



Status of Polio Eradication

Report to SAGE, 5-7 November, 2013



Presentation Outline

- Progress in Endemic countries
- Polio outbreaks
- Status of cVDPV2 outbreaks
- Program risks and mitigation priorities
- IMB recommendations

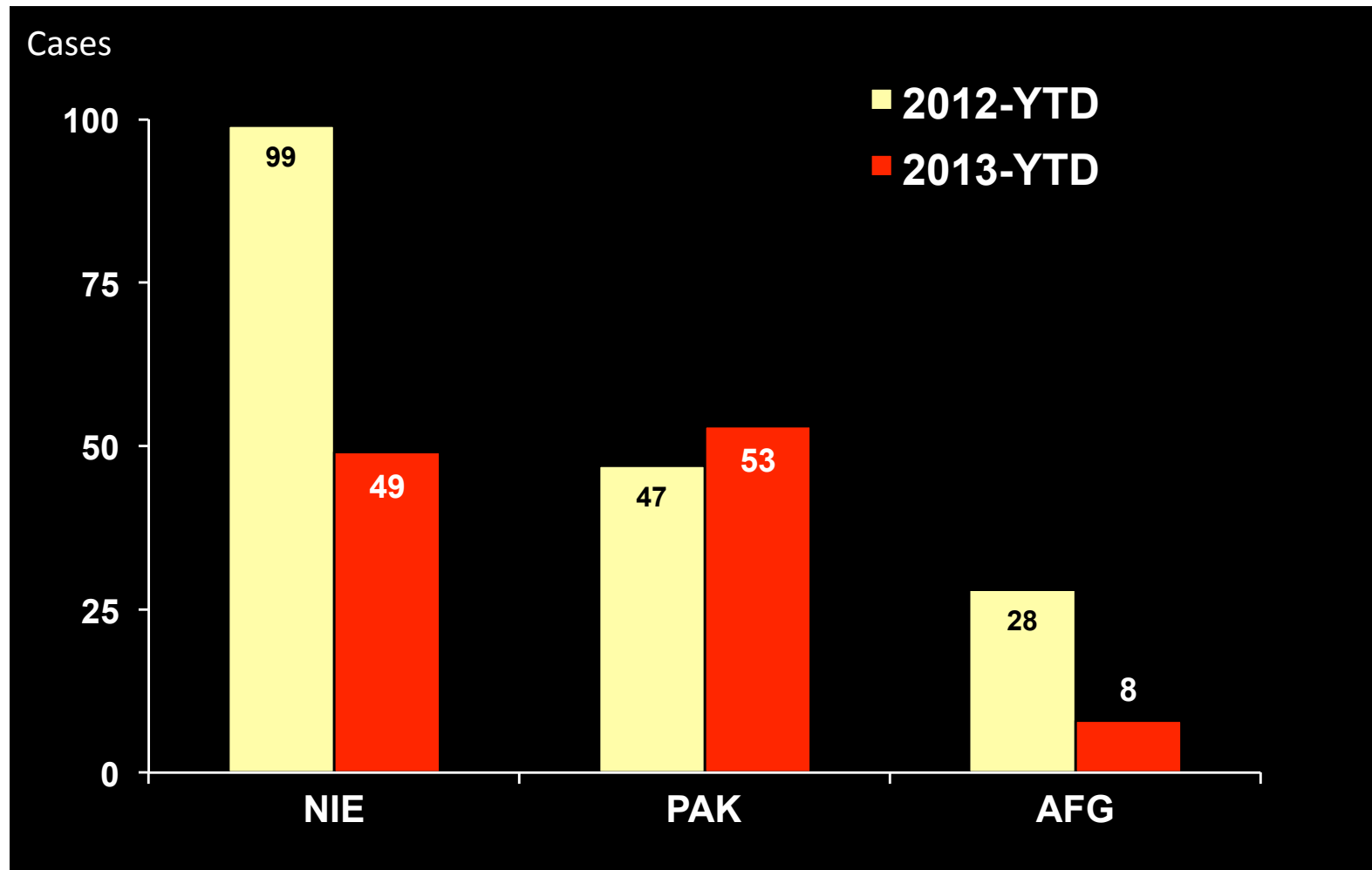
Issues for SAGE Guidance

- Access in insecure areas infected with WPV/cVDPV2
- Rapidly stopping complex multi-country polio outbreaks
- Preventing outbreaks of polio

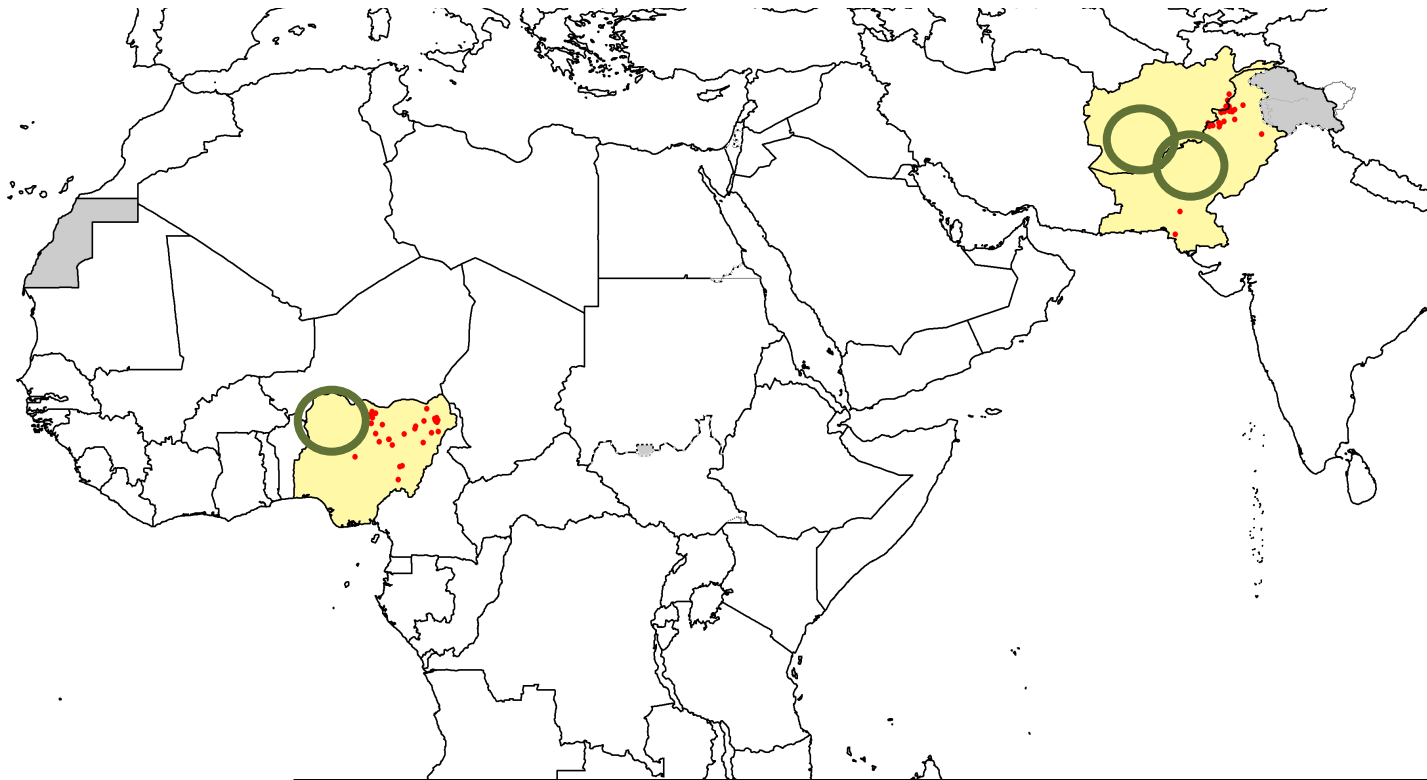
Endemic Countries

Progress in Endemic Countries

WPV cases to date
172 in 2012 - 110 in 2013



Endemic Polio Cases, last 6 months



- No type 3 virus globally since Nov 2012
- Nearly 40% decline in endemic virus
- No endemic transmission in AFG Since Nov 2012
- No virus in 3 of 7 reservoirs

