

# Trigger for OPV2 Withdrawal: Prospects for interrupting persistent cVDPV type 2

SAGE

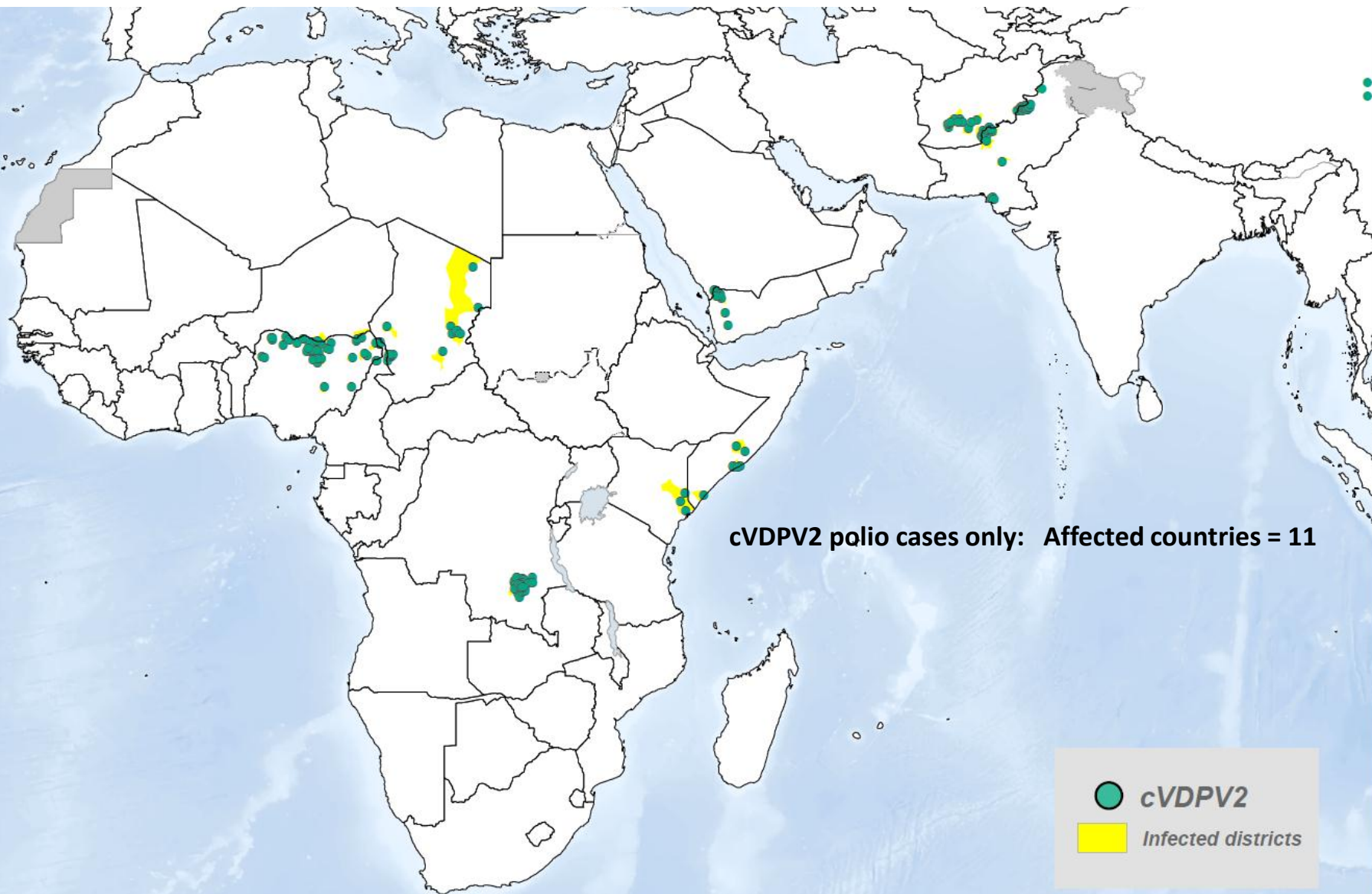
1 April, 2014

**Context:** Target Date for tOPV  
cessation: Low Season (April) 2016

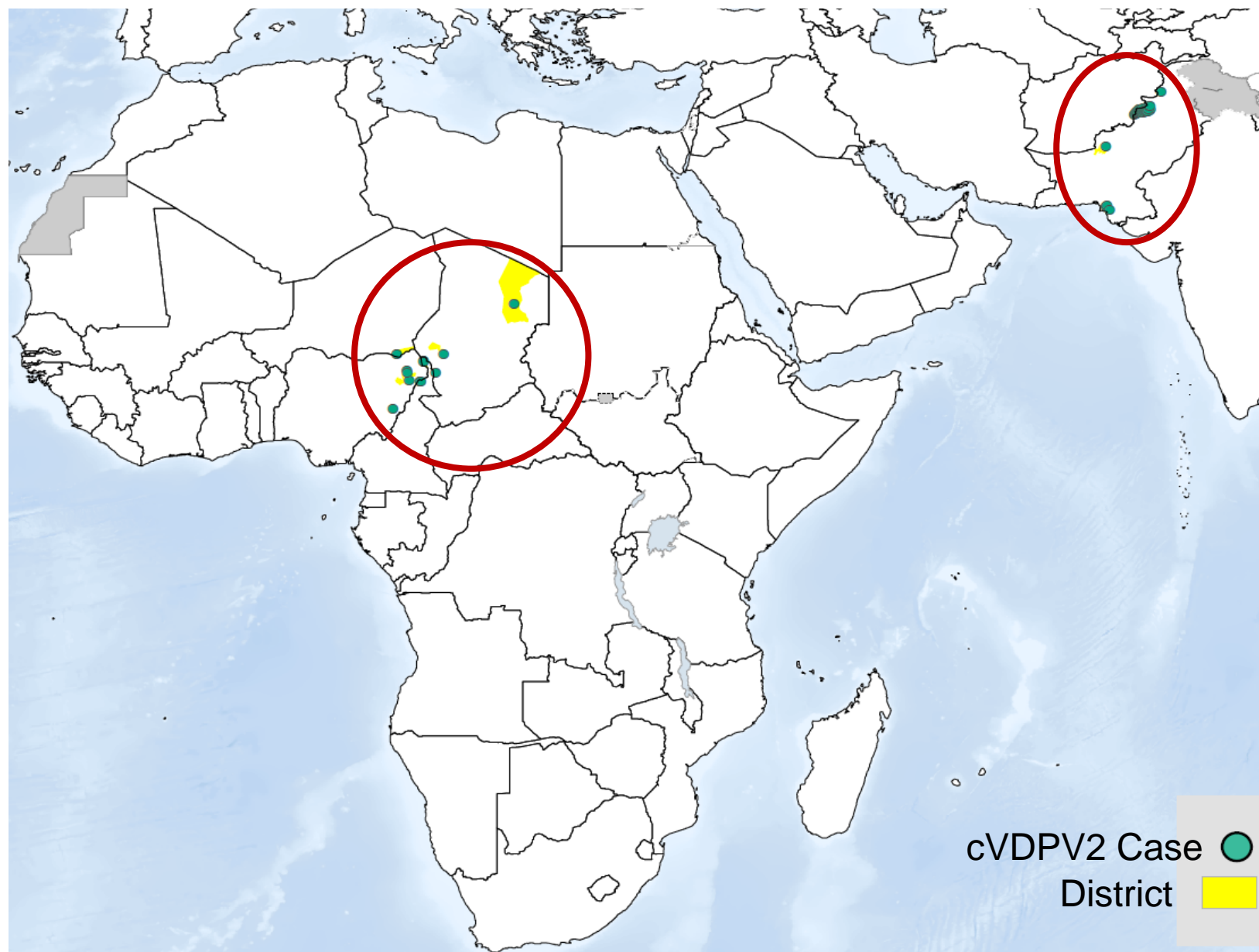
## **Outline:**

- Current cVDPV type 2 transmission
- Prospects of Interrupting cVDPV 2
