

Status of Outbreak Vulnerable Countries

Hamid Jafari, WHO

Robert Linkins, CDC

Independent Monitoring Board Meeting

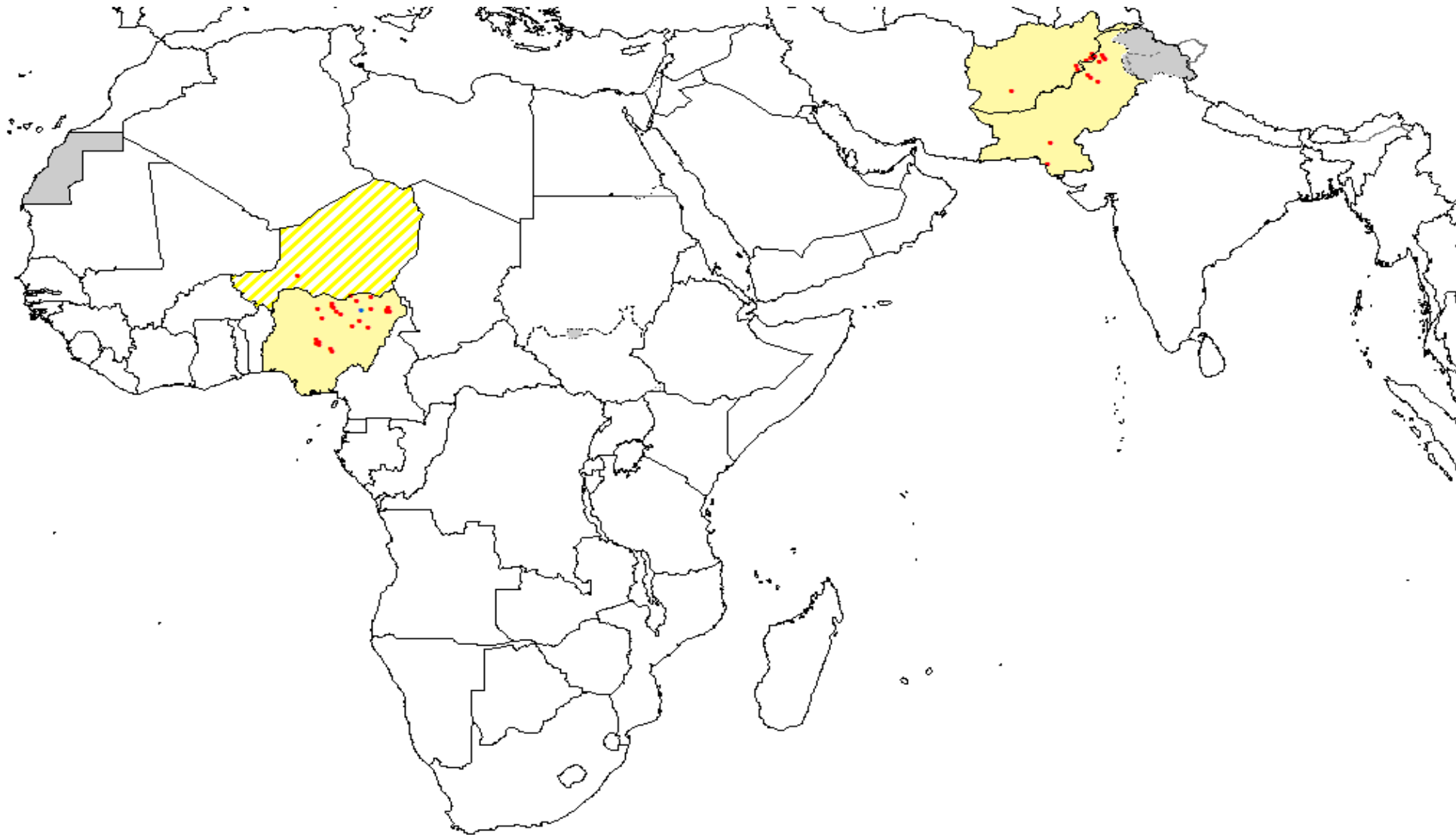
7-8 May, 2013

Outline

Non-Endemic Vulnerable & At-Risk Countries

- Recently infected countries (Niger, Egypt)
- Vulnerability and risk assessments
- Countries at risk for WPV/cVDPV outbreak
- Examples of regional risk management
- Maintaining support, building on polio

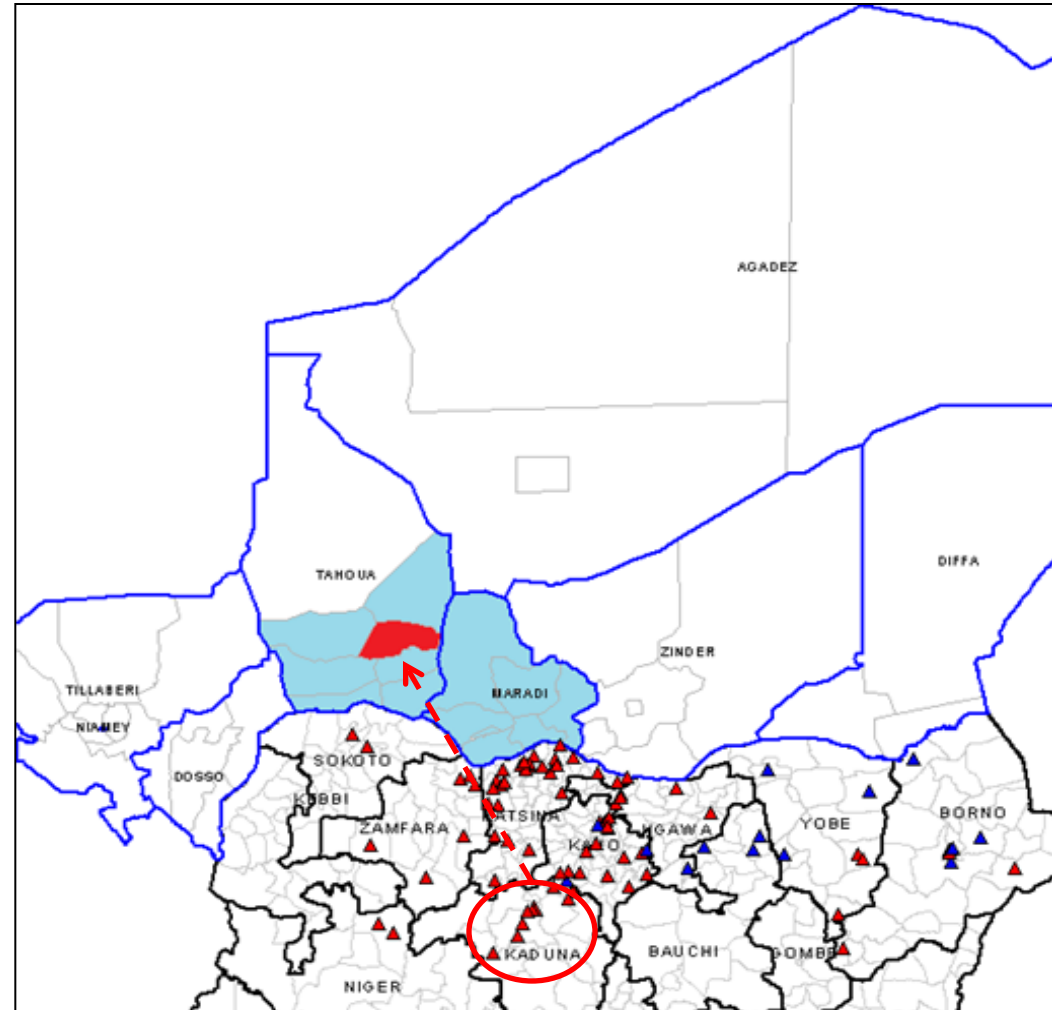
Wild Poliovirus Cases, Previous 6 Months