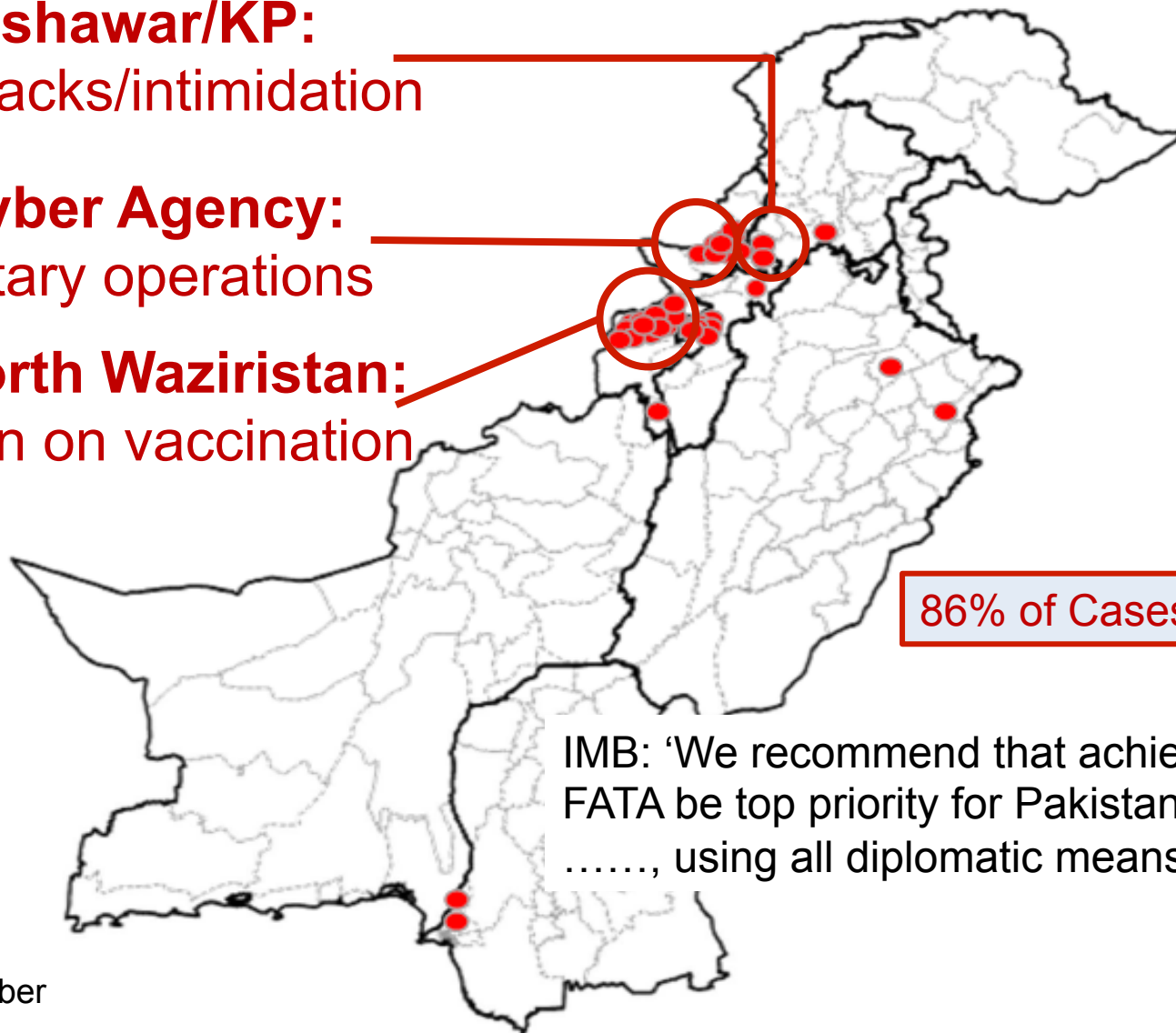
Pakistan, 2013*

> 500,000 children unreached with OPV

Peshawar/KP:
attacks/intimidation

Khyber Agency:
military operations

North Waziristan:
ban on vaccination



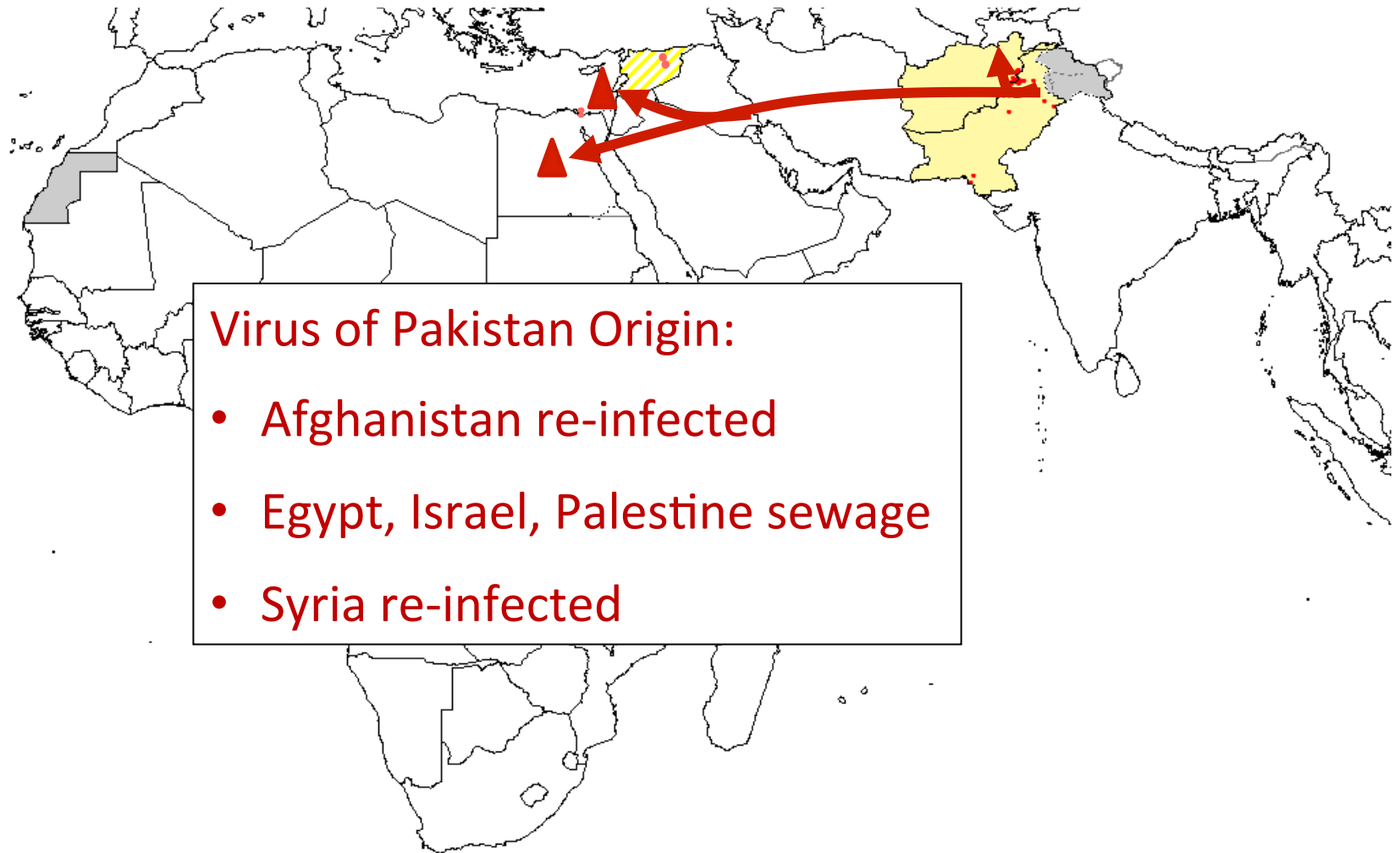
IMB: 'We recommend that achieving access in FATA be top priority for Pakistan's polio program, using all diplomatic means available

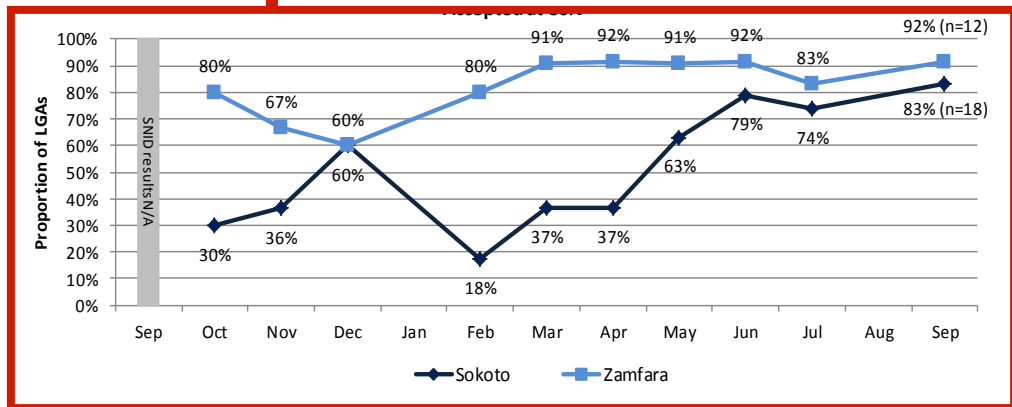
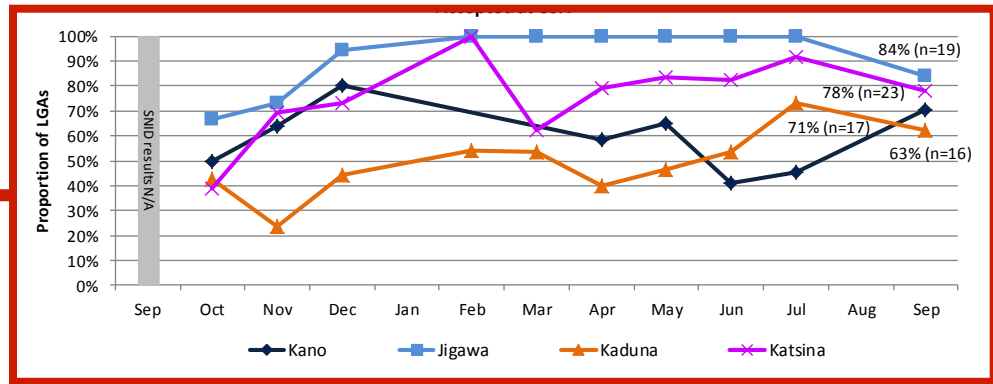
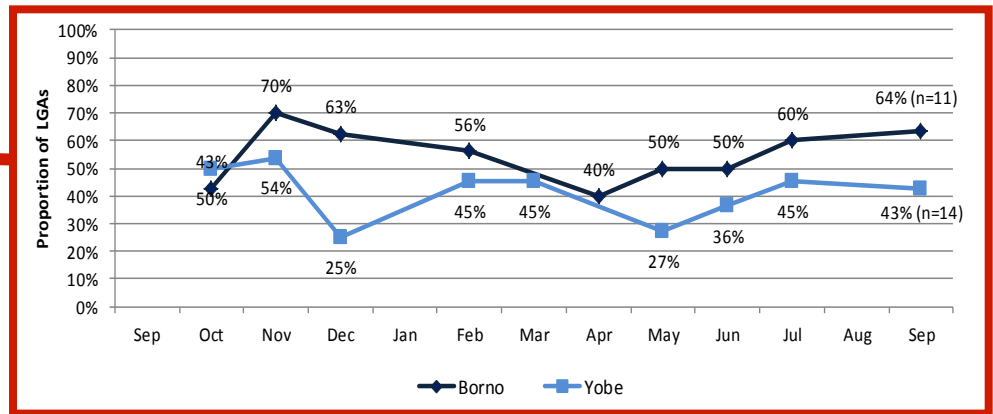
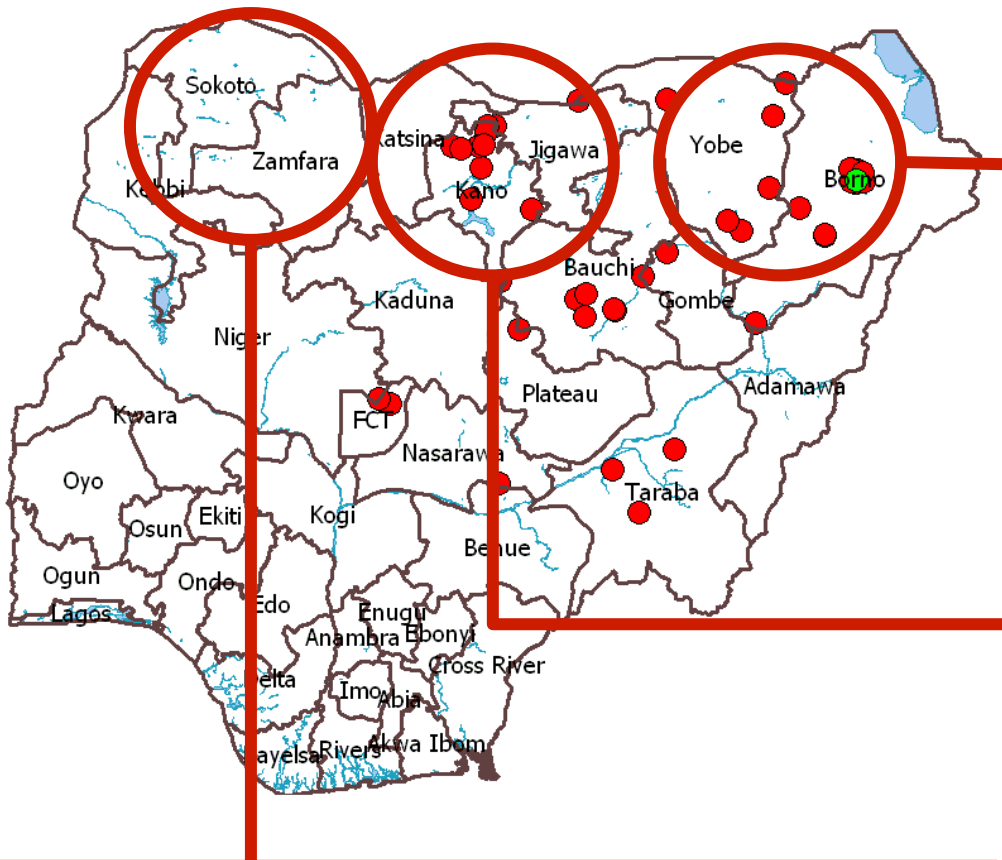
*As of 26 October

Pakistan Priorities

- area-specific access plans
- transit site vaccination
- religious scholars initiative (with Saudi Arabia)
- elders negotiation
- Pakistan military engagement (with UAE)
- provision of physical security
- operationalize Prime Minister's Cell

International Spread of Polio from Pakistan, 2013



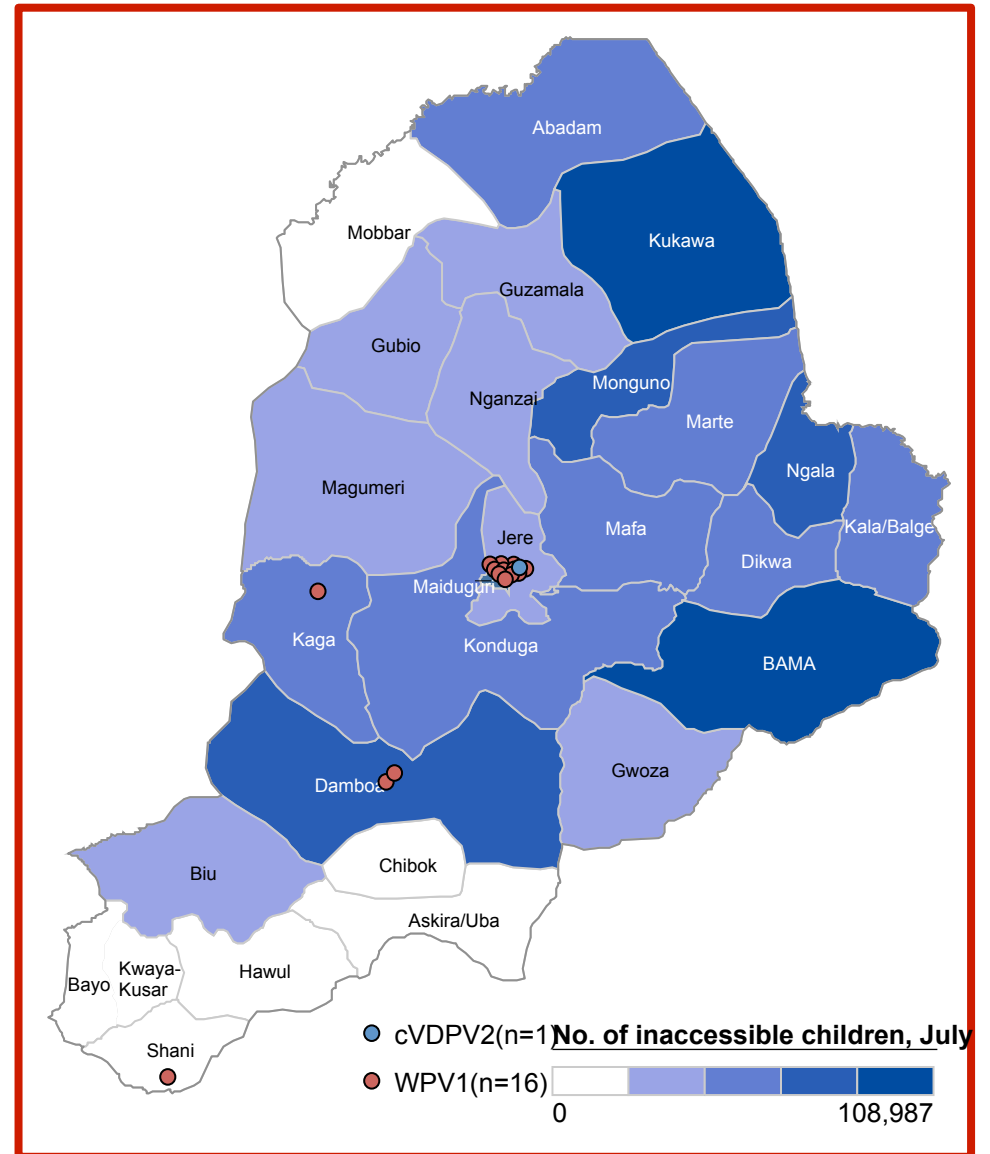
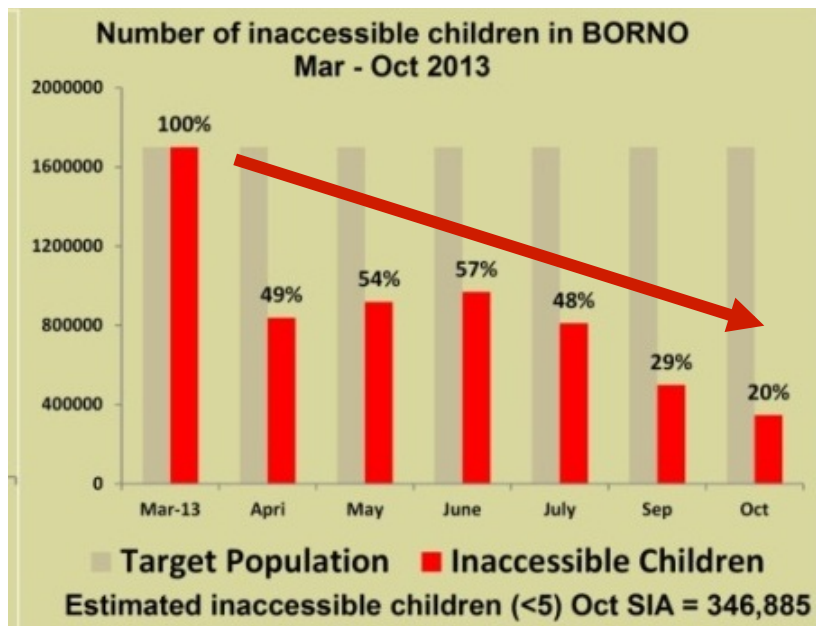