- Areas at risk of cVDPV 2 emergence and spread
- Mitigating risk of emergence around tOPV cessation

# cVDPV type 2 cases, 2011-13



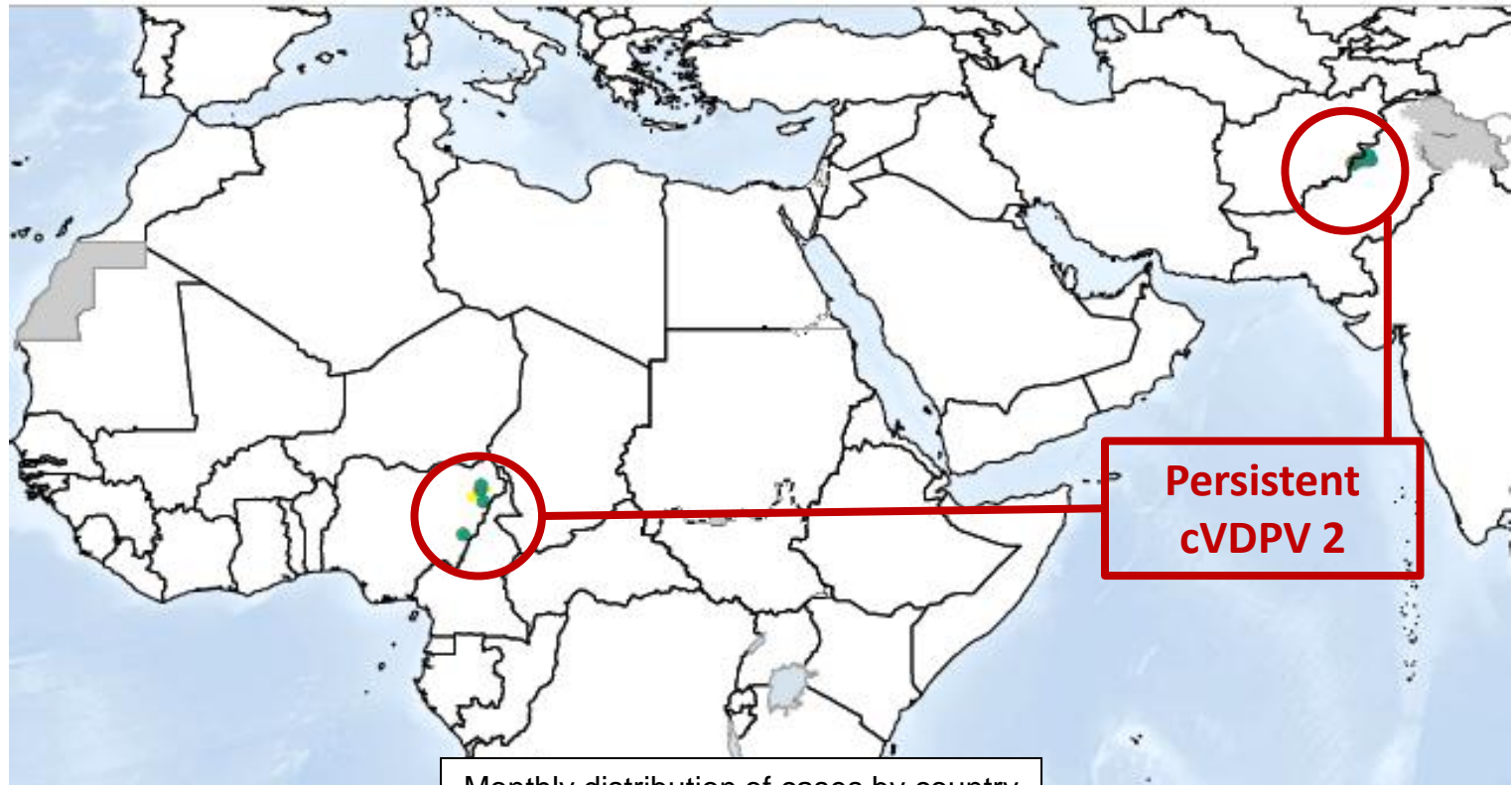
# cVDPV type 2 cases, last 12 months



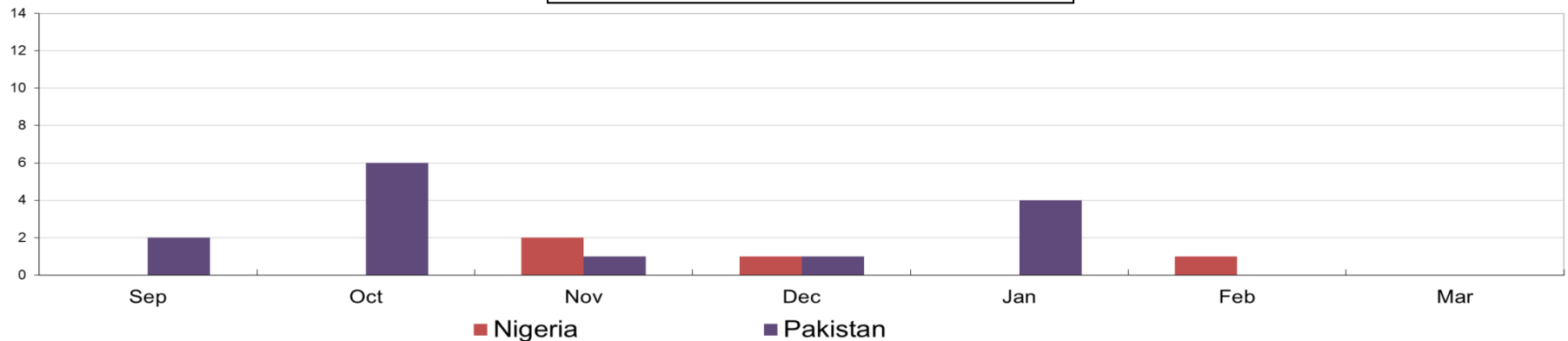
AFP cVDPV2 cases only: Affected countries = 6 (NIE, NIG, CAE, CHA, AFG, and PAK)

