 - New Minister, New EPI Director, Higher commitment
- **National and Sub-national capacity:**
 - Surge completed (19 International & 36 national consultants)
- **Quality of SIAs**
 - First two SIAs (sept and Oct) of sub-optimal quality
 - Next three rounds (Dec, Jan, Feb): improved quality, particularly in Kankan region but coverage in Conakry less than 90%
 - 6th response (Planned): 7 April 2016: NID
- **Quality of Surveillance**
 - Specimen shipment and testing resumed
 - Case detection and data management improved
 - 5/8 regions achieved Non-Polio AFP rate >3/100,000
 - 3 regions incl. Conakry still below required level but >2/100,000
- **Outbreak response assessment recommendations just issued**

Summary : Guinea cVDPV2 outbreak

- **Outbreak confined to Kankan** but circulation continues (latest case reported on Dec 14, 2015)
- **Medium to high risk** of continuation beyond switch with risk of spread to neighbouring areas
- **Active surveillance** has recently started but likelihood of missing transmission can't be ruled out
- Outbreak response assessment emphasizes need to enhance surveillance
- Surveillance indicators in Liberia and Sierra Leone below required standards.
 - Urgent efforts to enhance surveillance in these countries.
- Note: IPV introduced in the routine immunization programme in November 2015

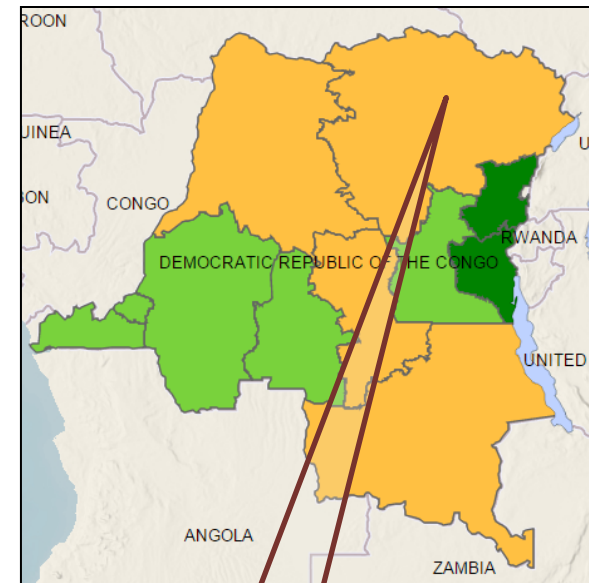
DRC – VDPV2 event

- 4 year old girl, 2 SIAs OPV doses
- Date of onset 13-Jan-2016 (reported to WHO-HQ 1-March-2016)
- Closest match is sabin 2 with 16nt changes (immunodeficiency ruled out)
- 25 contacts negative for polio
- Classified as **aVDPV**
- Active surveillance during SIAs
- Note: IPV in routine since April 2015

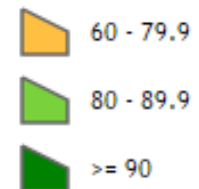
SIAS

- 24-26 March, NIDs < 5 years
- 14-16 April, NIDs < 5 years
- 25-27 April, SNID, Bas Uélé and Tshopo provinces < 10 years
- **Switch** on 30 April

Immunity profile last 12 months



NPAFP 3+ dose
percentage for
6M-59M



Approximate location of
case. Orientale province,
Yaleko district

Circulating-VDPV2 tracking sheet

Most recent virus:

Nigeria (AFP case: 16-May-2015, ENV isolate: 4-Mar-2015)

Pakistan (AFP case: 9-Feb-2015, ENV isolate: 28-Mar-2015)

Guinea (AFP case: 14-Dec-2015); Myanmar (AFP case: 5-Oct-2015); South Sudan (AFP case: 19-Apr-2015)