Nigeria

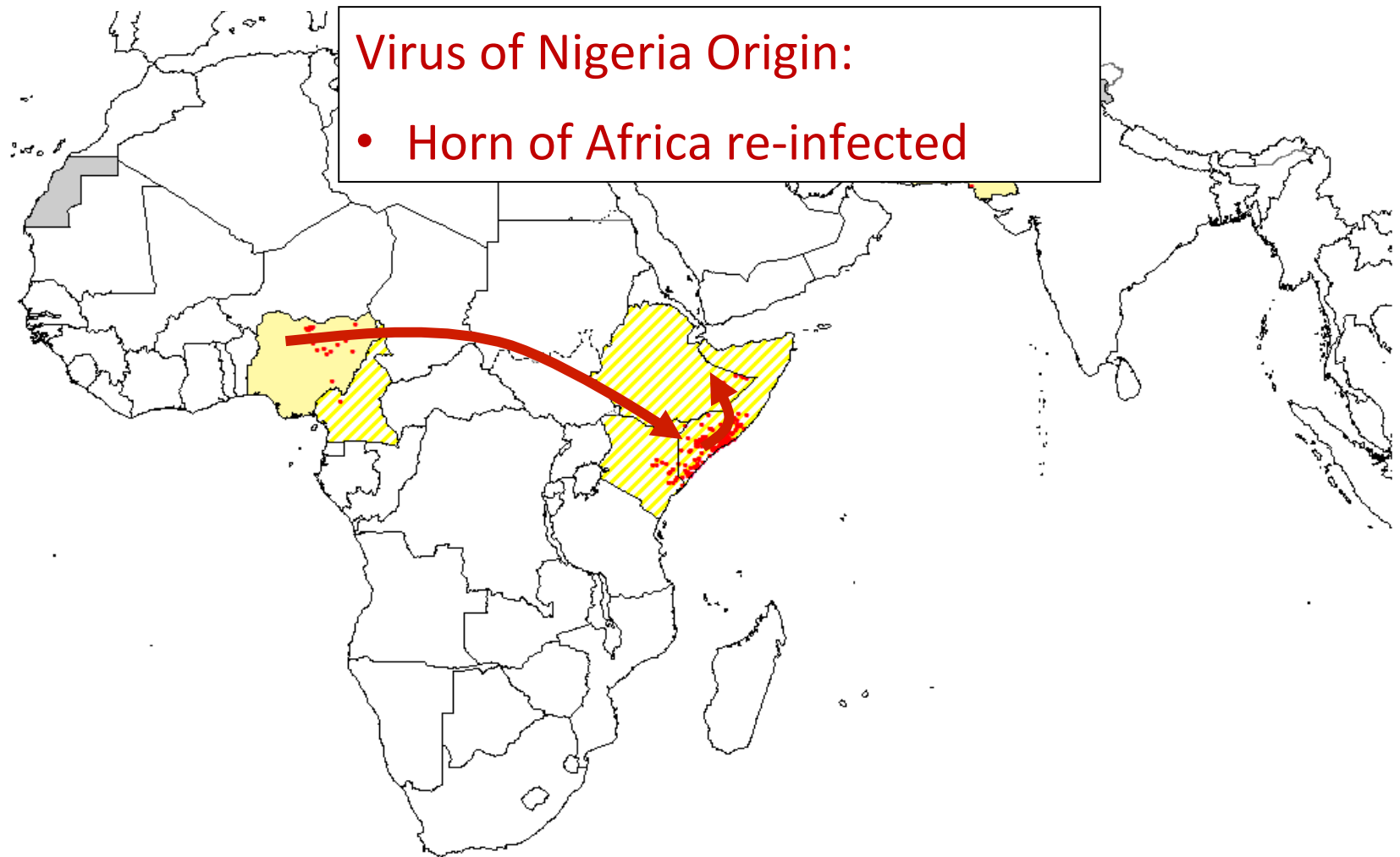
2013

Borno

Insecurity

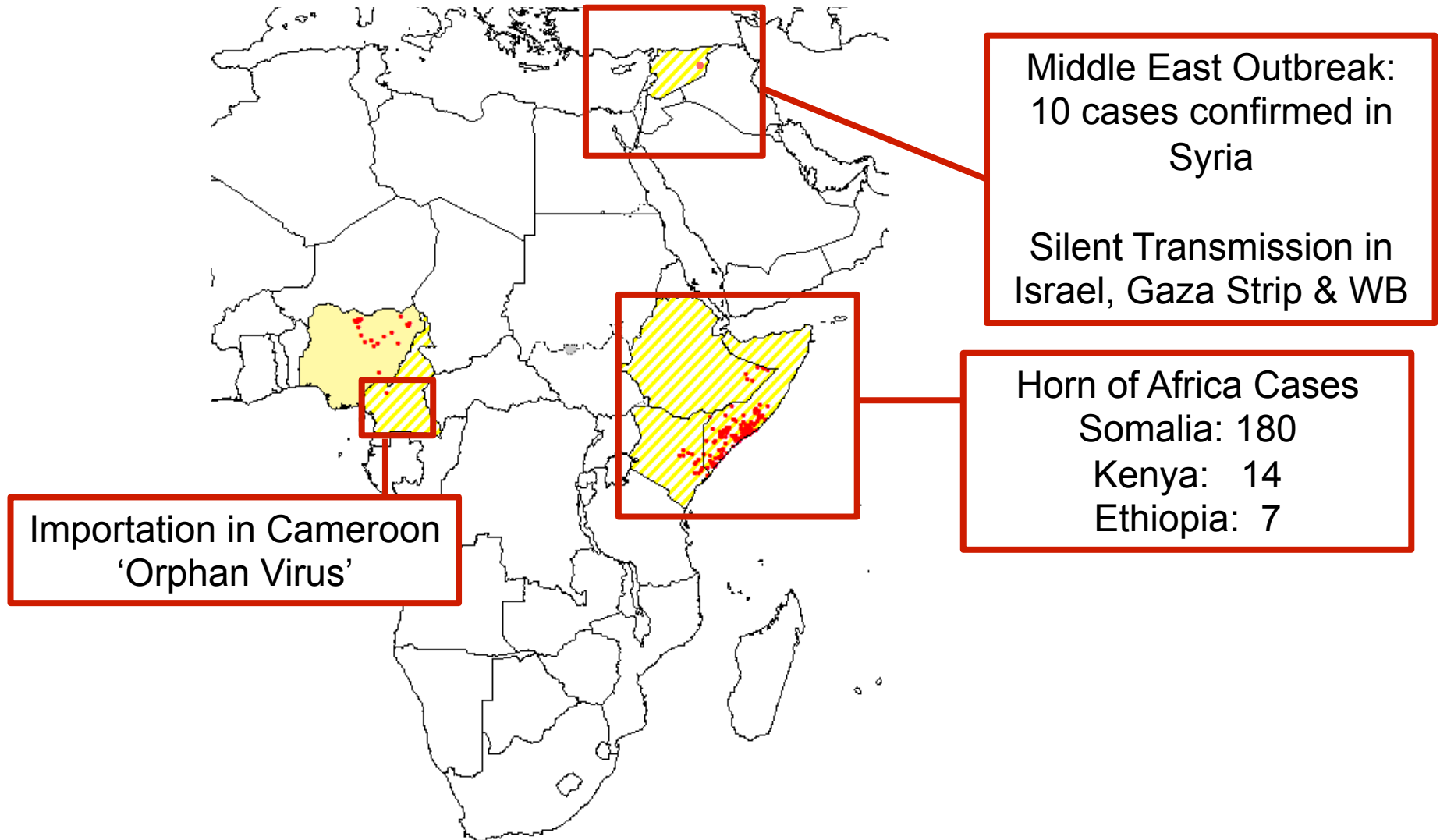


International Spread of Polio from Nigeria, 2013

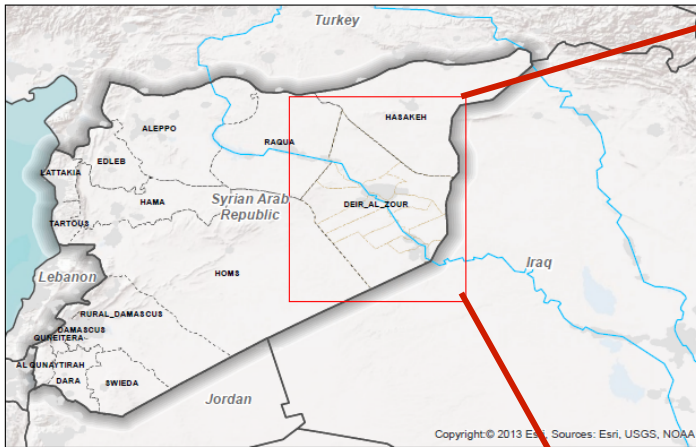


Polio Outbreaks

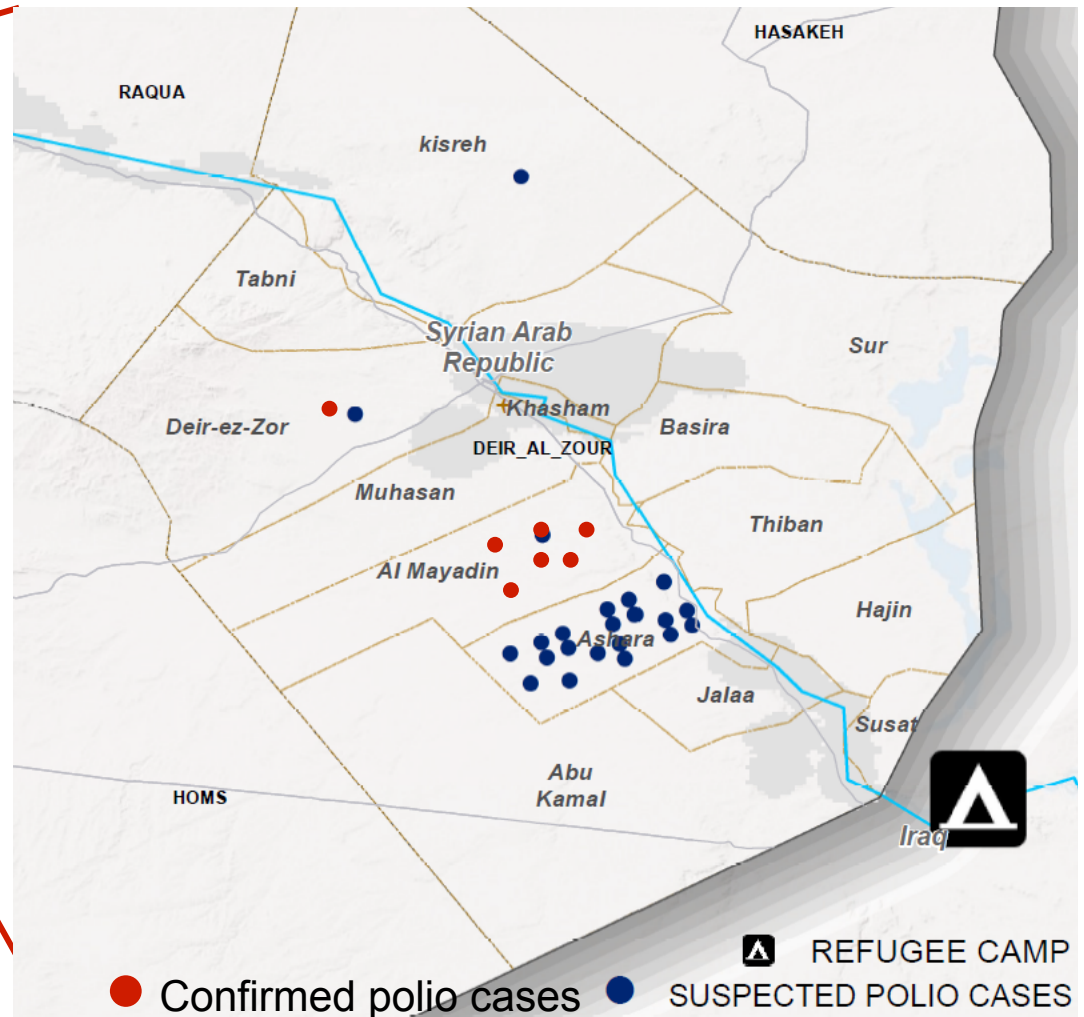
Situation in Outbreak Countries



Polio in Syria



- 10 confirmed cases
- onset Aug - Oct
- virus possibly PAK origin
- wider area likely infected
- response plan ongoing



Feb - Oct 2013

- [illegible]