NIGER: WPV1 importation and outbreak November 2012

The only new WPV outbreak in 2012

- 1 case, onset 15-Nov in Tahoua;
- 'Orphan' virus linked to Kaduna;
- 4 SIAs after case onset:
 - NID (23-Nov-2012)
 - SNID 15-Jan, bOPV (map)
 - NID 02-Feb, bOPV
 - NID 02-Mar, tOPV
- NP-AFP rate:
 - 2012: 4.4
 - 2013: 6.4
- No additional cases



WPV1 detection in Cairo environmental samples

- WPV1 in samples taken 2 and 6 December in 2 districts
- Strains 99.6% similar to recent Pakistan WPV1
- 3 SIAs after detection:
 - SNID 2 Feb, tOPV in 2 districts
 - SNID 10 Mar, mOPV1 all Cairo
 - SNID 14 Apr, mOPV1 all Cairo



- 2012-PAK12-ENV093E4 PAK/SD/SUK/NS-1/12/002 Sukkur 08-Jun-12 R3
- 2012-PAK12-ENV116E5 PAK/SD/HYD/HC-2/12/001 Hyderabad 10-Jul-12 R3
- 2012-PAK12-ENV125E3 PAK/SD/SUK/SC-1/12/004 Sukkur 28-Jul-12 R3
- ◆ ■ 2012-EGY12-ENV2013712231 EGY-E375-L20B4 Cairo - Alsalam 02-Dec-12 R3
- ◆ ■ 2012-EGY12-ENV2013712233 EGY-E375-RD1 Cairo - Alsalam 02-Dec-12 R3
- ◆ ■ 2012-EGY12-ENV2013712249 EGY-E385-L20B2 Cairo - Alhaggana 06-Dec-12 R3
- ◆ ■ 2012-EGY12-ENV2013712230 EGY-E375-L20B3 Cairo - Alsalam 02-Dec-12 R3
- ◆ ■ 2012-EGY12-ENV2013712250 EGY-E385-L20B4 Cairo - Alhaggana 06-Dec-12 R3
- ◆ ■ 2012-EGY12-ENV2013712232 EGY-E375-L20B5 Cairo - Alsalam 02-Dec-12 R3

WPV1 detection in Cairo environmental samples

- H-H case search
- NP-AFP: 3.2, Cairo 2.8 stool adequacy > 90%
- Increased env. sampling
- No further WPV1 detection



Epid. week	Nov				Dec				Jan				Feb				Mar			Apr										
	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
CAIRO - AIN SHAMS		■					■	■			■		■			■		■			■			■		■				
CAIRO - ALAMIRIA				■				■				■				■					■				■					
CAIRO - ALHAGGANA		■					■	■			■					■		■						■		■		■		
CAIRO - ALSALAM				■				■				■				■		■						■		■		■		
CAIRO - ALTEBEEN				■				■					■			■								■						
GIZA - AL WASLA				■				■				■				■								■						
GIZA - ALESHREEN					■						■			■										■				■		
GIZA - ALHARAM		■					■	■			■			■										■						
GIZA - ALMOHEET			■				■	■			■			■										■			■			
GIZA - ALSAFF	■						■	■			■			■										■						
GIZA - STATION			■				■	■				■				■								■			■			
QALIOBIA - BANHA			■				■	■					■				■							■						
QALIOBIA-SHOBRA ALKHIMA				■			■	■				■				■								■			■			

■ = wild poliovirus

■ = pending result

■ = negative

Global and Regional Risk Assessments

Global Risk Assessment

- Purpose: to prioritize human, financial and vaccine resources
- Mainly based on:
 - Proximity to current transmission
 - History of outbreaks
 - Recent SIAs
 - Emergencies/crises

Regional Risk Assessment

- Purpose: to assess program gaps, plan mitigation steps
- Mainly based on:
 - Population immunity (RI + SIAs)
 - Surveillance quality
 - Other factors - history of outbreaks, preparedness

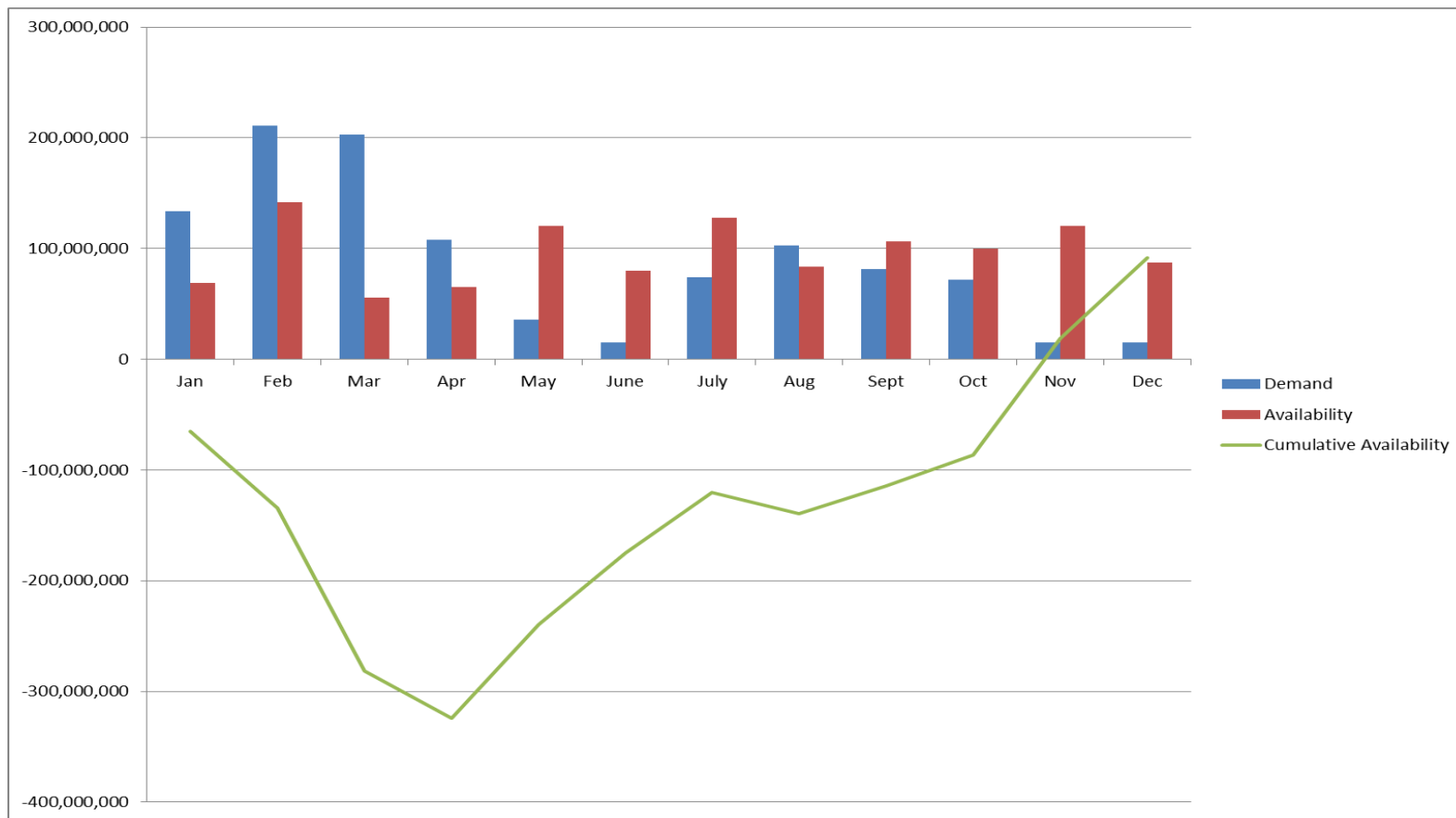
Assessing and Mitigating Risks in Polio-Free Areas