Tracking cVDPV2 Outbreaks with the goal of stopping OPV2 use in April 2016

Report date: 5 April 2016

| Report date: 5 April 2016 | | | Year / Month | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--------|------------------|--------------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|
| Outbreak, year of emergence | Source | State / Province | 2014 | | | | | | | | | | | | 2015 | | | | | | | | | | | | 2016 | | | |
| | | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. |
| Nigeria, 2005-08th | AFP | Borno | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Katsina | | | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| | | Kano | | | | | X | X | | X | | X | | | | | | | | | | | | | | | | | | |
| | | Jigawa | | | | | | | | | | X | | | | | | | | | | | | | | | | | | |
| | ENV | Jigawa | | | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| | | Kano | | | | X | X | X | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | | Kaduna | | | | | | X | | X | | X | X | | | | X | | | | | | | | | | | | | |
| | | Katsina | | | | | | X | X | | | | | | | | | | | | | | | | | | | | | |
| Sokoto | | X | | X | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | |
| Chad, 2012 | AFP | Adamawa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Borno | | X | X | X | X | X | | | X | | | | | | | | | | | | | | | | | | | |
| | | Kano | | | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| | | Jigawa | | | | | | | | | | X | | | | | | | | | | | | | | | | | | |
| | | Yobe | | | | | | | | | | X | X | | | | | | | | | | | | | | | | | |
| | ENV | Borno | X | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| | | Kano | | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Nigeria, KDS-1 | AFP | FCT, Abuja | | | | | | | | | | | | | | | | X | | | | | | | | | | | | |
| | ENV | Kaduna | | | | | | | X | | | X | | X | | | | | | | | | | | | | | | | |
| Pakistan | AFP | Balochistan | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | FATA | X | | X | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| | | KP | | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| | | Sindh | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ENV | Sindh | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pakistan (recent emergences) | AFP | FATA | X | X | | | X | | | | | | | | X | | | | | | | | | | | | | | | |
| | | KP | | | | | X | | | | | | | | X | | | | | | | | | | | | | | | |
| | | Sindh | | | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| | ENV | Balochistan | | | | | | | | | | | | | | | X | | | | | | | | | | | | | |
| | | Sindh | | | | | | X | | X | X | X | X | X | X | X | X | | | | | | | | | | | | | |
| South Sudan | AFP | Unity | | | | | | | X | | | | | | | | | | | | | | | | | | | | | |
| Myanmar | AFP | Rakhine | | | | | | | | | | | | | | | X | | | | | | X | | | | | | | |
| Guinea | AFP | Kankan | | | | | | X | | | | | | | | | | | | X | | X | X | | X | | | | | |

X At least one cVDPV2 reported per given month

VDPV2 event tracking sheet, 2015-2016, showing nucleotide changes

New : India (Bihar, Siwan) AFP case with Feb. onset. Senegal (Dakar, Dakar Nord) ENV isolate with Nov. spec date.

Tracking other VDPV2 events since 2015

Report date: 5 April 2016

| Affected Country | | Source | 2015 | | | | | | | | | | | | 2016 | | | |
|------------------|-------------|--------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|
| | | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. |
| 1 | Chad | case | 7 | | | | | | | | | | | | | | | |
| 2 | China | case | | | 22 | | | | | | | | | | | | | |
| | | ENV | | | | | | | | | | 7 | | | | | | |
| 3 | DRC | case | 10 | | | | | 7 | | | | | | | 16 | | | |
| 4 | Egypt | case | | | | | | | | | | | | | | | | |
| | | ENV | | 6 | | | | 8 | | | | | | | | | | |
| 5 | Ethiopia | case | | | 7 | | | | | | | | | | | | | |
| 6 | India | case | | 7 | | | | | | | | | | | | 6 | | |
| | | ENV | 6-8 | | 6 | 6-11 | 13 | | | | 6 | | | 7 | | 6-7 | | |
| 7 | Iraq | case | | | | | | | | | | | | | | 7 | | |
| 8 | Niger | ENV | | | | | | | | | | | 8 | | | | | |
| 9 | Nigeria | case | | | | | | | | | | | | | | | | |
| | | ENV | 6 | 6-7 | 6 | | | | | | | | | | | | | |
| 10 | Pakistan | case | 11 | | | | | | | 9 | | | | | | | | |
| | | ENV | 7 | | | 9 | | 7 | 7 | | 8 | | | 6 | | | | |
| 11 | Senegal | ENV | | | | | | | | | | | 6 | | | | | |
| 12 | South Sudan | case | | | | 14 | | | | | | | | | | | | |
| 13 | Turkey | case | 6 | | | | | | | | | | | | | | | |

aVDPV

NEW: pending

NEW: pending



At least one VDPV2 report per given month. If more than one virus was reported the range of nt. changes is provided