*'Declares the new international spread of
wild poliovirus an emergency for all Eastern
Mediterranean Member States....'*

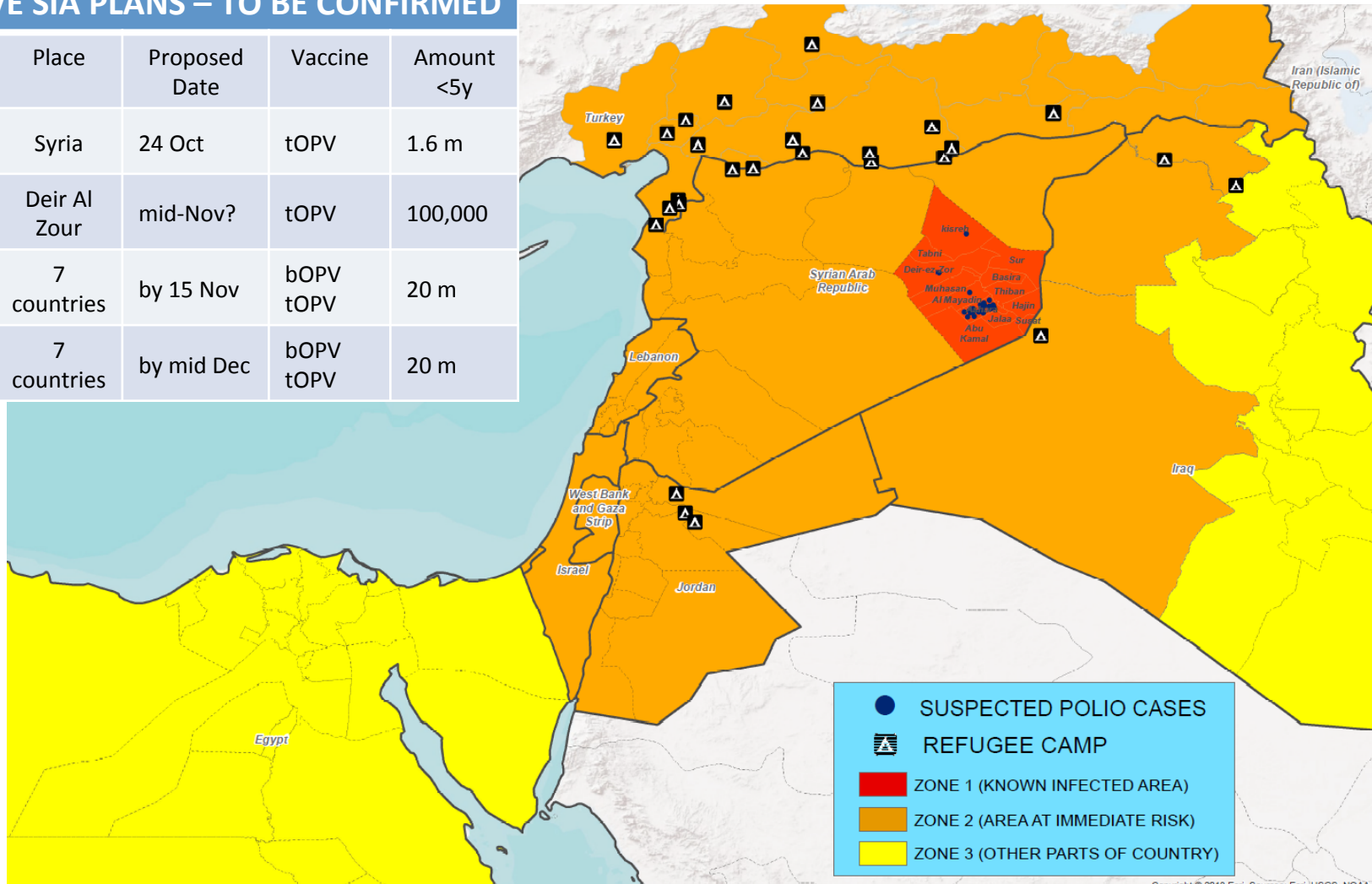
**WHO Regional Committee
30 October 2013, Oman**

- **Oman:** US\$ 5 million in new funding
- **Saudi Arabia:** facilitate role of religious scholars
- **UAE:** scale-up engagement in FATA/Pakistan
- **SYR, LEB, JOR, IRQ, EGY, oPT:** coordinated outbreak response

Multi-country Response

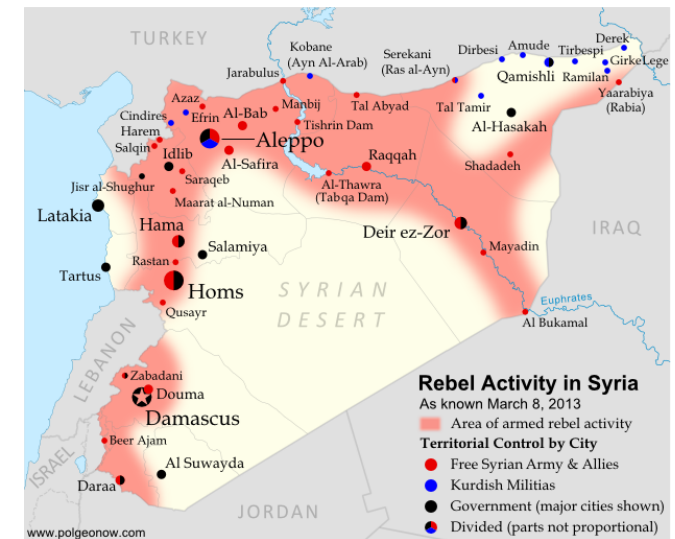
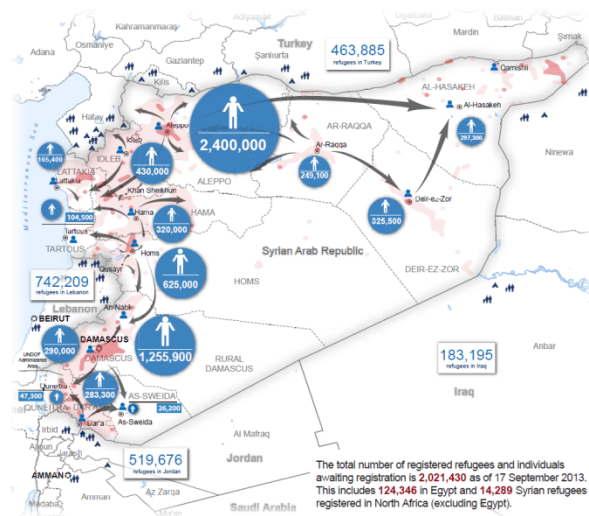
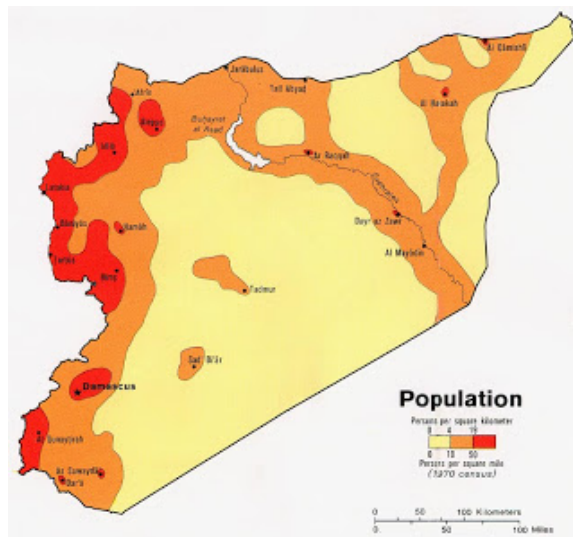
TENTATIVE SIA PLANS – TO BE CONFIRMED

	Place	Proposed Date	Vaccine	Amount <5y
Round 1	Syria	24 Oct	tOPV	1.6 m
Round 2	Deir Al Zour	mid-Nov?	tOPV	100,000
Round 2	7 countries	by 15 Nov	bOPV tOPV	20 m
Round 3	7 countries	by mid Dec	bOPV tOPV	20 m



Optimizing Coverage within Syria

- detailed mapping & engagement with humanitarian actors
- detailed mapping of access, conflict & actors
- actively exploring all options with Govt of Syria & UN system



Middle East Outbreak

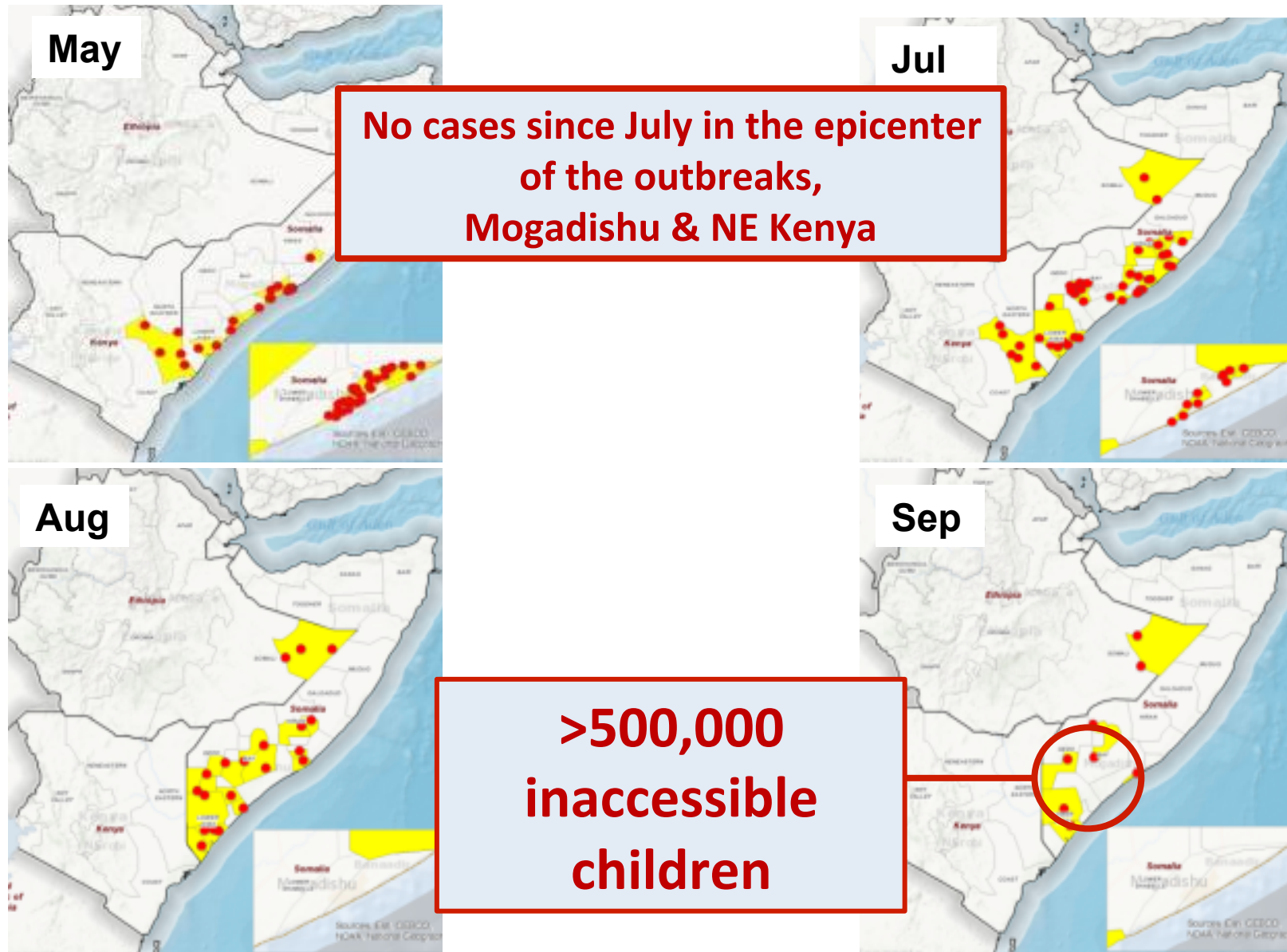
Operations Management

- | | |
|------------------|---|
| Amman | <ul style="list-style-type: none">- multi-country/agency coordination- senior team leader deployed |
| Damascus | <ul style="list-style-type: none">- expert team on-site- microplanning/humanitarian pauses |
| Gaziantep | <ul style="list-style-type: none">- support to southern Turkey/NGOs |

Positive Factors to Limit Int'l Spread

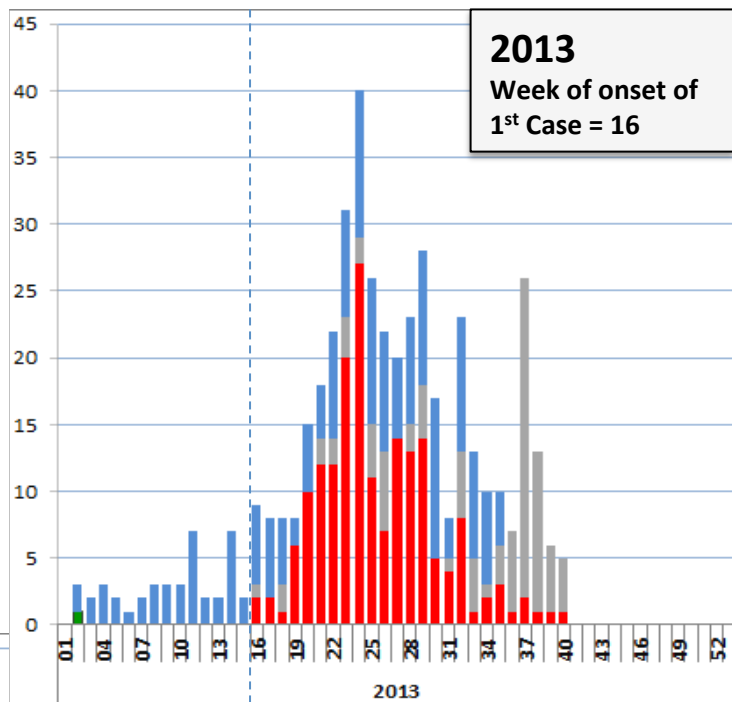
- EWARN system in place
- very strong vaccination culture
- very high coverage before crisis
- pre-planned campaigns for Nov-Dec
- heading into cold/low-transmission season
- very strong leadership, government, UN & humanitarian system support (OCHA, UNHCR, NGOs...)