Since 1-Apr-2013

# cVDPV type 2 cases, last 6 months



Monthly distribution of cases by country

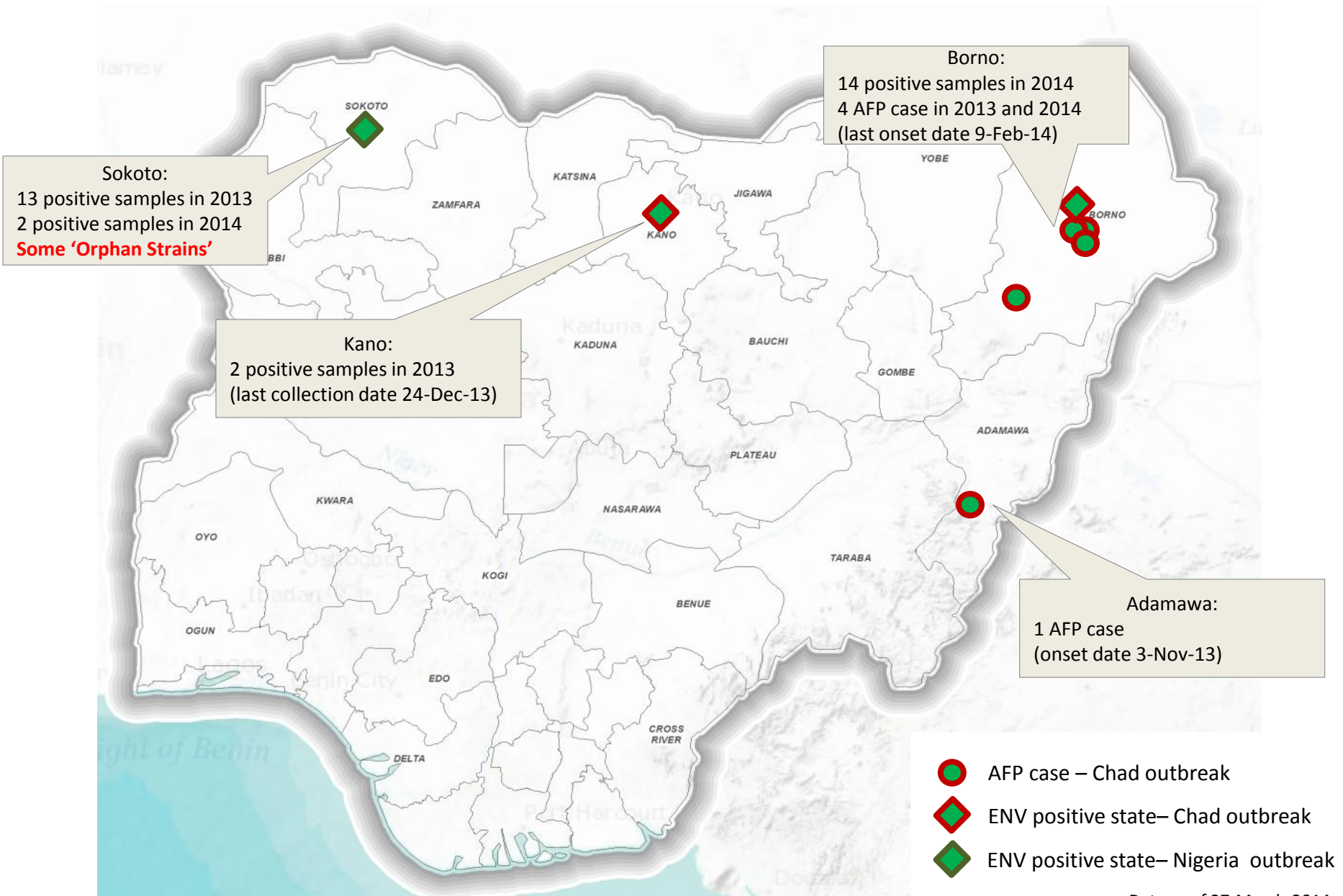


Last 6 months

**Update: 21 March 2014**

**2014: 6 cVDPV2 (Kano 1, Sokoto 1 and Borno 4)**

# Nigeria AFP & ENV cVDPV2 Strains, 2013-14



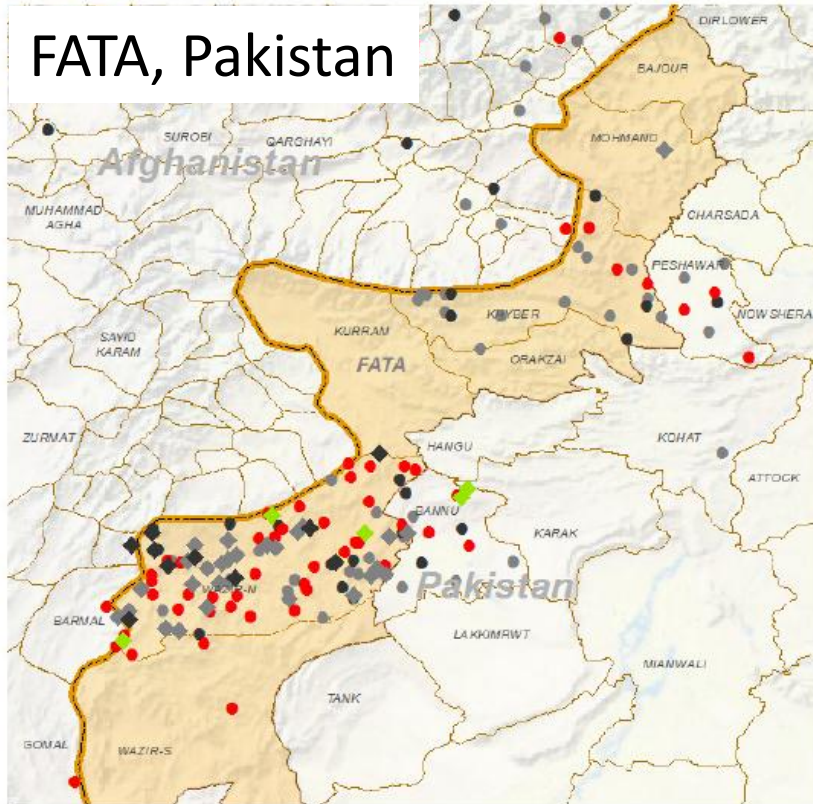
# Challenges to Interrupting cVDPV 2

- Co-circulation of cVDPV 2 & wild type 1
  - SIA vaccine regimen mainly bOPV
- Inaccessibility & insecurity
- Gaps in quality of SIAs