Programme Priorities - Next 6 months

- Continued **support to Pakistan and Afghanistan** to implement all activities of NEAP
 - Improvement of SIAs quality
 - Additional allocation of IPV
- **Guinea and DRC outbreaks**
 - Enhance surveillance and quality of response
 - Use of mOPV2 post Switch
- Strengthen **outbreak response capacity** at Global and regional levels
- **Political advocacy and resource mobilization** to sustain efforts in non endemic countries

Endgame Plan Objectives, 2013-18

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



Endgame Plan Objectives, 2013-18

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

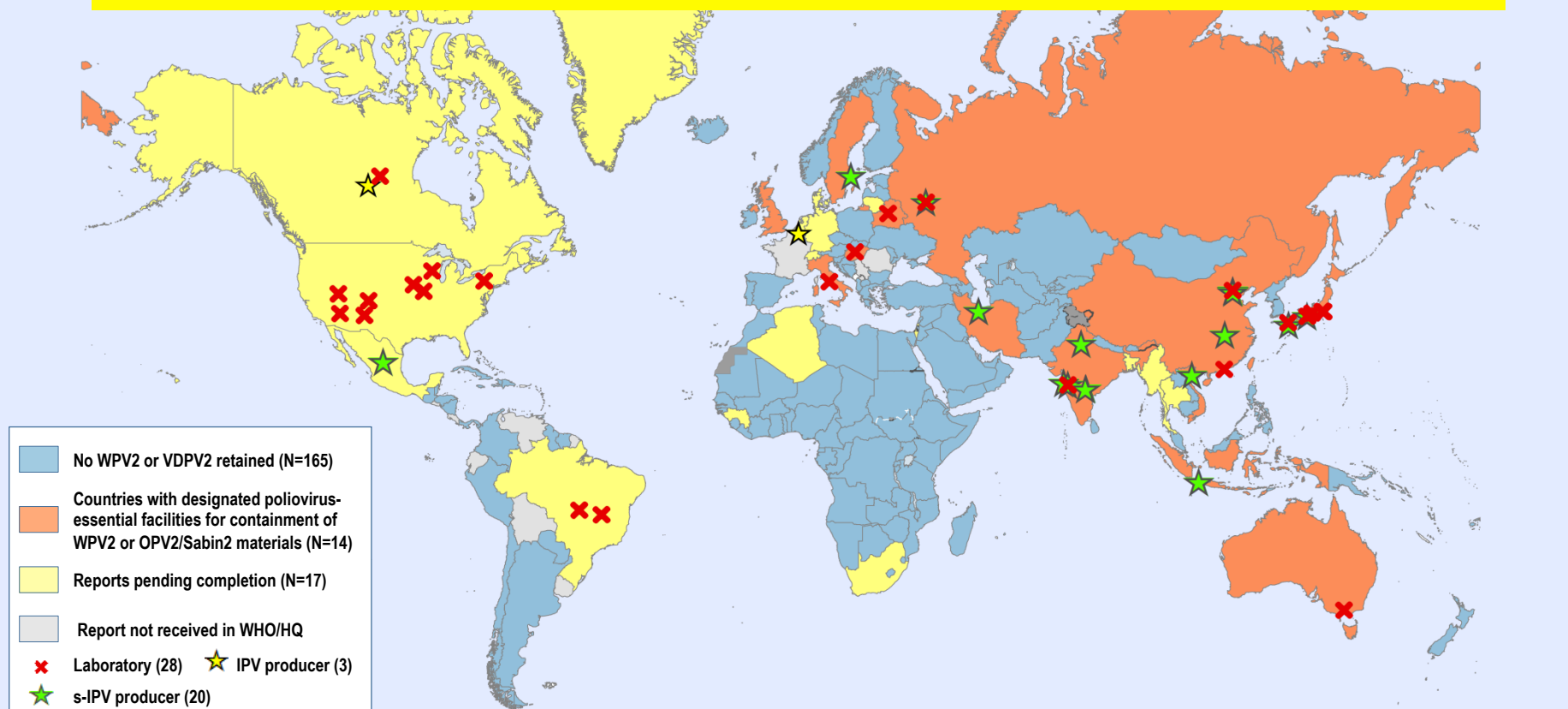


GAP III implementation - **PROGRESS / STATUS**

| | 15 October 2015 | 31 March 2016 |
|---|---|--|
| Phase I: reduce the number of facilities containing PV2: <ul style="list-style-type: none"> • <i>WPV2/VDPV2 by end-Dec 2015</i> | 0 official reports received | 159/198 official reports received 13 countries designated 38 Poliovirus Essential Facilities (PEF) to retain WPV2 or Sabin2 materials |
| <ul style="list-style-type: none"> • <i>OPV2/Sabin2 by end-July 2016</i> | 0 official reports received | 0 official reports received |
| National capacity building: | 10 containment implementation and certification workshops conducted for 122 countries | 7 additional containment implementation and certification workshops conducted for 76 countries |
| Phase II: reduce risk in remaining facilities: | 0 facilities certified against GAPIII requirements | 0 facilities certified against GAPIII requirements |
| GAPIII Containment Certification Scheme (CCS) | Draft in development | CCS shared with stakeholders for comments |

Target 1: Complete Phase I (WPV2/VDPV2) by 31 Dec 2015

198/204 official reports received
18 countries reported hosting 51 designated
Poliovirus Essential Facilities (PEFs)



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.

GAP III Implementation - CHALLENGES/STRATEGIES

| Challenges | Strategies |
|---|--|
| Tight deadlines for completion | Allow for interim solutions (CCS) |
| Low general awareness of PV containment | Improve communications with stakeholders, including non-polio lab networks |
| Resistance to destruction of sample collections | Development of guidance for identification and categorization of potentially infectious materials to support completion of Phase I for Sabin 2 |
| Delayed identification of national containment authorities in some countries | Increase visibility/priority for PV containment through Regional Offices High level advocacy (Letters to MoH, meetings at EB, WHA) |
| Lack of specialized technical resources at global and national level | Training provided for Phase I & II implementation Training planned for certification auditors |

GAPIII - Activities underway

Global and Regional mechanisms

- 🦠 International oversight mechanism to ensure harmonized procedures
- 🦠 Regional Certification Commission meetings dedicated to containment
- 🦠 Establishment of Containment advisory Group (CAG)

Communications and Advocacy

- 🦠 Awareness raising /engagement of other networks
- 🦠 Containment page on GPEI website : resource material & regular updates
- 🦠 Engagement with countries hosting poliovirus-essential facilities

Technical support:

- 🦠 Draft of Containment Certification Scheme (CCS) out for comments
- 🦠 Guidance for identification /categorization of potentially infectious materials
- 🦠 Regional GAPIII Implementation and certification trainings
- 🦠 Development of pool of GAPIII containment auditors