- Global Risk Assessment
 - Quarterly teleconference on SIA prioritization and allocation of resources
 - Representatives from all GPEI partners participate
- Regional Risk Assessment Working Group
 - Works with regional offices on assessments and follows mitigation actions

Risk Assessments in Polio-Free Areas: Priorities and Actions Taken

- Success in approach over past year:
 - Fewer international outbreaks (Niger & Kenya)
 - Special SIAs financed in risk areas of W Africa
 - Management of short OPV supply in Q3 2012 & Q1 2013
- Maintained global visibility and transparency about risks
 - Regional assessments presented to certification and advisory committees, used for advocacy with governments

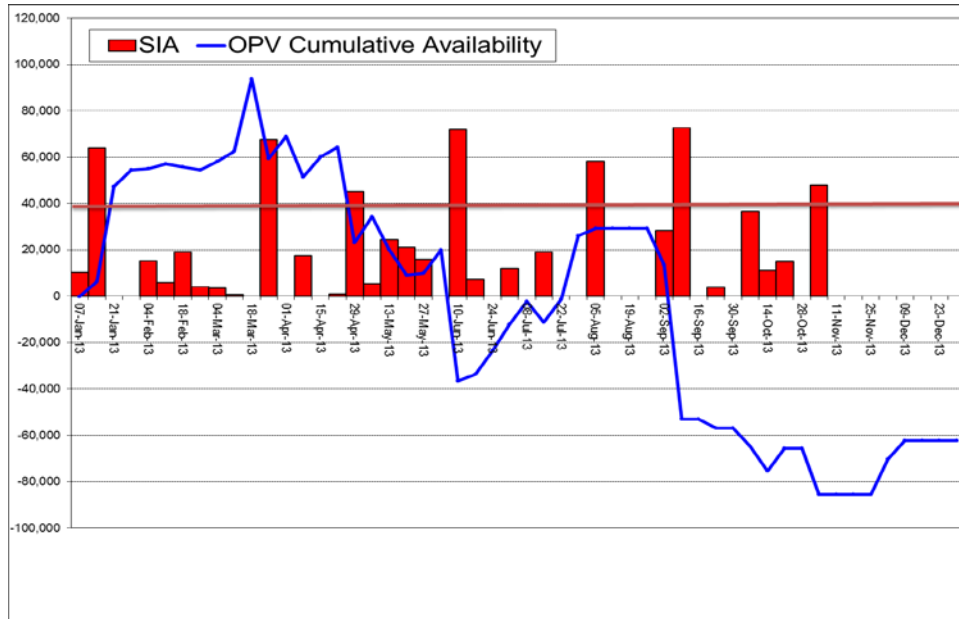
2013 OPV supply vs Demand Status as of updated 18 June SIA schedule (PQ suppliers only) (Demand 1,067B doses)



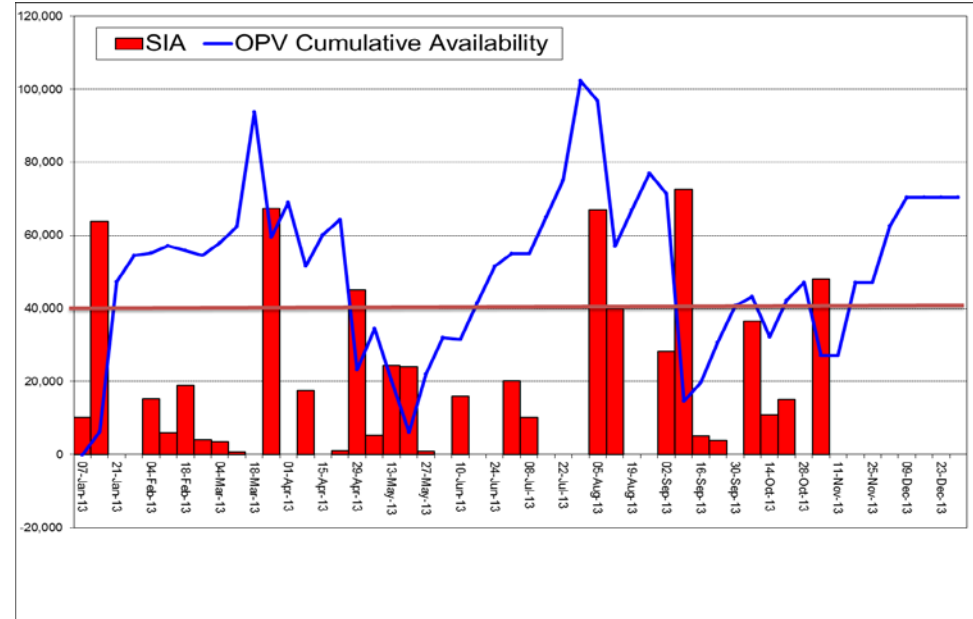
- Demand as per 18 June full SIA scenario. Total demand 1.067B doses compared to 1.175B doses in tender document (58M doses less due to Pakistan demand met with 2012 supply for Jan, and revised numbers overall, and additional 40M doses less in Q4 under 18 June SIA scenario).
- Supply includes pre-qualified offers only, and include the reduction of 67 mds in offered supply from Novartis.
- Shortfall throughout the year, but positive balance at year end > 90M doses.
- Current supply from registered suppliers: sufficient to meet demand for Nigeria and Pakistan (assuming Sanofi bOPV acceptable in Nigeria)
- Assumes zero balance from 2012