Declining WPV1, Kenya & Somalia



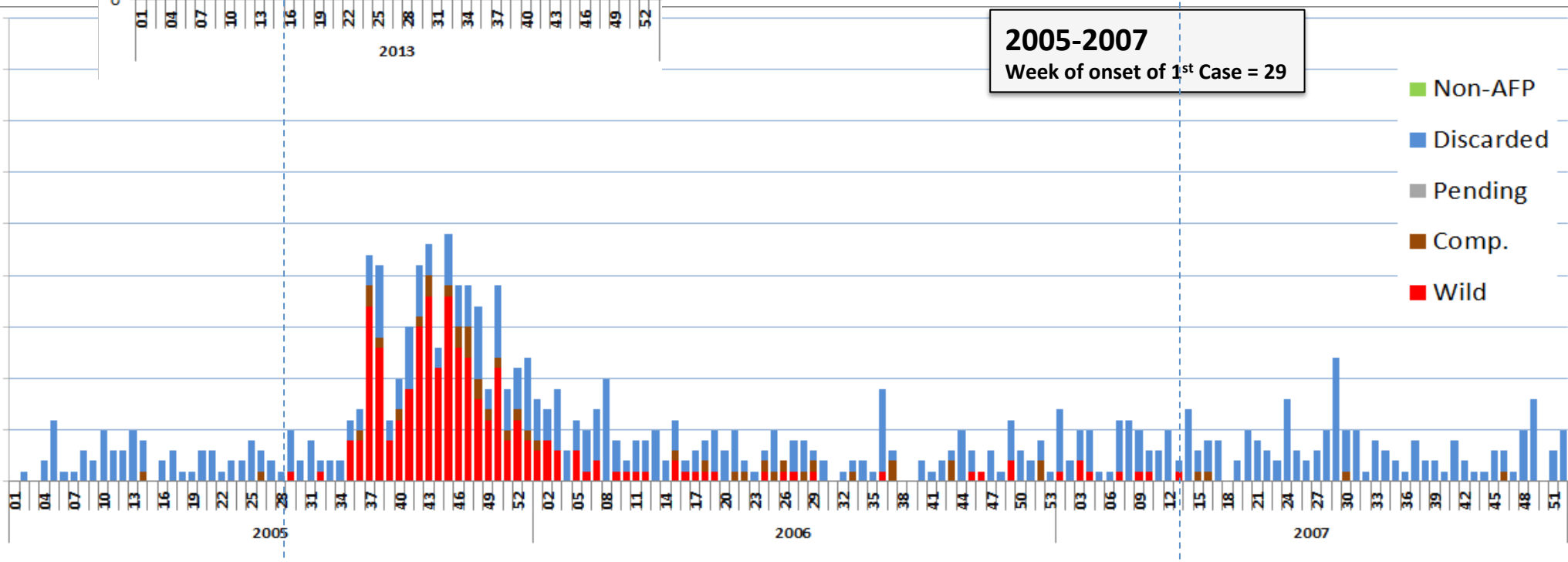
Polio epidemic curves 2013 vs 2005-2007 Somalia

Data as of 29 Oct 2013



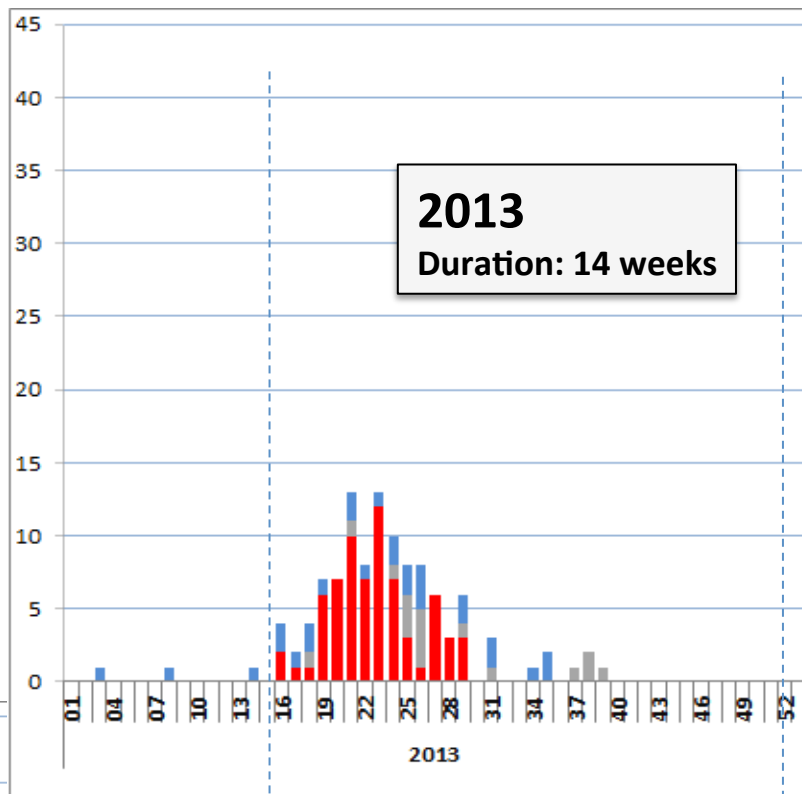
2005-2007
Week of onset of 1st Case = 29

- Non-AFP
- Discarded
- Pending
- Comp.
- Wild



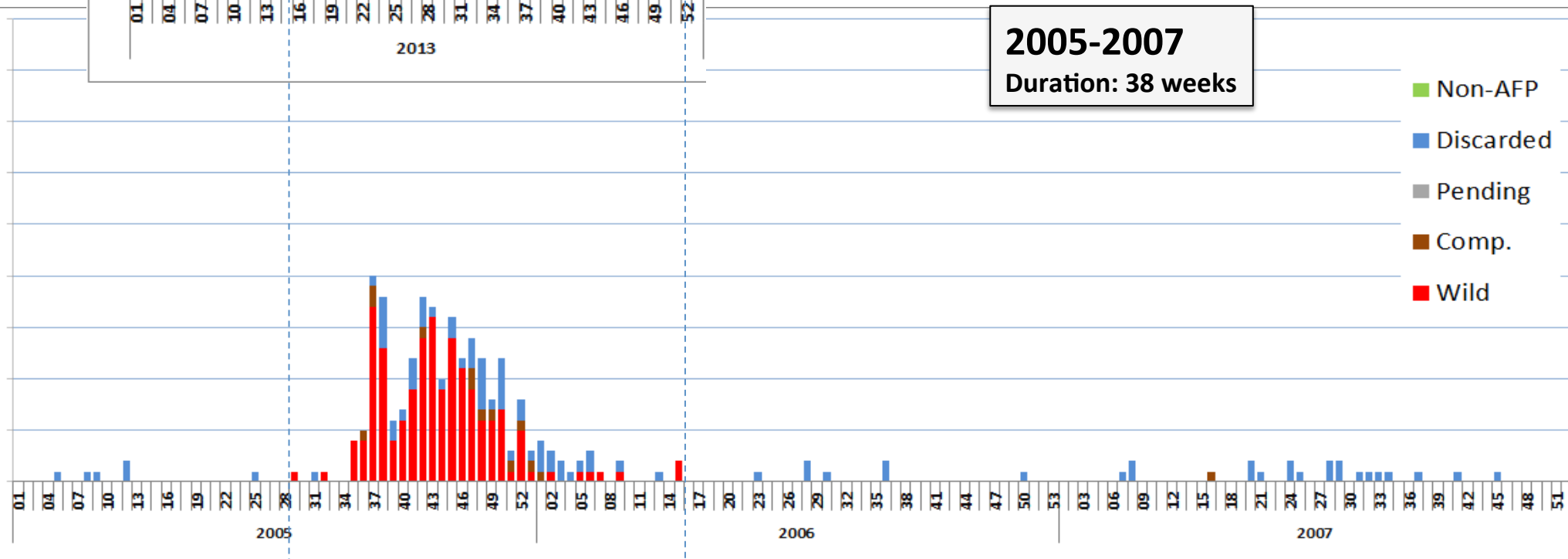
Polio epidemic curves 2013 vs 2005-2007 Banadir Region, Somalia

Data as of 29 Oct 2013



2005-2007
Duration: 38 weeks

- Non-AFP
- Discarded
- Pending
- Comp.
- Wild



Outbreak/Amplifier Zone:

- whole population
- short-interval additional dose strategy
- 6-8 rounds
- 4 month target to stop transmission
- IPV (north Kenya)

Historic Spread Zone:

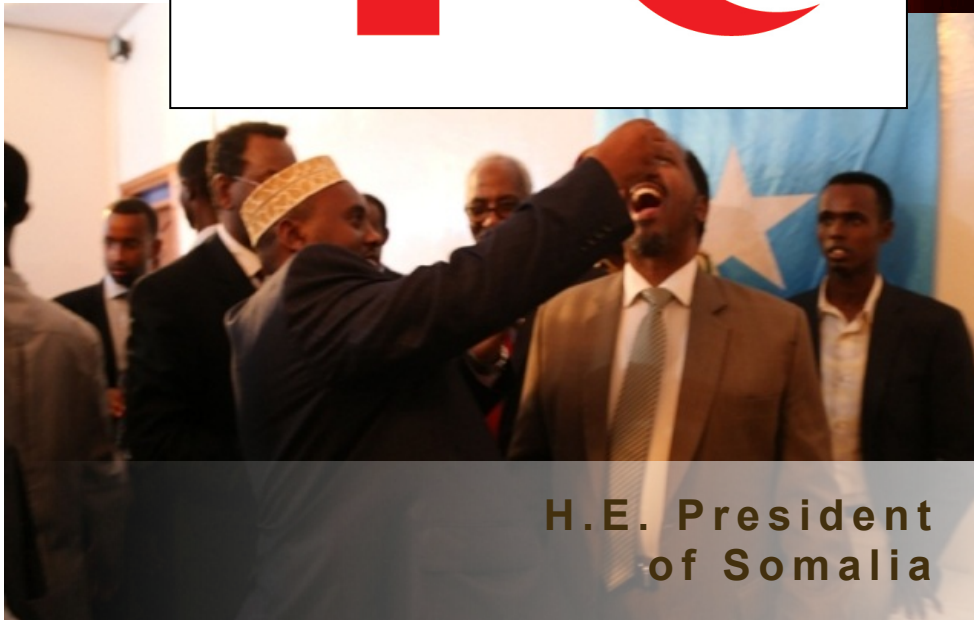
- expanded age groups (eg. < 10 years)
- 4 rounds
- reduce reinfection

Inaccessible Zone:

- expanded age groups (eg. < 10 years)
- delink to UN/Gov't; transit site/border vaccination
- local access negotiation (Red Cres, NGOs, private sect)
- Permanent Transit Vaccination Posts