Endgame Plan Objectives, 2013-18

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

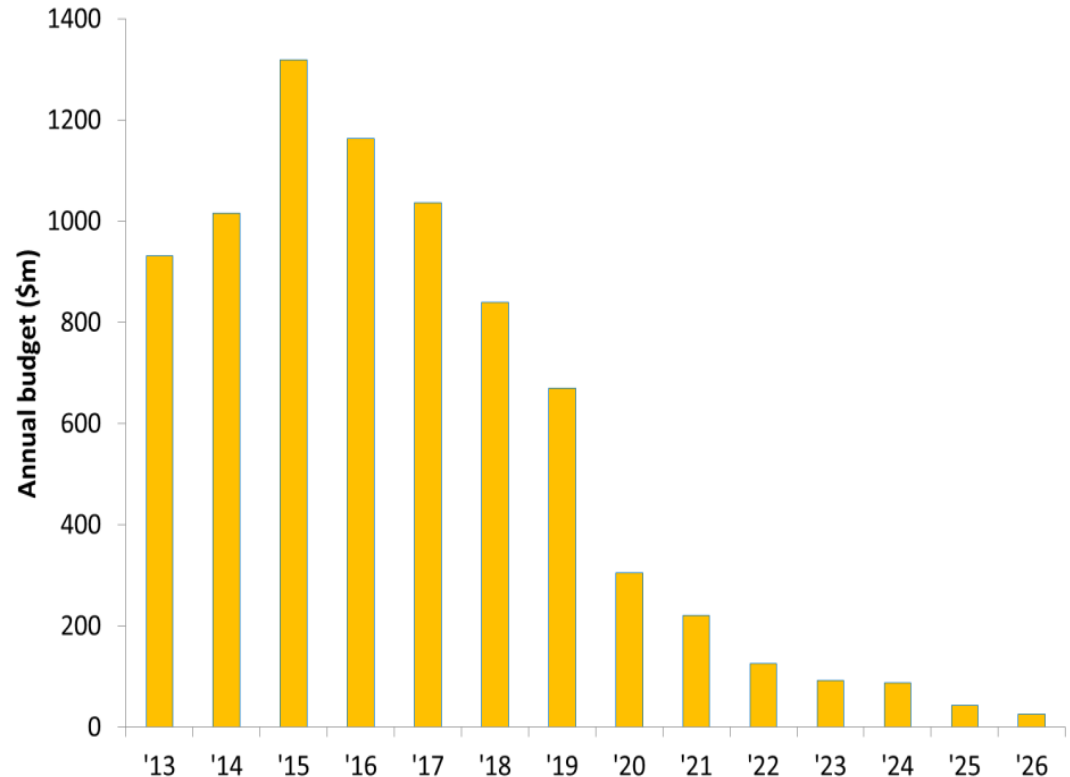


As polio goes, so will **GPEI**

GPEI Budget (US \$ million)

Timeline

| | |
|--|------|
| Interruption in Nigeria | 2014 |
| Interruption in Pakistan and Afghanistan | 2016 |
| Global certification | 2019 |