Current demand and supply: before and after mitigation measures

bOPV - Before

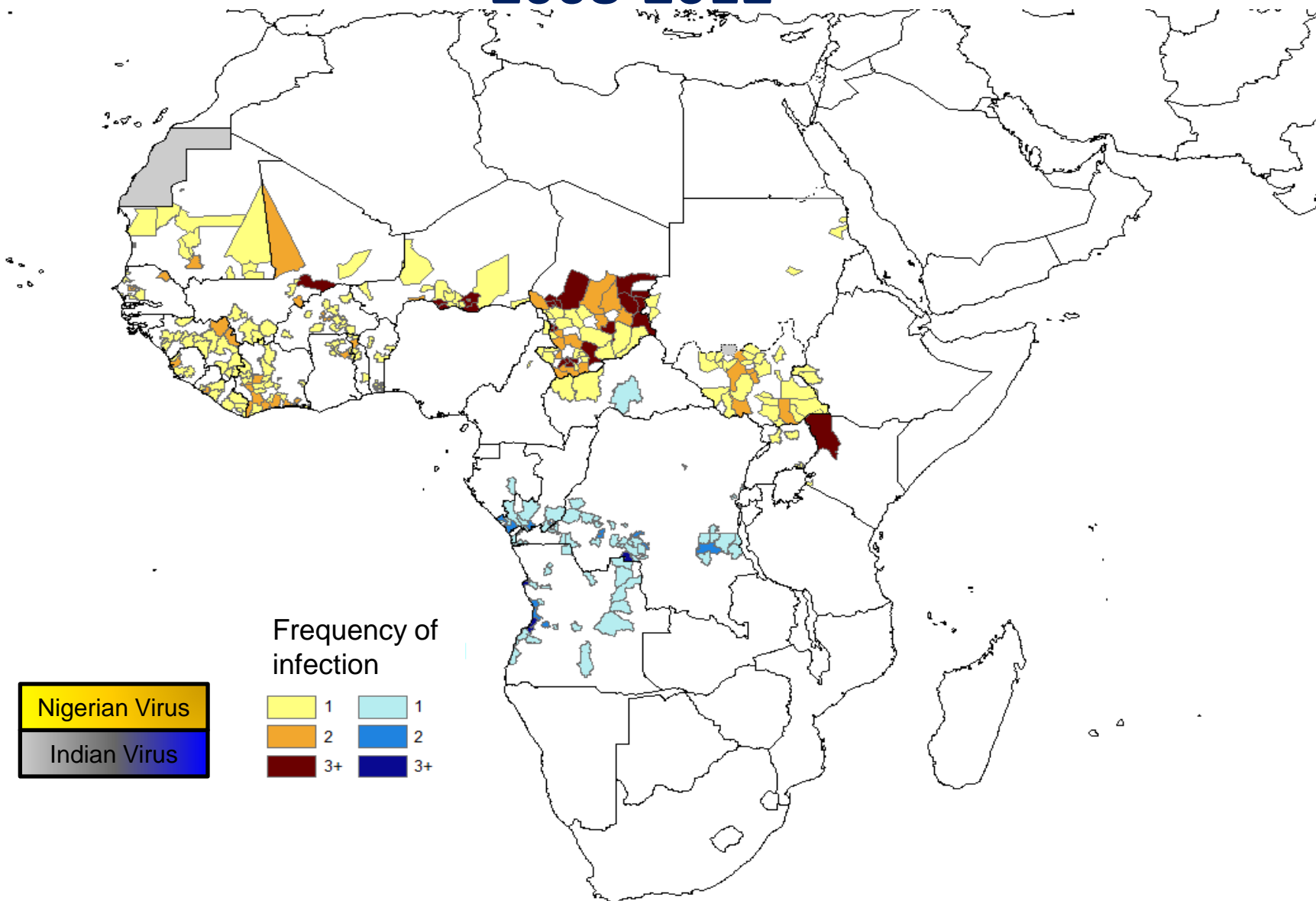


bOPV - After



Vulnerable and At-Risk Countries Global Review

Districts affected by WPV Outbreaks in AFR and EMR 2008-2012

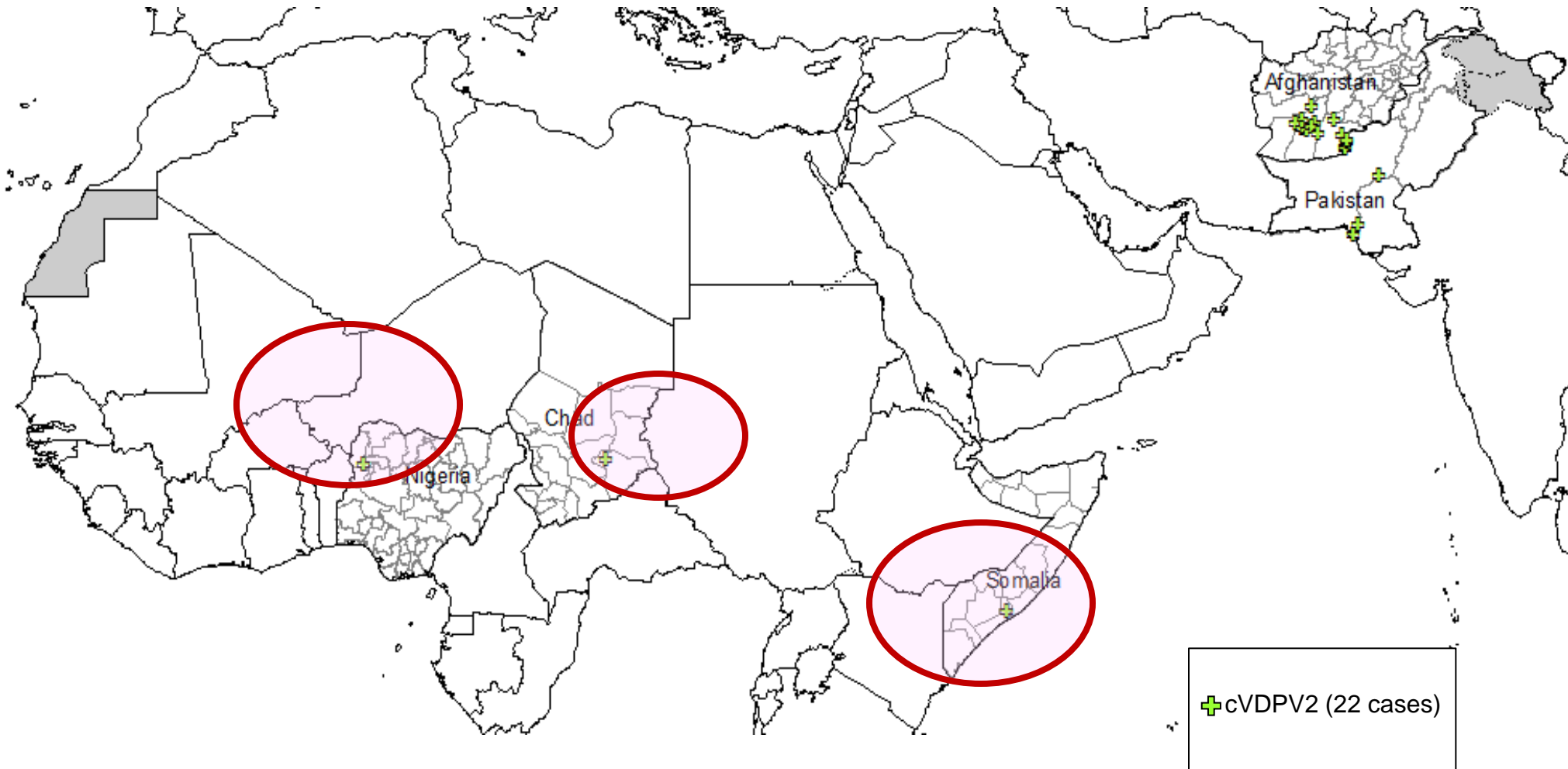


Note: District infected in each outbreaks counted only once. Nigeria excluded.