# Co-circulation of cVDPV 2 & wild poliovirus type 1

WPV + cVDPV cases, previous 12 months\*

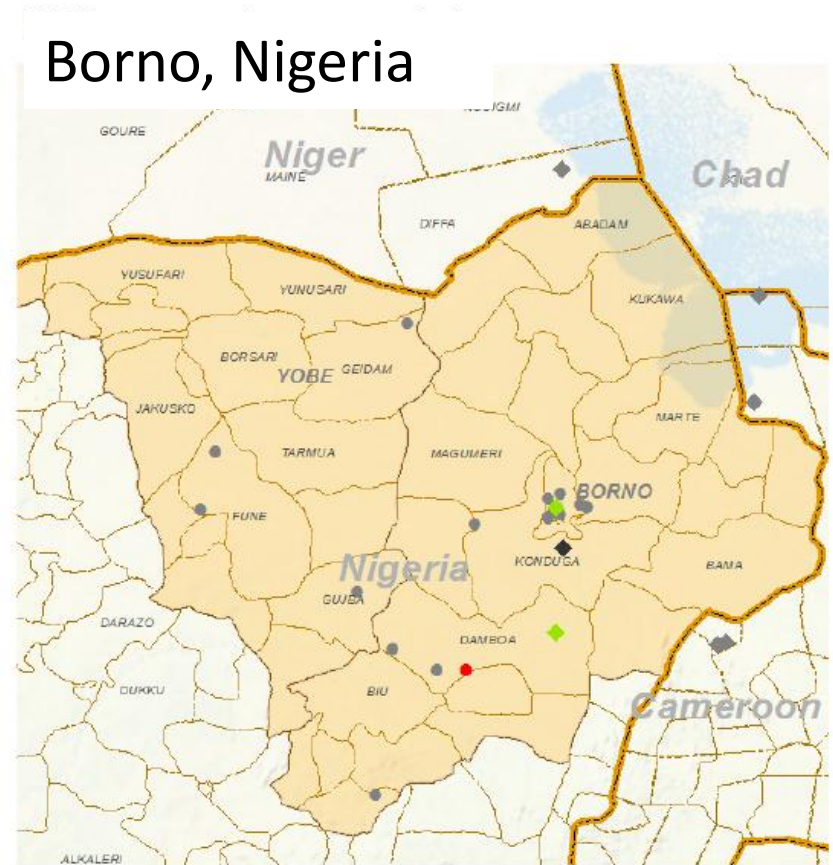
FATA, Pakistan



●●● WPV 1 Previous 4, 4-6, >6 months

◆◆◆ cVDPV 2 Previous 4, 4-6, >6 months

Borno, Nigeria

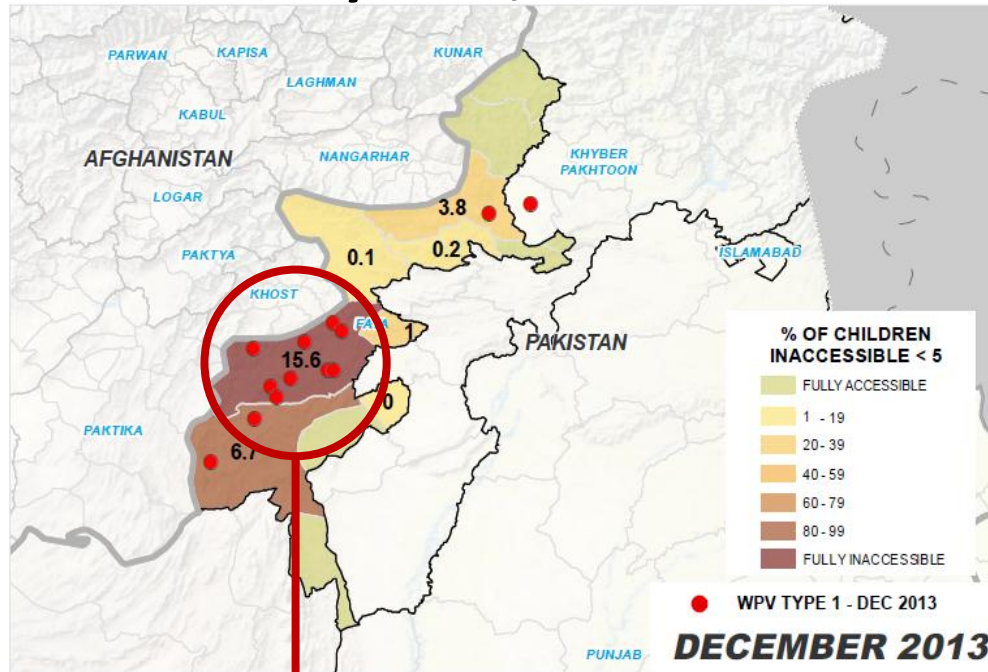


●●● WPV 1 Previous 4, 4-6, >6 months

◆◆◆ cVDPV 2 Previous 4, 4-6, >6 months

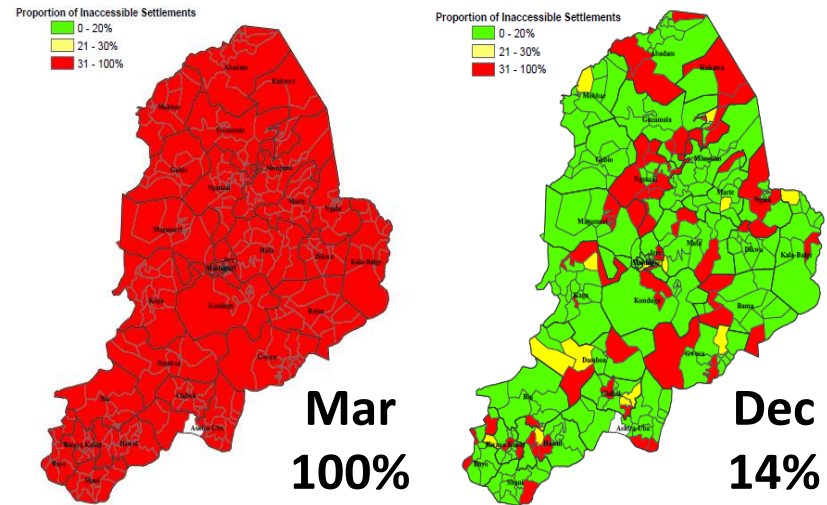