Bivalent OPV



H.E. President
of Somalia



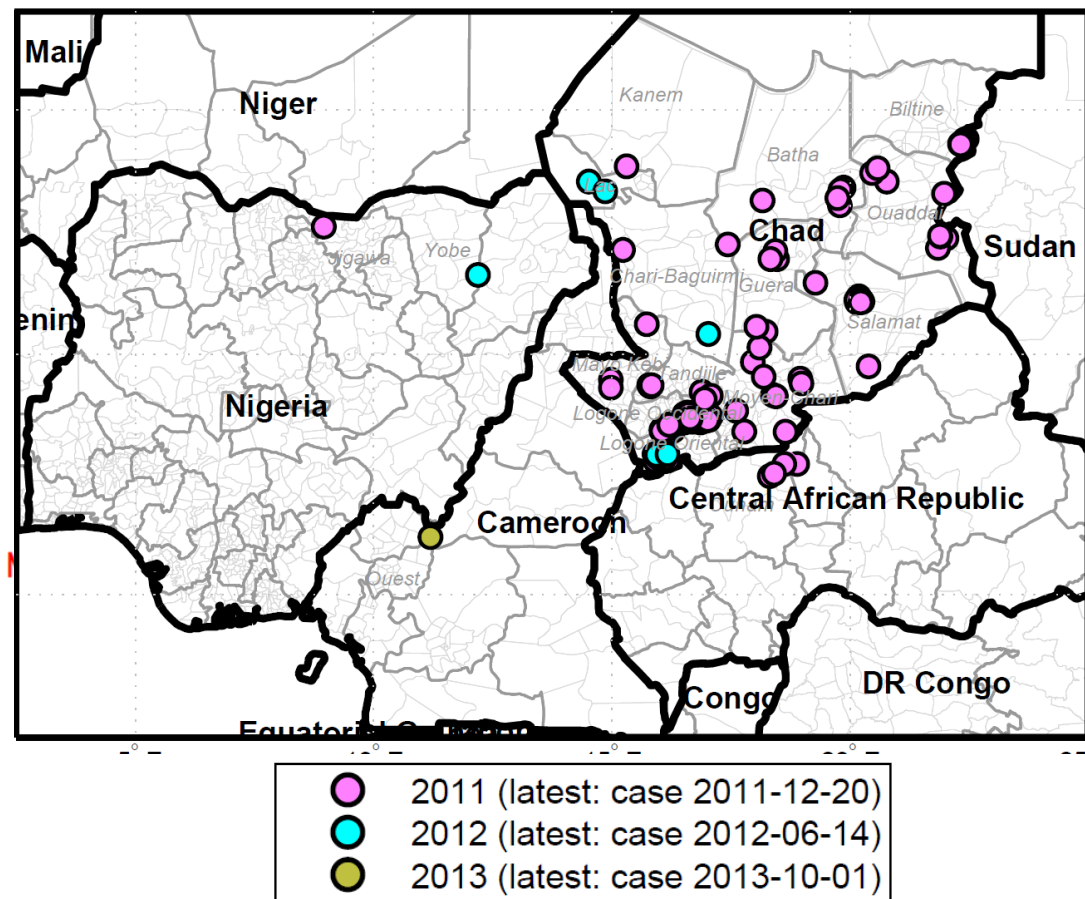
1st Lady of Kenya Margaret
Kenyatta

WPV1 in Cameroon

Orphan Strain

2011-CHA-LOR-BEB-11-133 2011715572 Bebedija 23-Apr-11 N6B
 2011-CHA-LOR-BEB-11-153 2011715574 Bebedija 03-May-11 N6B
 2011-CHA-LOR-BEB-11-190 2011713787 Bebedija 24-May-11 N6B
 2011-CHA-LOR-BEB-11-132 2011713674 Bebedija 23-Apr-11 N6B
 2011-CHA-LOR-BEB-11-129 2011713668 Bebedija 20-Apr-11 N6B
 2011-CHA-LOR-BEB-11-130 2011713670 Bebedija 20-Apr-11 N6B
 2011-CHA-LOR-BEB-11-127 2011713664 Bebedija 14-Apr-11 N6B
 2011-CHA-LOR-BEB-11-131 2011713672 Bebedija 21-Apr-11 N6B
 2011-CHA-LOR-BEB-11-140 2011713681 Bebedija 27-Apr-11 N6B
 2011-CHA-LOR-BEB-11-121 2011713656 Bebedija 21-Apr-11 N6B
 2011-CHA-LOR-BEB-11-176 2011713778 Bebedija 20-May-11 N6B
 2011-CHA-LOR-BEB-11-219 2011715670 Bebedija 13-Jun-11 N6B
 2011-CHA-LOC-BEB-11-281 2011716269 Bebedija 31-Jul-11 N6B
 2011-CHA-LOR-BEB-11-166 2011713772 Bebedija 18-May-11 N6B
 2011-CHA-LOR-BEB-11-167 2011713774 Bebedija 18-May-11 N6B
 2011-CHA-LOR-BEB-11-202 2011715660 Bebedija 05-Jun-11 N6B
 2011-CHA-NDJ-NDS-11-362 2012708865 Ndjamena Sud 20-Oct-11 N6B
 2011-CHA-MKE-GUE-11-458 2012710112 Guelendeng 30-Dec-11 N6B
 2011-CHA-BAT-ATI-11-361 2012708863 Ati 13-Oct-11 N6B
 2013-CAE-OUE-MAL-13-345 2014707758 Malentouen 07-Oct-13 N6B
 2011-CHA-WAO-GUE-11-142 2011713683 Guereda 29-Apr-11 N6B

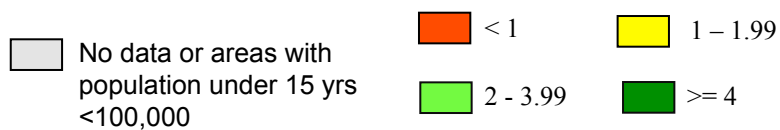
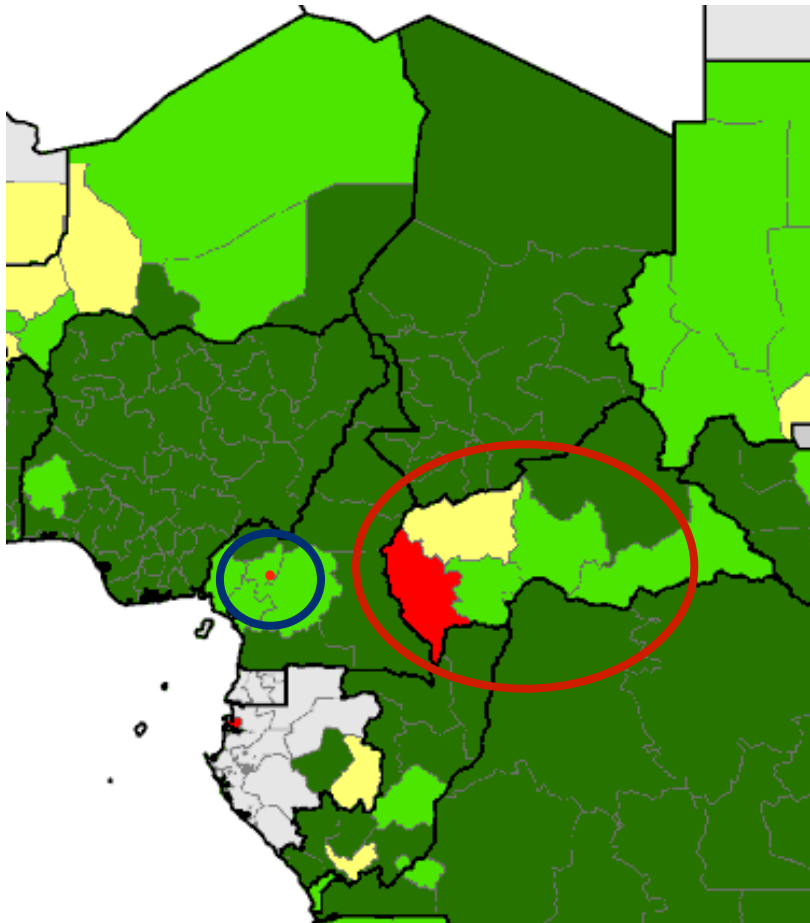
N6B Cluster By Year, 2011-2013



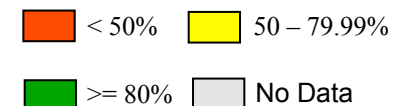
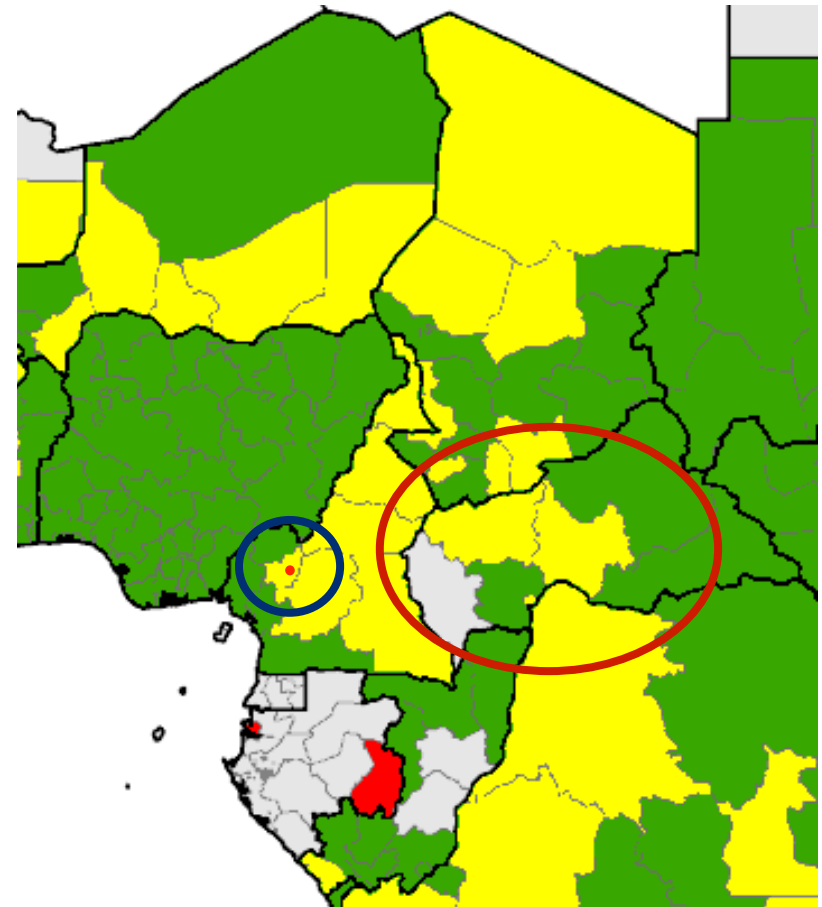
- 10 year old child
- fully vaccinated (3 doses)
- date of paralysis 1 Oct 2013
- 'orphan' virus: last seen in Chad nearly 3 years ago
- multi-country investigation & response plans ongoing