Data in WHO/HQ as of 06 May 2013

Risk of Cross-border cVDPV Outbreaks

Circulating Vaccine-derived Poliovirus*, Previous 6 Months**



**01 Nov 2012 – 30 Apr 2013

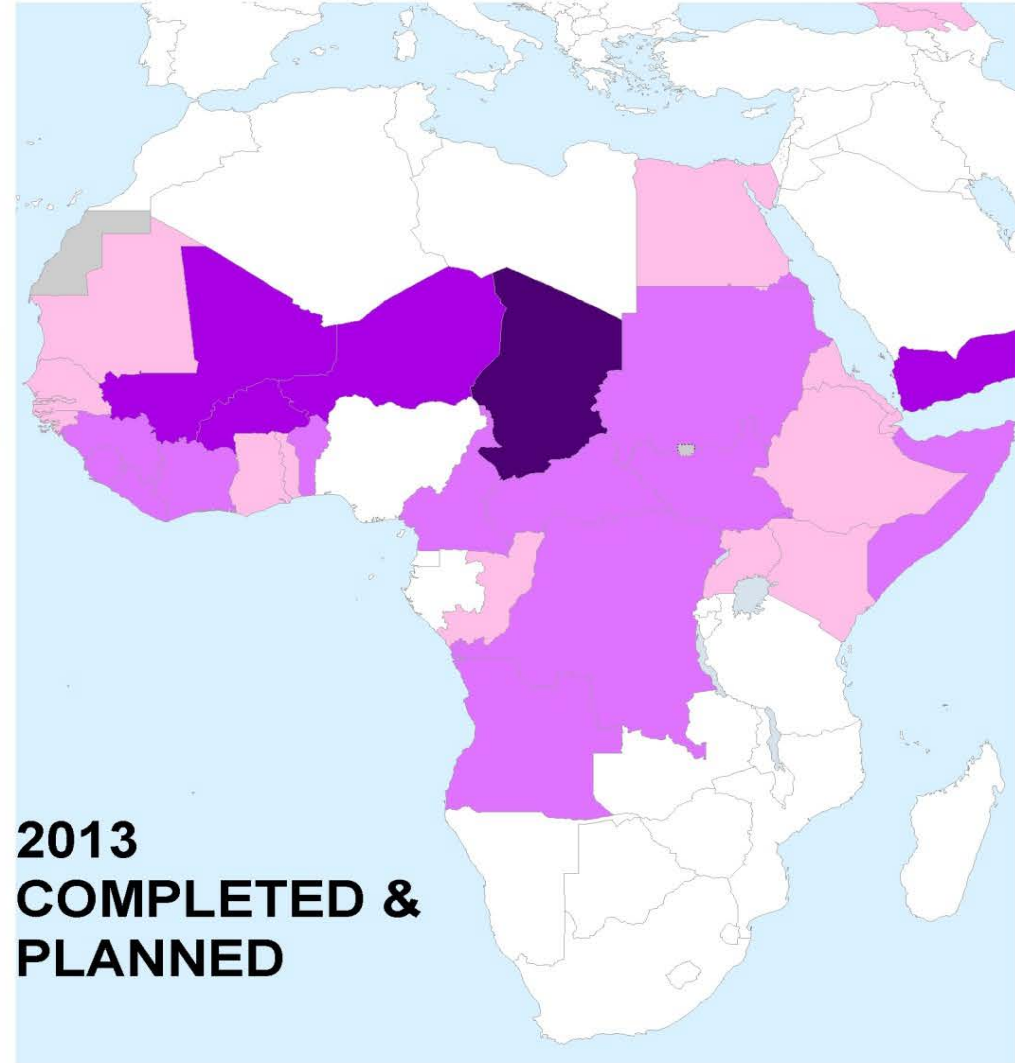
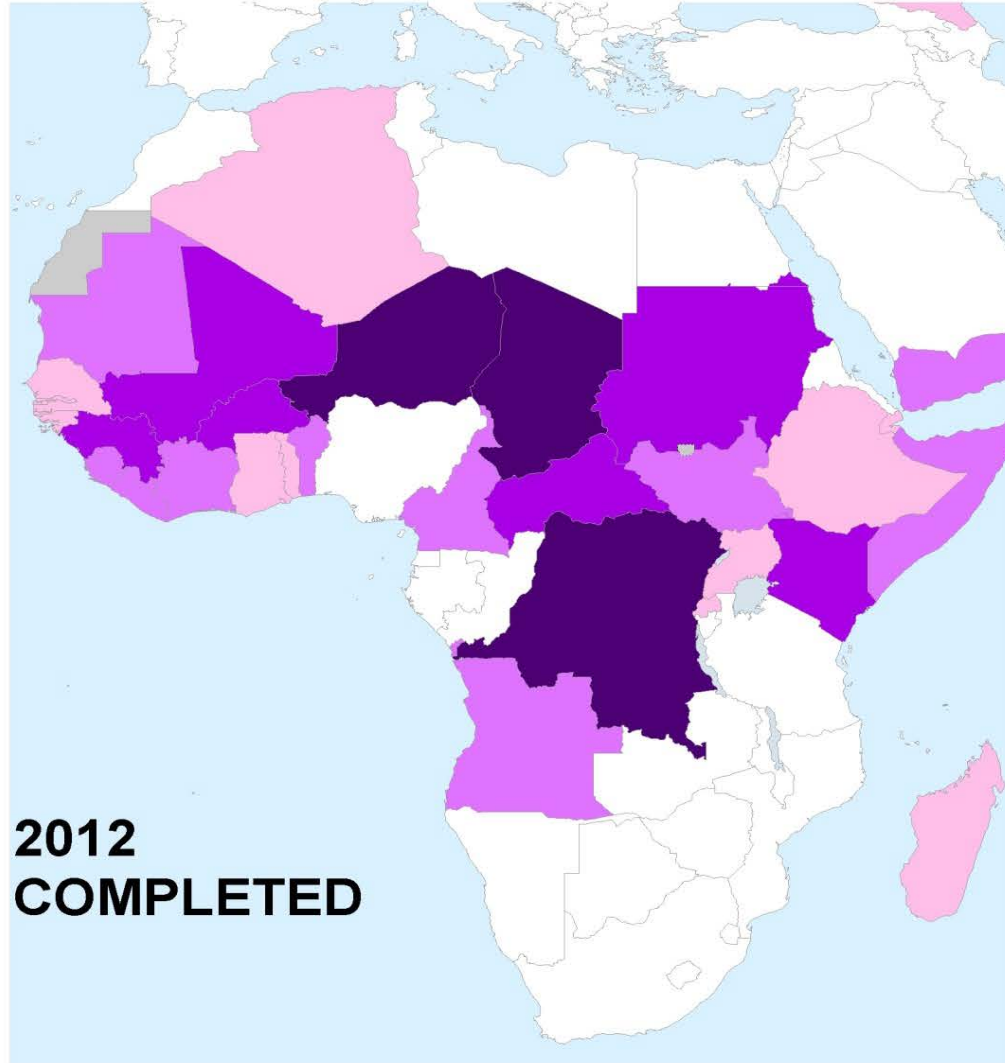
Data in WHO HQ as of 30 April 2013