# Inaccessibility

## Inaccessibility FATA, Pakistan

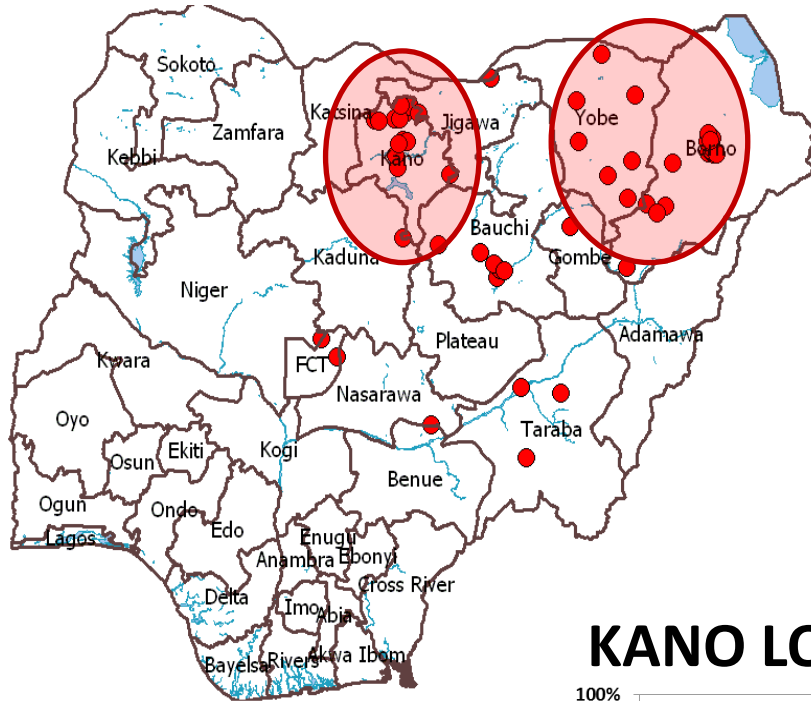


No Vaccination of  
children since mid-2012

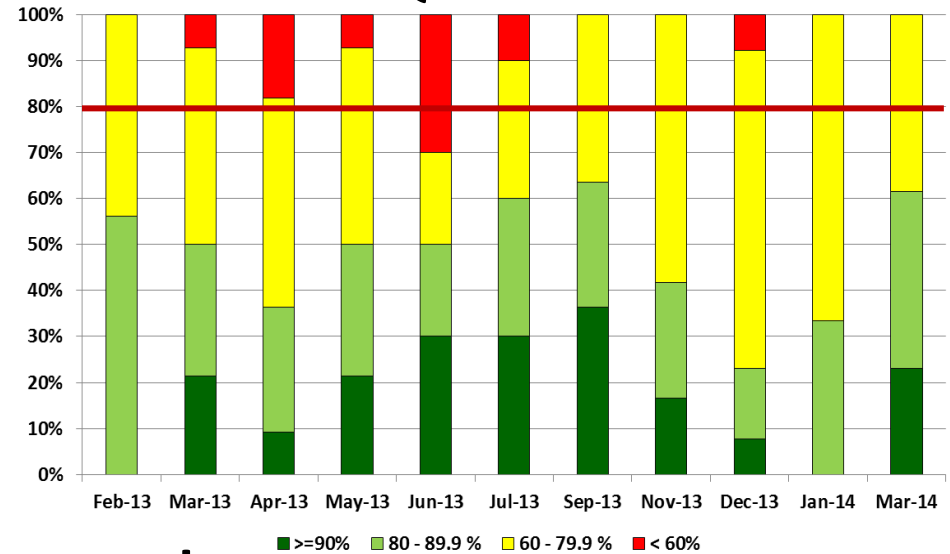
## BORNO, Access Trend



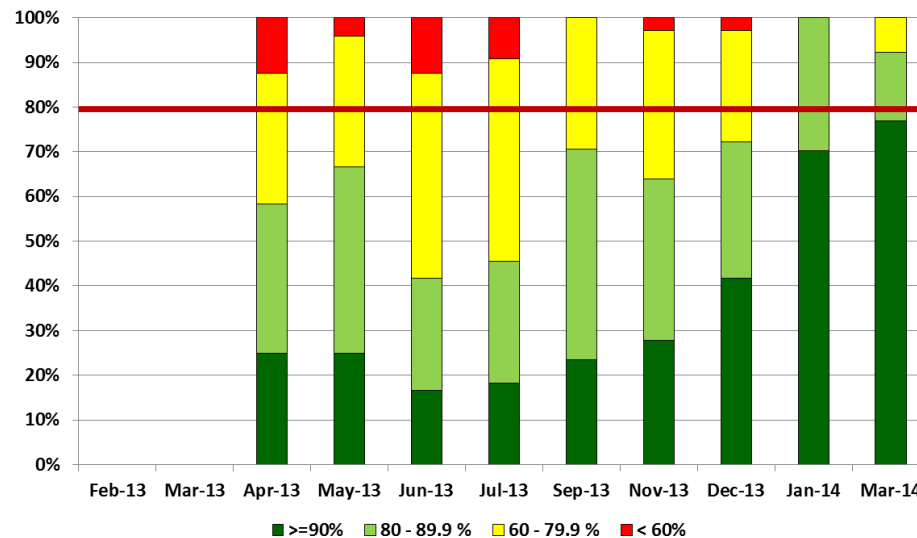
# Gaps in Quality



## BORNO LQAs trend

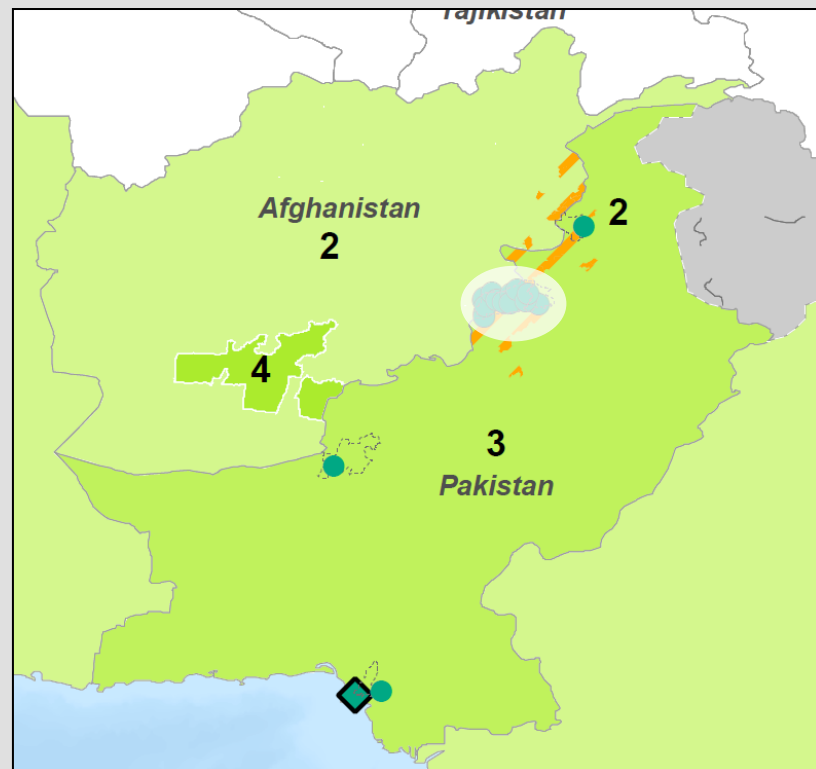
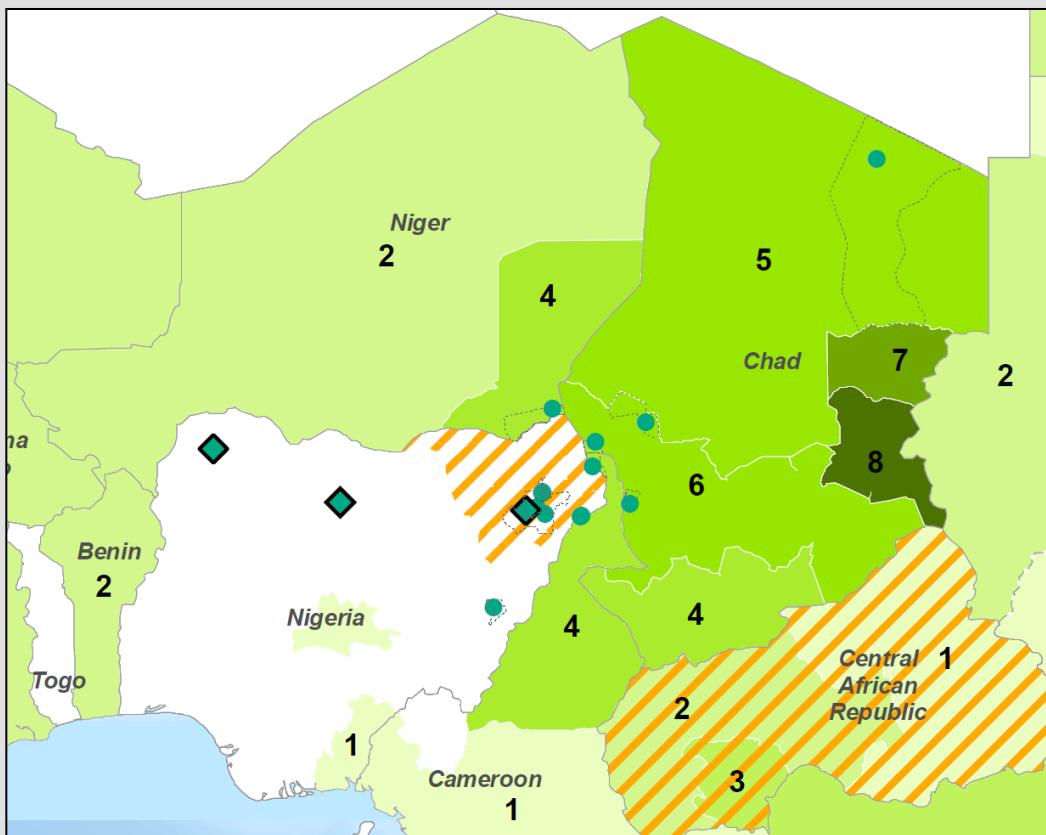