Orphan Virus in Cameroon

Sub-national Non Polio AFP Rate



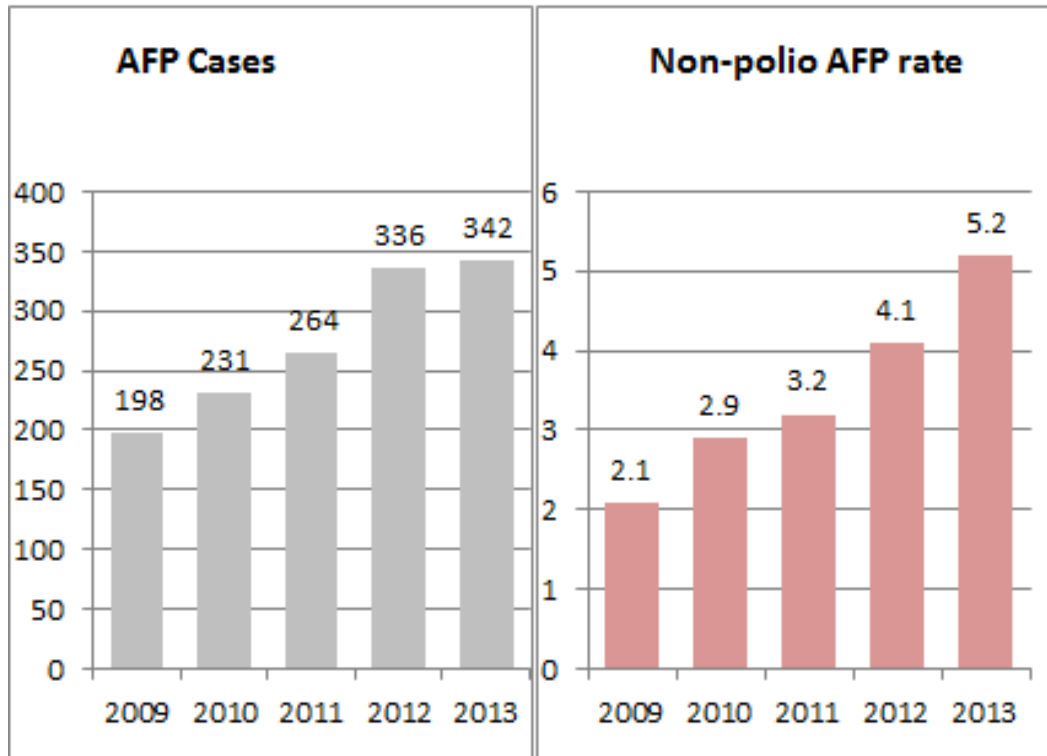
Sub-national Stool Adequacy Rate



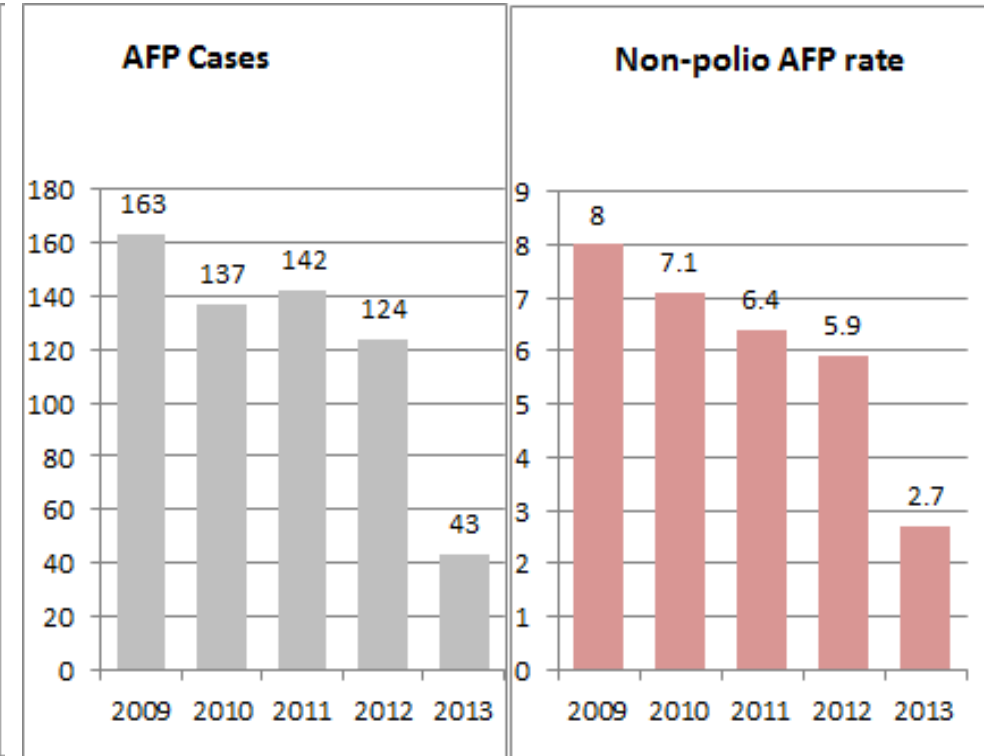
Data in WHO/HQ as of 08 Oct 2013

Orphan Virus in Cameroon

Cameroon



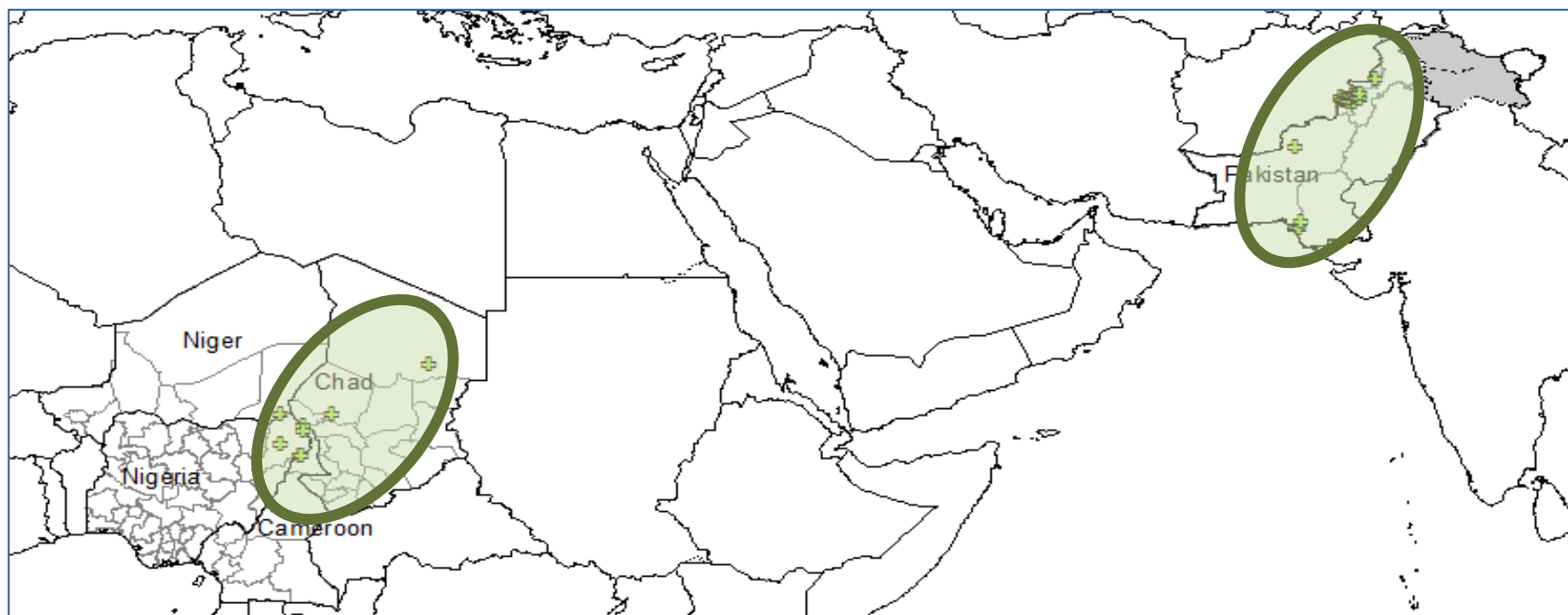
Central African Republic



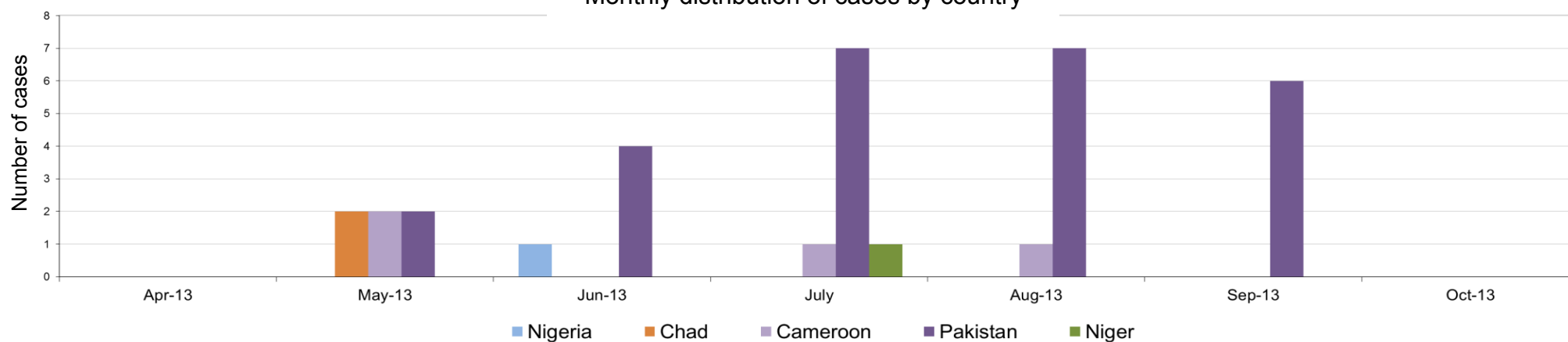
- Nomadic populations in border areas around Lake Chad?
- Program deterioration in CAR?

cVDPV2 Transmission

Circulating Vaccine-derived Poliovirus Cases, last 6 Months

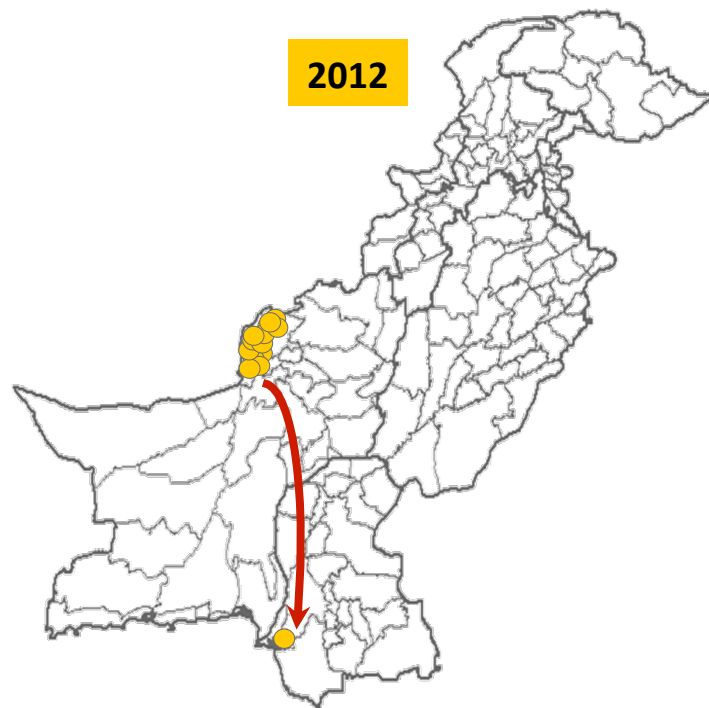


Monthly distribution of cases by country

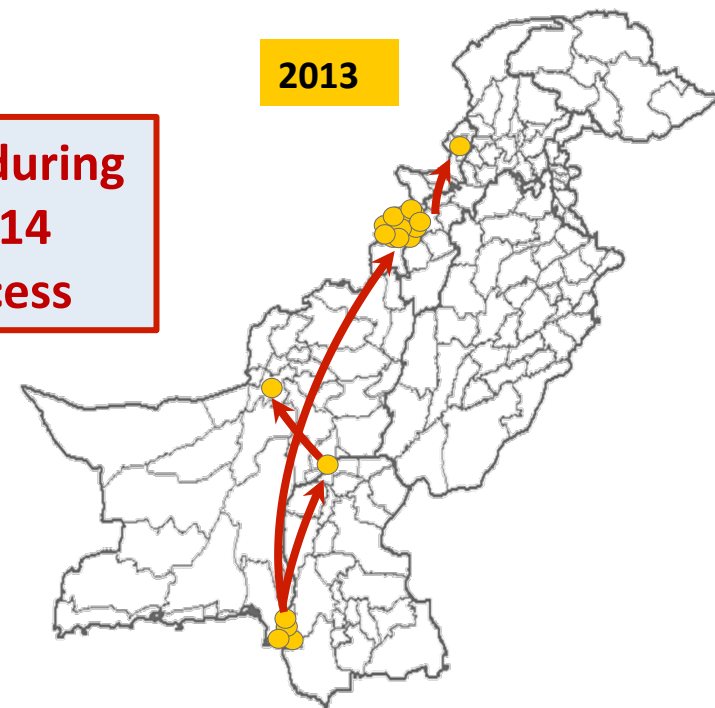


Data in WHO HQ as of 29 October 2013

cVDPV2 cases, 2012 and 2013

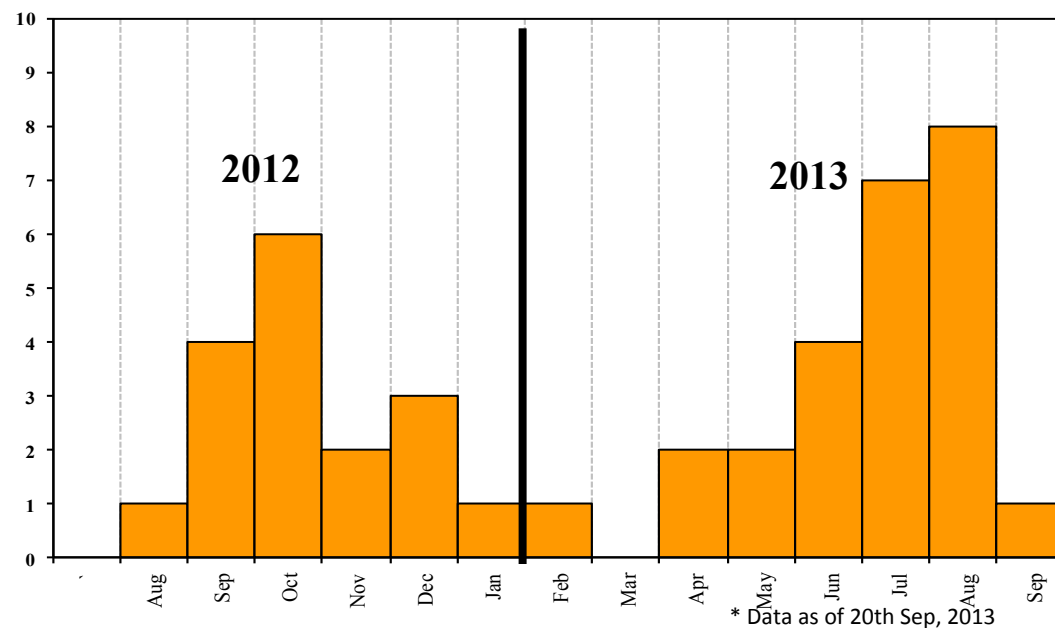


**Goal: Stop cVDPV2 during
low season of 2014
Contingent on access**



Cases (n)

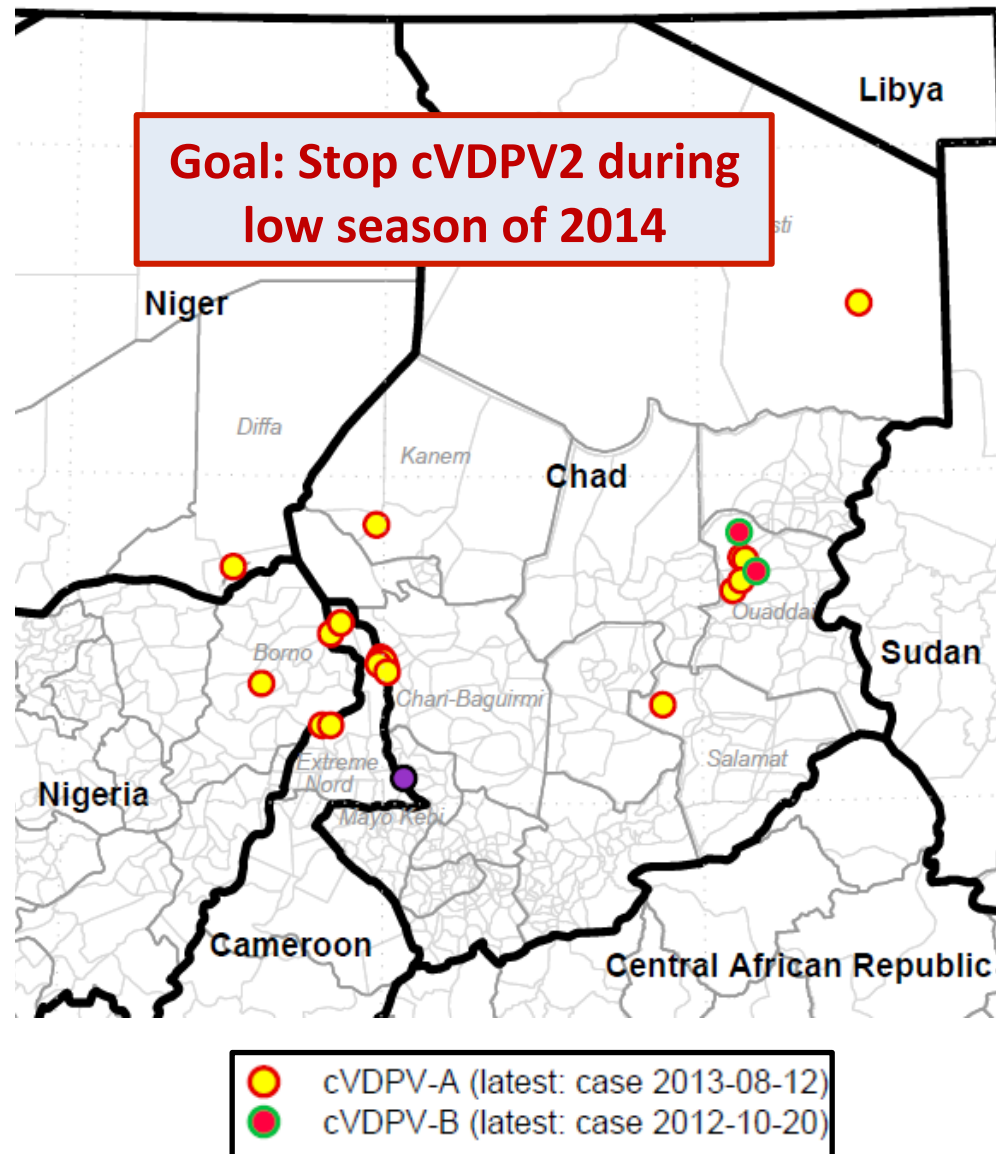
PROVINCE	DISTRICT	2012	2013	TOTAL	Last case
BALUCHISTAN	KABDULAH	15		15	14-Dec-12
BALUCHISTAN	JAFFARABAD		1	1	11-Jan-13
	MASTUNG		1	1	27-Jun-13
SINDH	KHIGADAP	1	4	5	03-Jul-13
FATA	Waziristan (n)		19	19	08-Sep-13
	MOHMAND		1	1	13-Jul-13
TOTAL		16	26	41	08-Sep-13