SIA ACTIVITIES 2012 & 2013

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AFRICA - LIST OF SIAs COMPLETED & PLANNED IN 2012 & 2013

MAP DATE: 07 May 2013, Version 1.0



Map Scale (A3): 1:38,165,432

1 cm = 382 km

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



Data Source:

Admin. Boundaries: World Health Organization
Base Map: ESRI
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization
Data as on 01 May 2013

SIA Rounds



(NID / SNID)

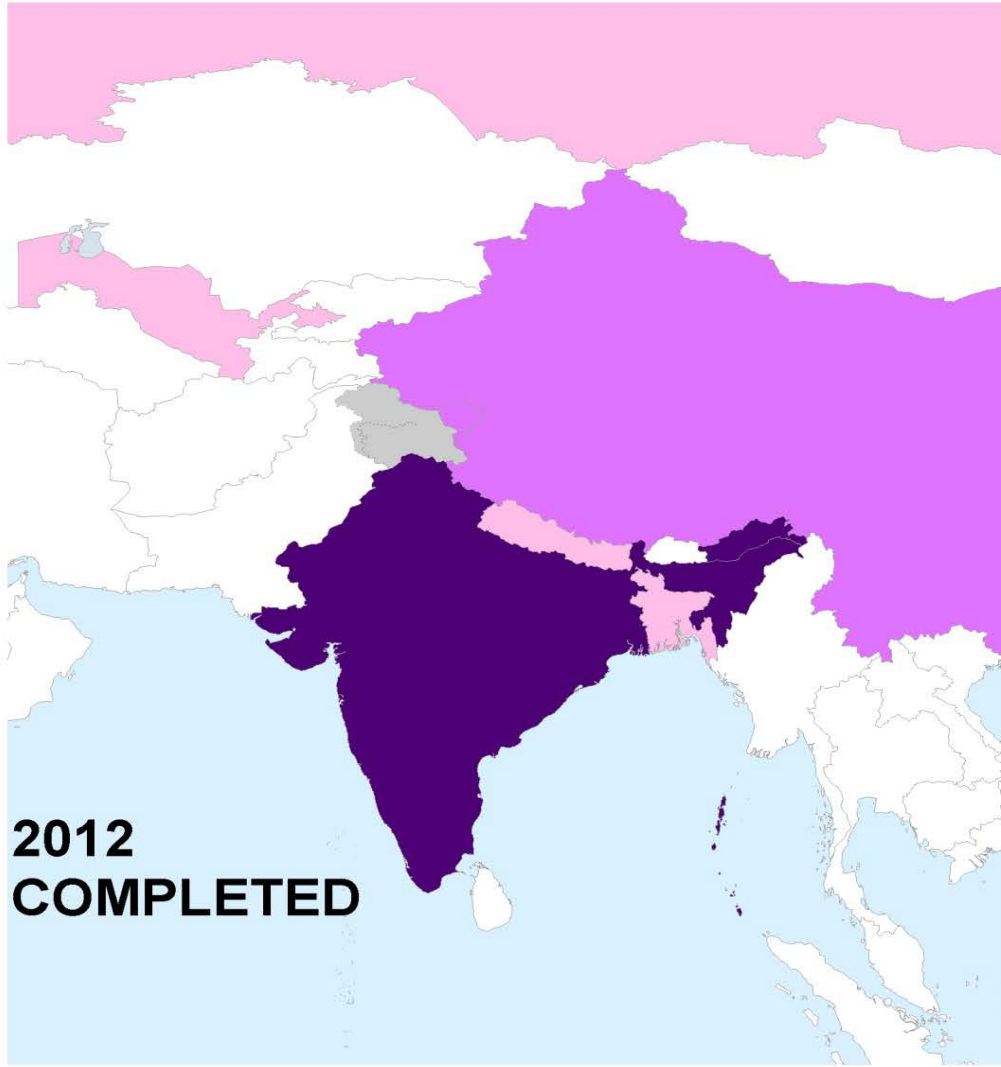
The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers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

SIA ACTIVITIES 2012 & 2013

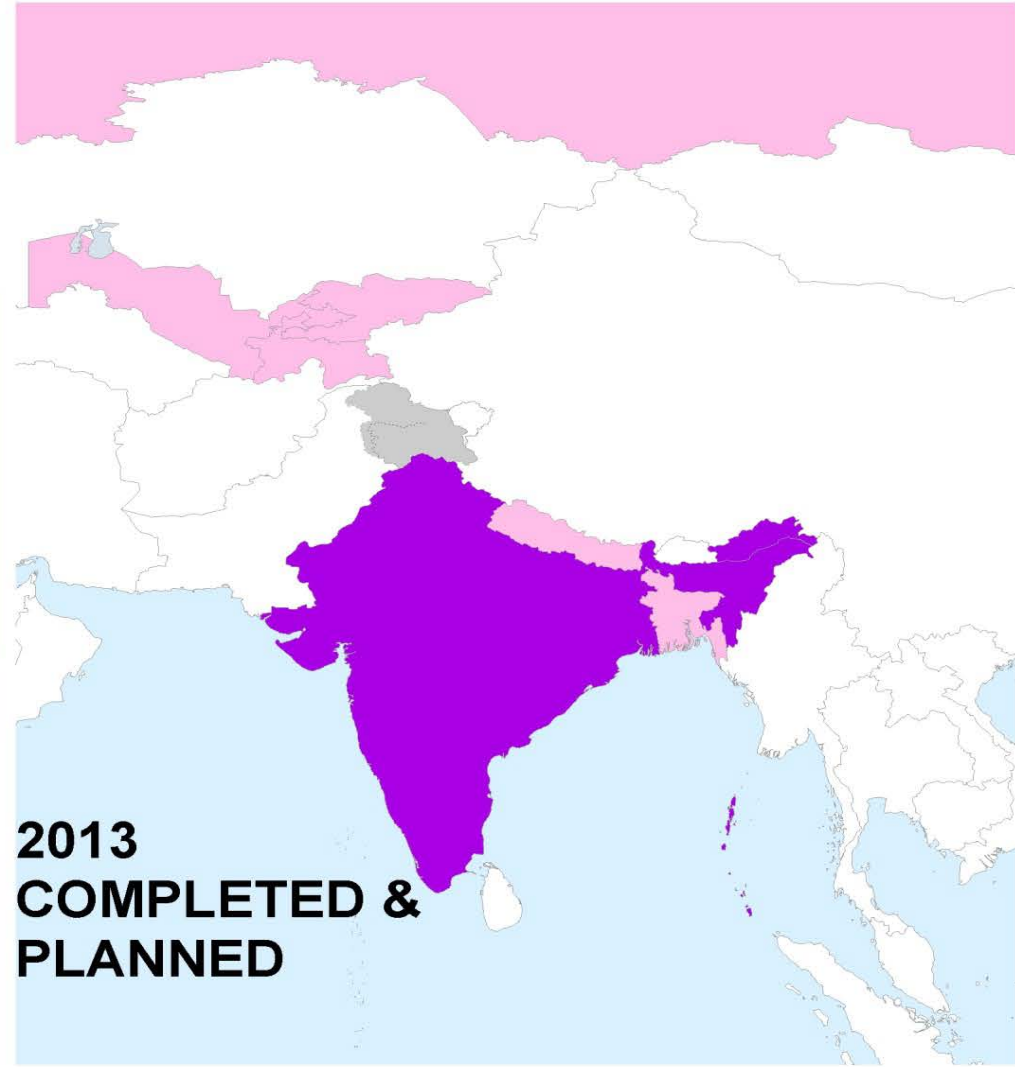
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ASIA - LIST OF SIAs COMPLETED & PLANNED IN 2012 & 2013