## KANO LQAs trend



# Prospects for interrupting Persistent cVDPV 2

# tOPV SIAs, Last 12 months



◆ States with at least one cVDPV2 Env. sample \*

● cVDPV2 case\*

▨ AREAS CURRENTLY FACING ACCESSIBILITY ISSUES

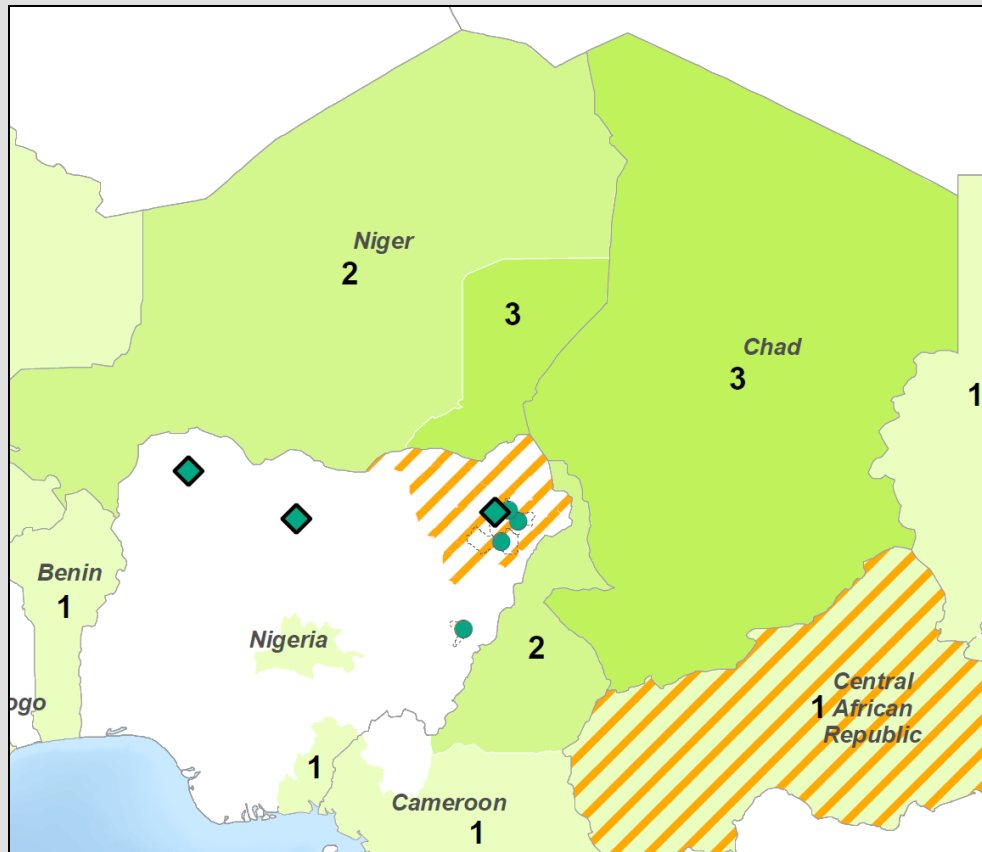
1 2 3 4 5 6 7 8+

NO. OF tOPV IMMUNIZATION ACTIVITIES

The SIAs in the areas currently facing accessibility issues may not have occurred.