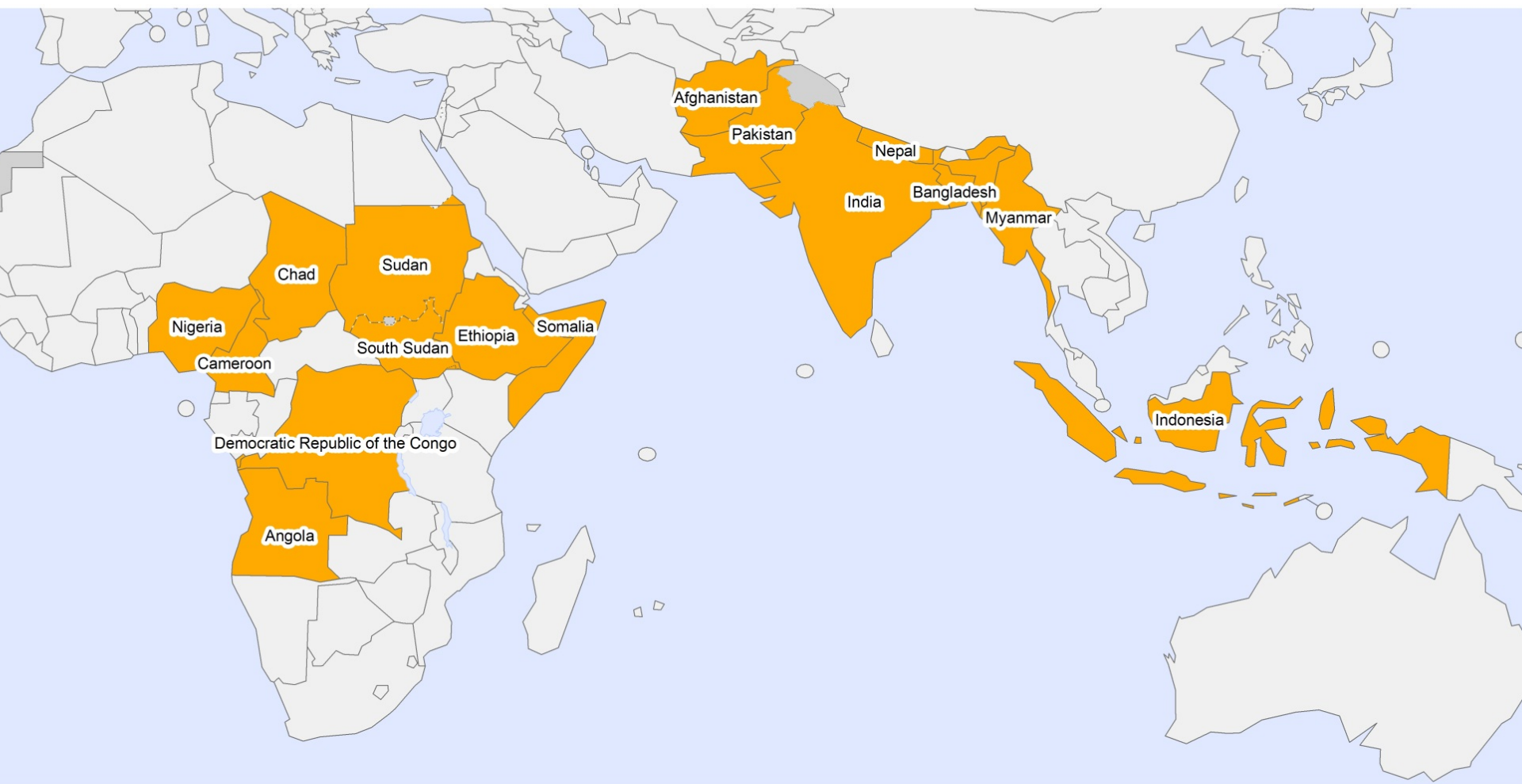
Transition planning

- 1. Plan in 16 priority countries**
- 2. Global plan**
- 3. Sharing lessons learned**

Maintain and mainstream essential functions

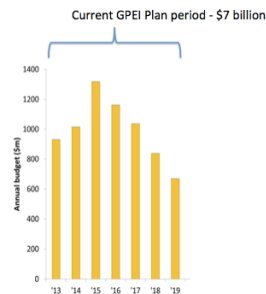
Maximize contribution to a broader health agenda

Polio transition planning- 16 priority countries

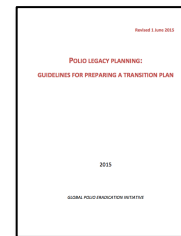


Transition planning - Country-led effort

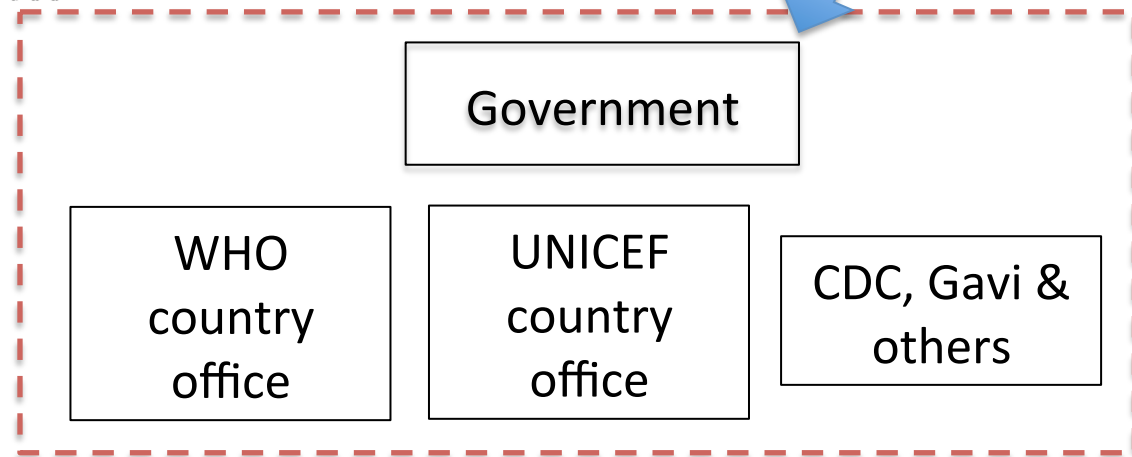
1. Information



2. Technical transition guidance



3. Advocacy support



4. Technical assistance capacity

Consultants

Current staff

Other options?



Summary: Priorities for next 6 months

Objective 1

- Support to Pakistan and Afghanistan to implement NEAP
- Guinea and DRC outbreaks
- Strengthen outbreak response capacity at Global and regional levels
- Political advocacy and resource mobilization to sustain efforts in non endemic countries

Objective 2

- The Switch !

Objective 3

- Clarify technical issues and accelerate implementation of Phase II

Objective 4

- Transition Plans in priority countries

Thank you