MAP DATE: 06 May 2013, Version 1.0



**2012
COMPLETED**



**2013
COMPLETED &
PLANNED**

Map Scale (A3): 1:28,888,102

1 cm = 289 km

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



Data Source:

Admin. Boundaries: World Health Organization
Base Map: ESR/ I
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization
Data as on 01 May 2013

SIA Rounds

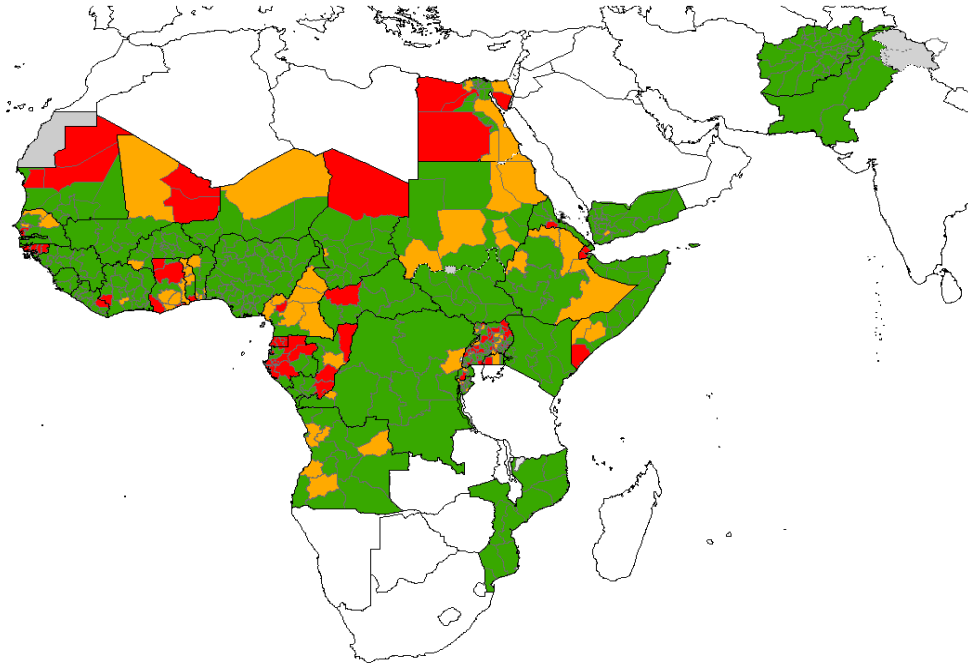


(NID / SNID)

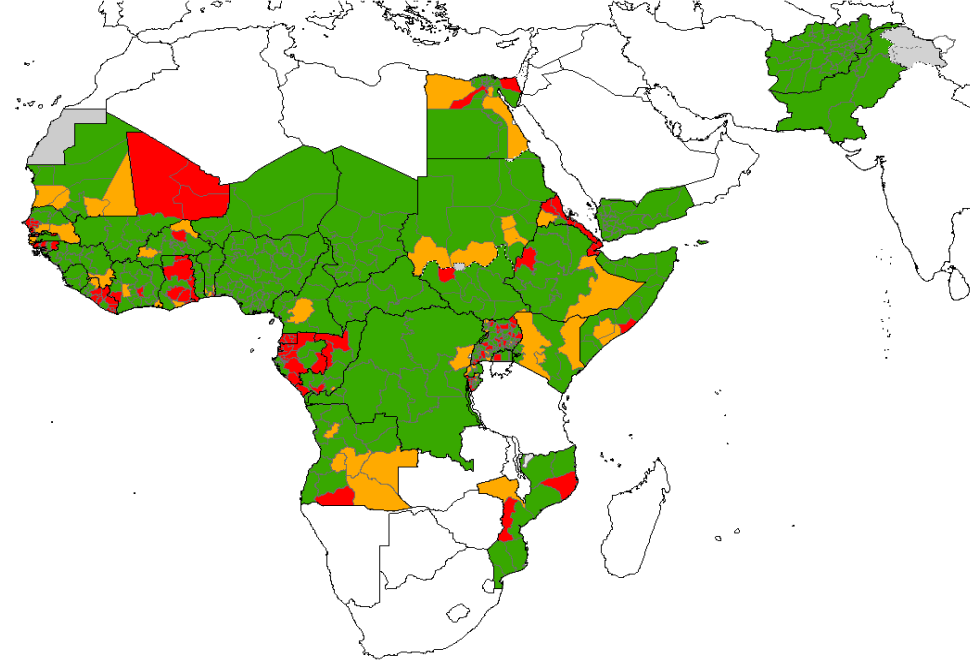
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Quality of AFP Surveillance to Detect WPV & cVDPV