\* 01 APR 2013 - 31 MAR 2014

# tOPV SIAs, last 6 months



◆ States with at least one cVDPV2 Env. sample\*

● cVDPV2 case\*

/// AREAS CURRENTLY FACING ACCESSIBILITY ISSUES

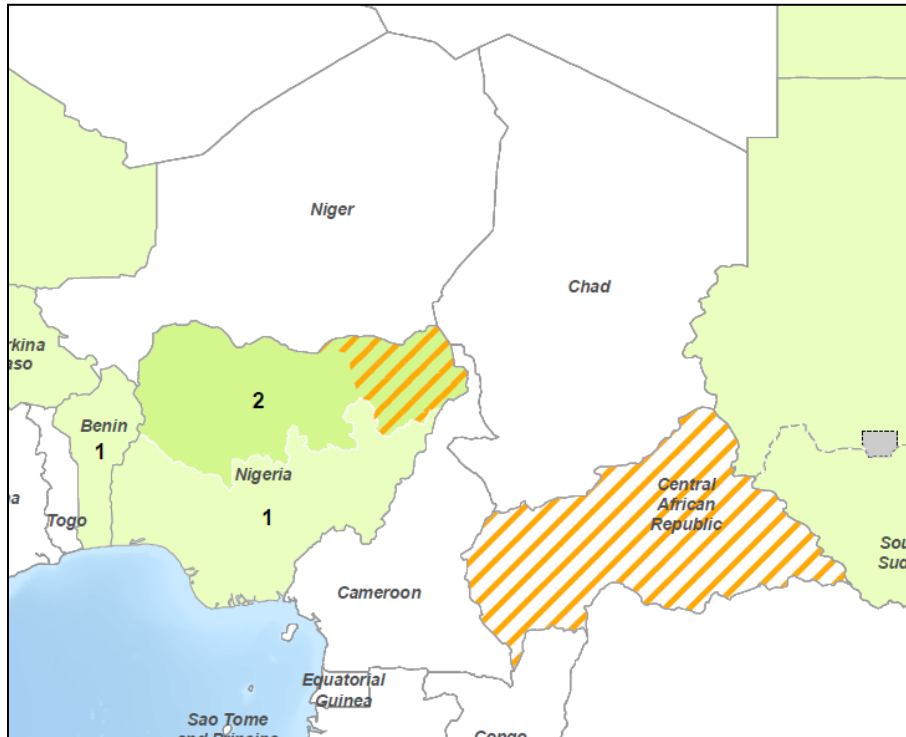
1 2 3 4 5 6 7 8+

NO. OF tOPV IMMUNIZATION ACTIVITIES

The SIAs in the areas currently facing accessibility issues may not have occurred.

\* 01 OCT 2013 - 31 MAR 2014

# Planned tOPV SIAs, next 6 months



# Additional Plans

- Pakistan
  - Restore health facilities and start RI in N Waziristan
  - Use of tOPV & IPV after resumption of SIAs in N Waziristan
- Nigeria
  - tOPV vaccination in infected LGAs
  - Use of IPV in Borno
  - Improving routine immunization

# Timeline for stopping cVDPV with Sabin 2 withdrawal date of April 2016

Outbreak, year of emergence	Affected Country	Source	2013												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	Nigeria	AFP																																										
		ENV	X	X							X	X	X	X		X																												
Chad, 2012	Chad	AFP		X		X	X																																					
	Cameroon	AFP					X	X	X	X																																		
	Niger	AFP							X																																			
	Nigeria	AFP						X						X	X		X																											
		ENV			X							X	X	X	X	X																												
Pakistan, 2012	Pakistan	AFP	X	X	X	X	X	X	X	X	X	X	X	X	X		X																											
		ENV				X						X																																
	Afghanistan	AFP			X																																							
		ENV																																										
Key dates																																												

June – March

10 months to stop cVDPV 2

Stop cVDPV2

Notify countries

Target - end OPV2

Date of data:

Nigeria: 14-Mar-2014

Chad: 14-Mar-2014

Pakistan: 1-Apr-2014

X At least one cVDPV2 reported per given month

Nigeria: 2 tOPV SIAs; Pakistan: 1 tOPV SIA next 6 months -  
SIA Plans in Nigeria and Pakistan will be reviewed and updated in April 2014

# SIA Strategy to reduce risk of emergence & spread of cVDPV 2

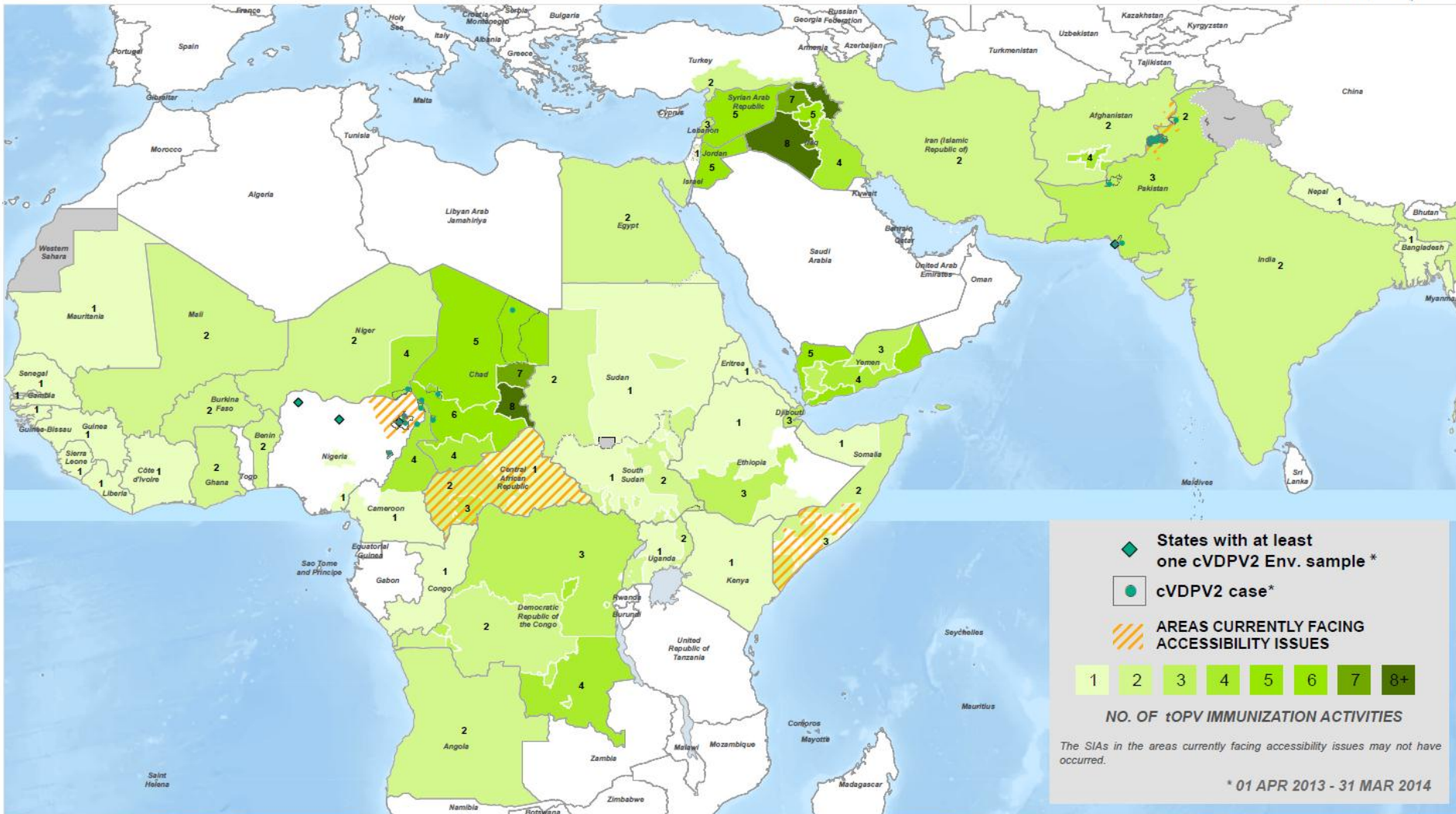
# tOPV SIAs, last 12 months

MAP SHOWING GLOBAL SUPPLEMENTARY IMMUNIZATION ACTIVITIES (APR 2013 - MAR 2014)