Status of cVDPV2 Transmission, Africa

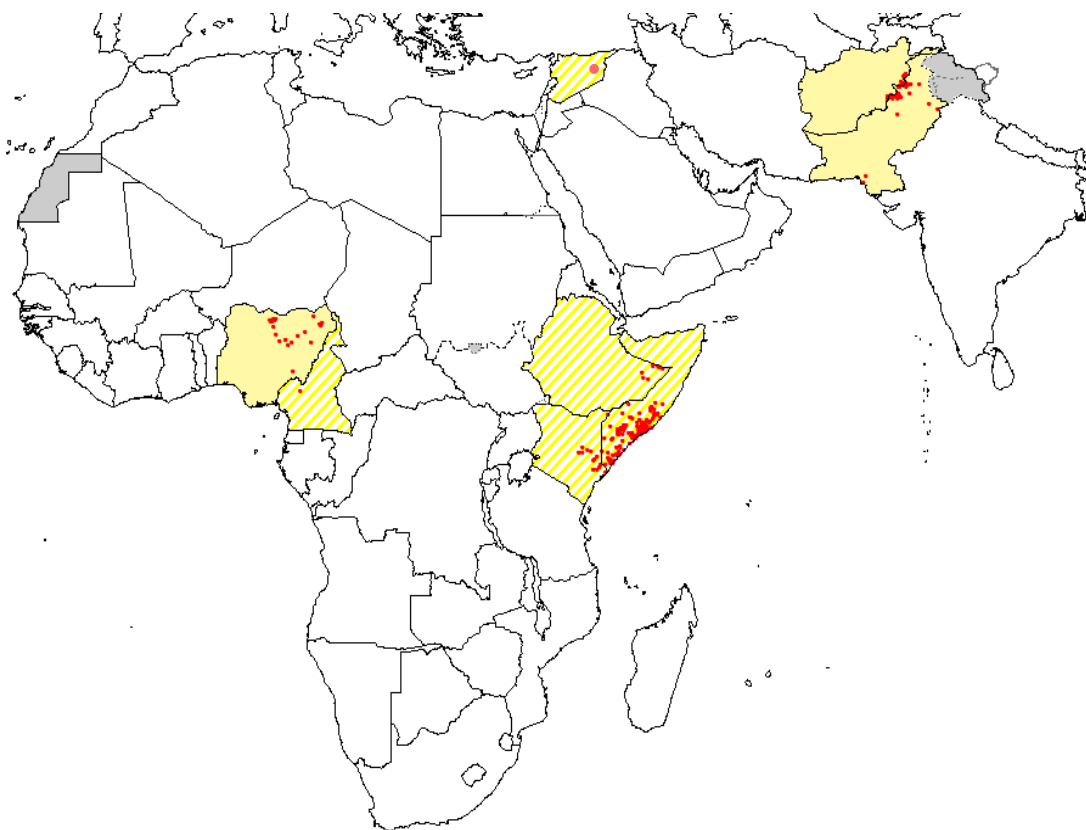
Most recent cases:

- Cameroon: August
- Niger: July
- Nigeria: June
- Chad: May



Summary of Progress

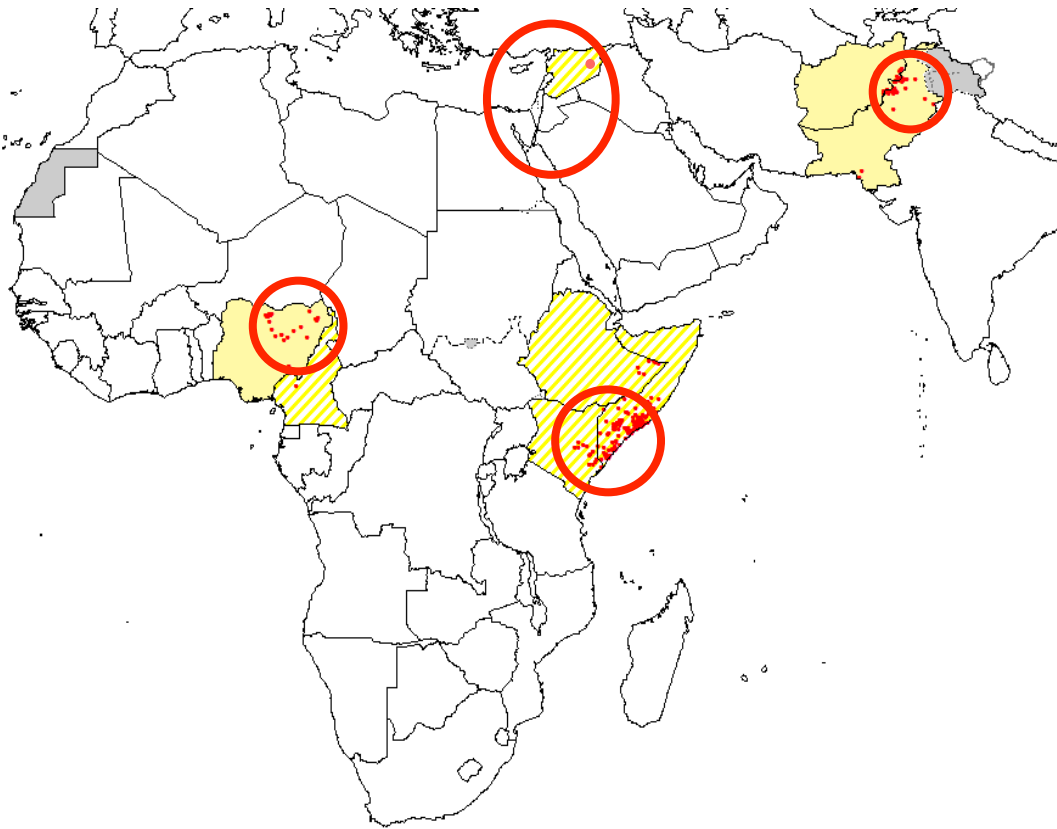
WPV Polio cases last six months



- ✓ No WPV3 >10 mos (18 mos in Asia)
- ✓ No endemic WPV in AFG > 10 mos
- ✓ Large parts of PAK & NIE without active transmission
- ✓ Impact of robust HOA response

Summary of Risks

Key Zones of Active Transmission



- ~1.5 million children inaccessible
- Insecurity, attacks on workers
- Prolonged outbreaks
- New outbreaks
- Gaps in campaign quality

Strategic Priorities

Enhance access: Pakistan & Nigeria

Stop ongoing outbreaks:

Syria

Somalia

Cameroon

Reduce vulnerability:

Middle East

Horn of Africa & Central Africa

GPEI Approach to Inaccessible/Insecure Areas, Pakistan, Afghanistan, Nigeria, Somalia

- Set clear Ops goals: Position for 2014 'low season'
- Area specific plans:
 - Cross- agency advocacy planning
 - High level
 - Tailored to local challenges
 - Demand generation, program re-profiling
 - New partnerships
 - Security and operational framework

Risk Management in Inaccessible Areas

Negotiate access

- Govt. & relevant 3rd parties
- Islamic Advisory Group
- Countries with influence

Engage communities

- Tailored communications
- PolioPlus

Adapt tactics & tools

- Short interval & duration SIAs, older ages
- Optimum vaccine mix (mOPV1, bOPV)

Establish vaccination platforms

- Transit point vaccination
- Permanent Polio Teams, NGOs

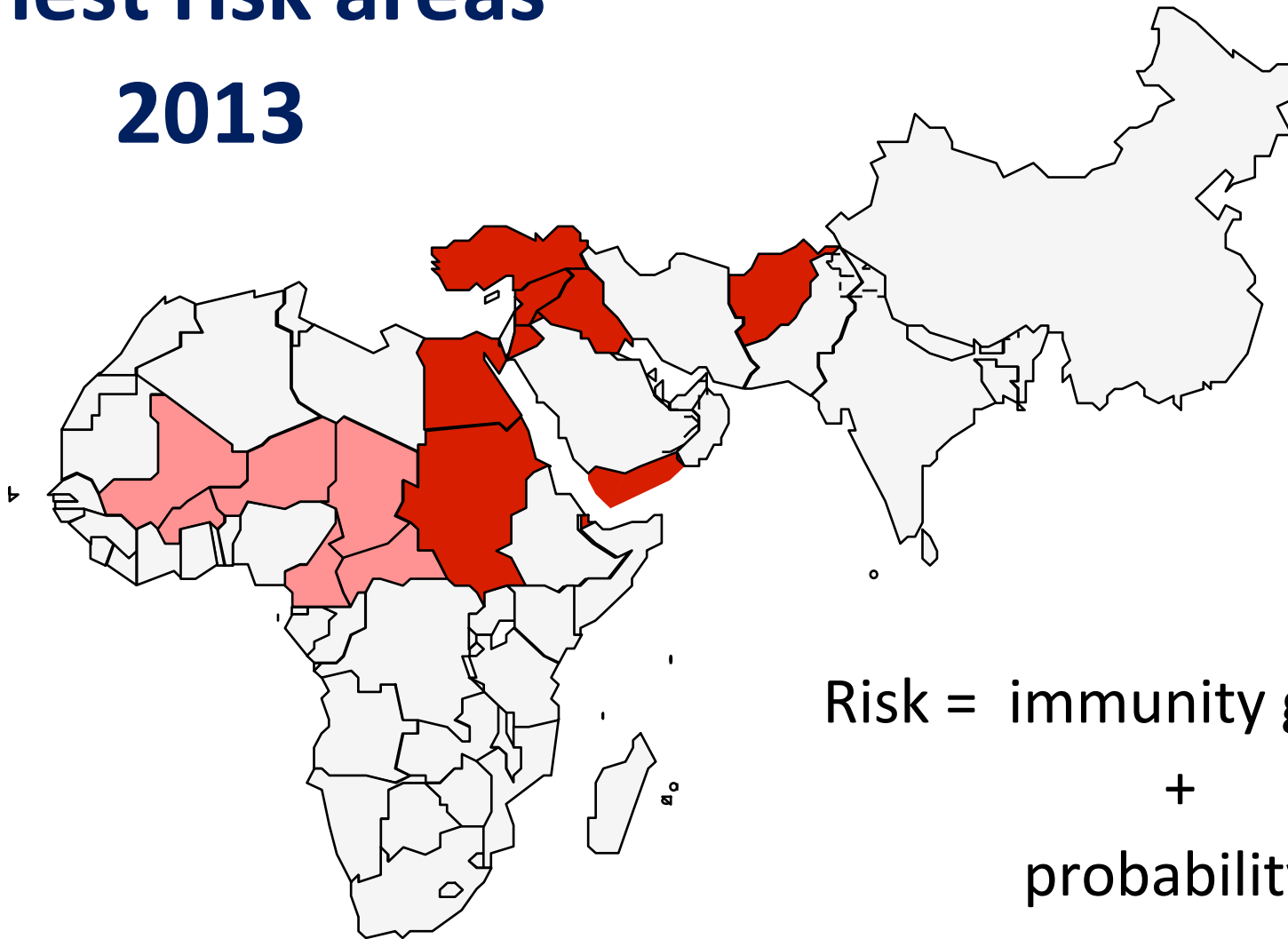
Focus management

- Dedicated area managers
- Optimized staffing

Additional Risk Management Strategies

- Addressing remaining quality gaps
 - e.g. redeployment of surge, planning, team quality etc.
- Stopping outbreaks rapidly
 - Expanded age groups, short interval dosing
- Maintaining vaccine supply to priority areas
- Ensuring cash for early 2014 - advocacy

Highest risk areas 2013



Risk = immunity gap
+
probability of
importation

Reducing Vulnerability

- AFP surveillance (AFP rate >2 at prov/gov level)
- routine immunization/EPI coverage
- OPV campaigns (NIDs or SNIDs)
- early IPV introduction
- vaccination of travellers
(per WHO *International Travel & Health*)

Questions for SAGE

- Ideas on how should the program address access in insecure areas?
- How can the program stop complex multi-country polio outbreaks faster?
- What else should the program do to reduce vulnerability to polio outbreaks?