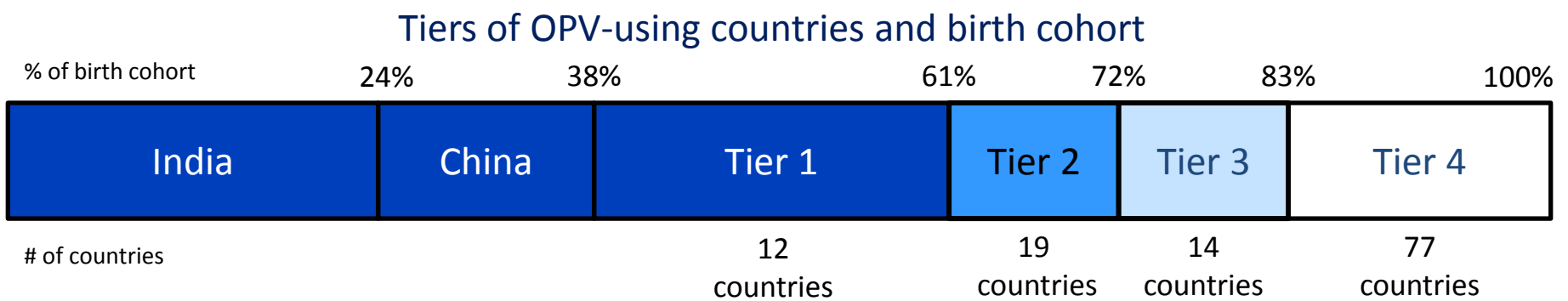


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MAP DATE: 31 March 2014, Version 1.0



# National/sub-National tOPV SIAs in Tier 1 & some Tier 2 Countries each low season, until cessation of tOPV

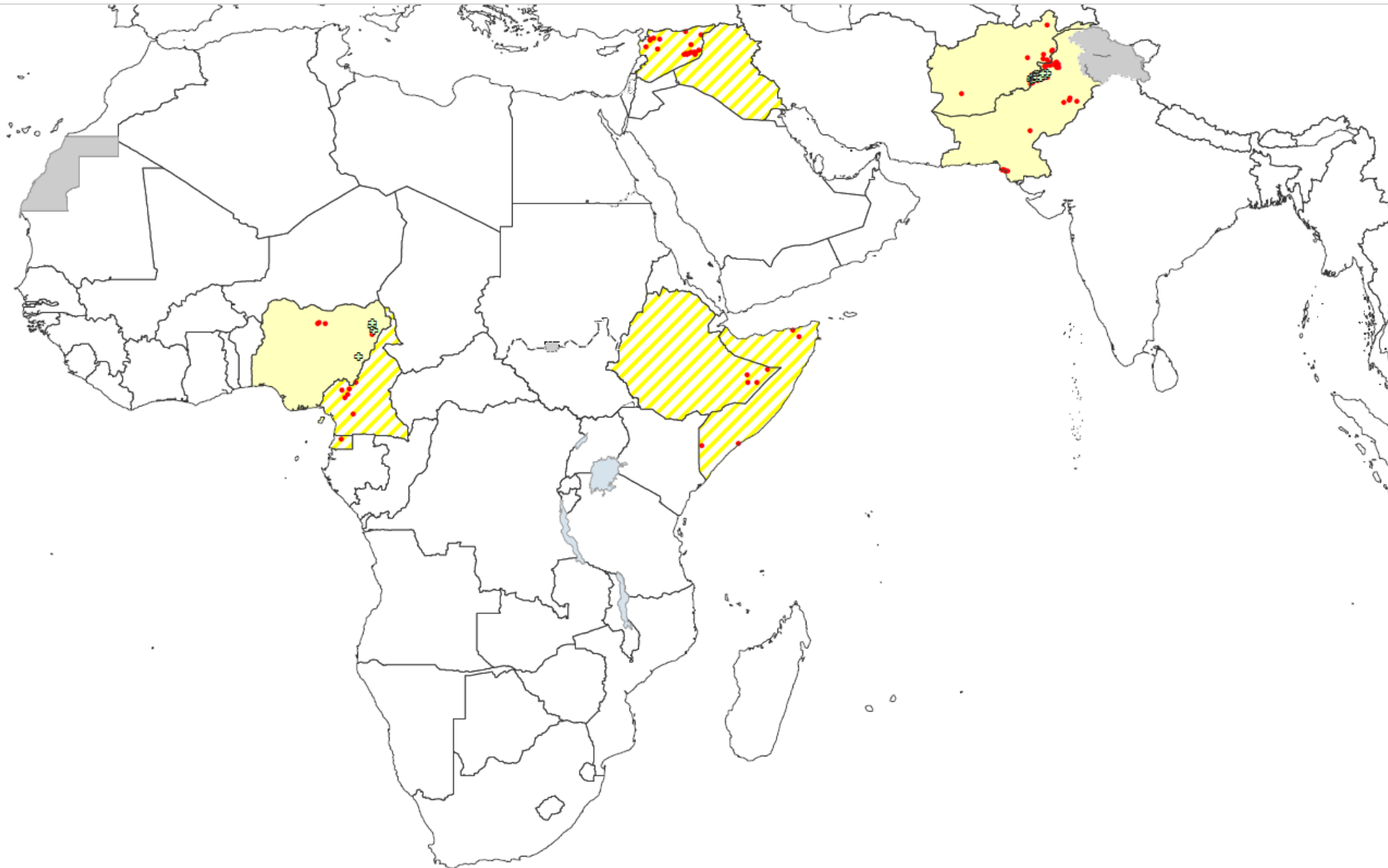


# Strategies to mitigate the risk of cVDPV 2 emergence

Strategy	All Countries	Tier 1 Countries	Tier 2 Countries
IPV Introduction	+++		
Improve RI		+++	++
*Preventive tOPV SIAs		+++	+

\*Preventive tOPV SIAs in low season of 2015 & 2016 in Tier 1 countries/areas and selected Tier 2 countries/areas

# WPV1 and cVDPV 2 cases, last 6 months



1 Excludes viruses detected from environmental surveillance.

● cVDPV1

▲ cVDPV3

● Wild Polio Virus Type 1

■ Endemic countries

+ cVDPV2

\*02 Oct 2013 – 01 April 2014

▨ Country with WPV case in previous 4 months

# Issues for Discussion

- Should equal priority be given at this stage to interruption of cVDPV 2 and WPV1?
- At what point would it become necessary to reconsider the target date of tOPV cessation?
- Is the approach to introduce IPV, improve routine immunization coverage and conduct 'preventive' tOPV SIAs in Tier 1 and selected Tier 2 countries sufficient to reduce the risk of cVDPV 2 emergence?