Apr 12 – Sep 12



Oct 12 – Mar 13



Surveillance Index =
NP-AFP Rate X Stool
Adequacy Rate /100

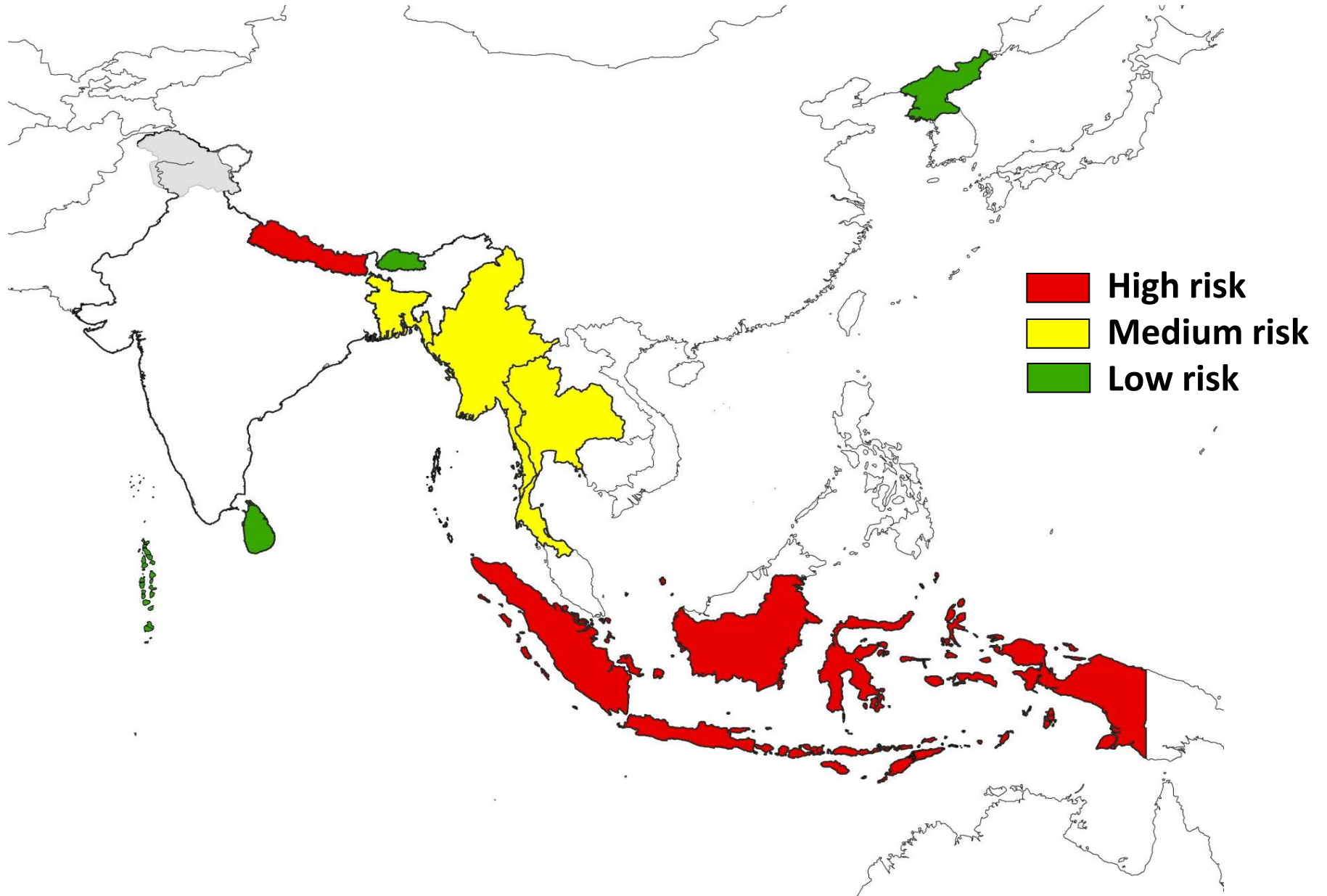


Only WPV endemic, re-established, and WPV importation belt countries are mapped.

Examples of Regional Vulnerability Assessments and Mitigation Activities

- South-East Asia Region
- Eastern Mediterranean Region
- African Region

South-East Asia Region Risk, May 2013



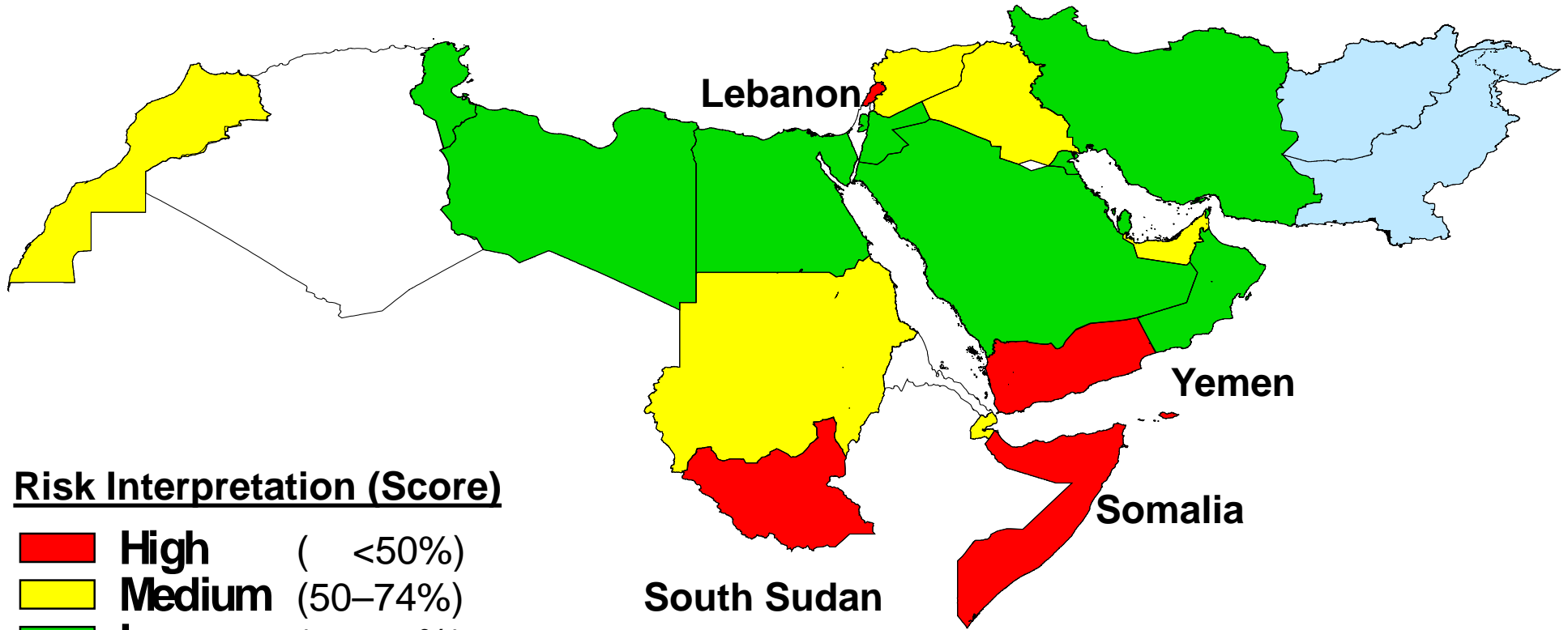
South-East Asia: High Risk Countries

Mitigation Actions

Priority Countries	Immunization	Surveillance
Nepal	NIDs (September/October)	SEA-RCCPE technical and advocacy visit (January)*
Indonesia	No NID/SNIDs planned for 2013	EPI/VPD surveillance review (June) SEA-RCCPE technical and advocacy visit (June)*

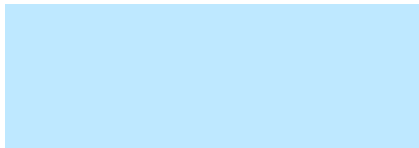
**The South-East Asia Region Certification Commission for Polio Eradication (SEA-RCCPE) has planned technical support and advocacy visits to each country in 2013 as part of their polio-free certification activities: Nepal (January) Timor-Leste (February), Bhutan (April), Indonesia (June), Thailand (June), Bangladesh (July), Myanmar (August), and DPRK (September)*

Eastern Mediterranean Region Risk, May 2013



Risk Interpretation (Score)

- High** (<50%)
- Medium** (50–74%)
- Low** (≥75%)

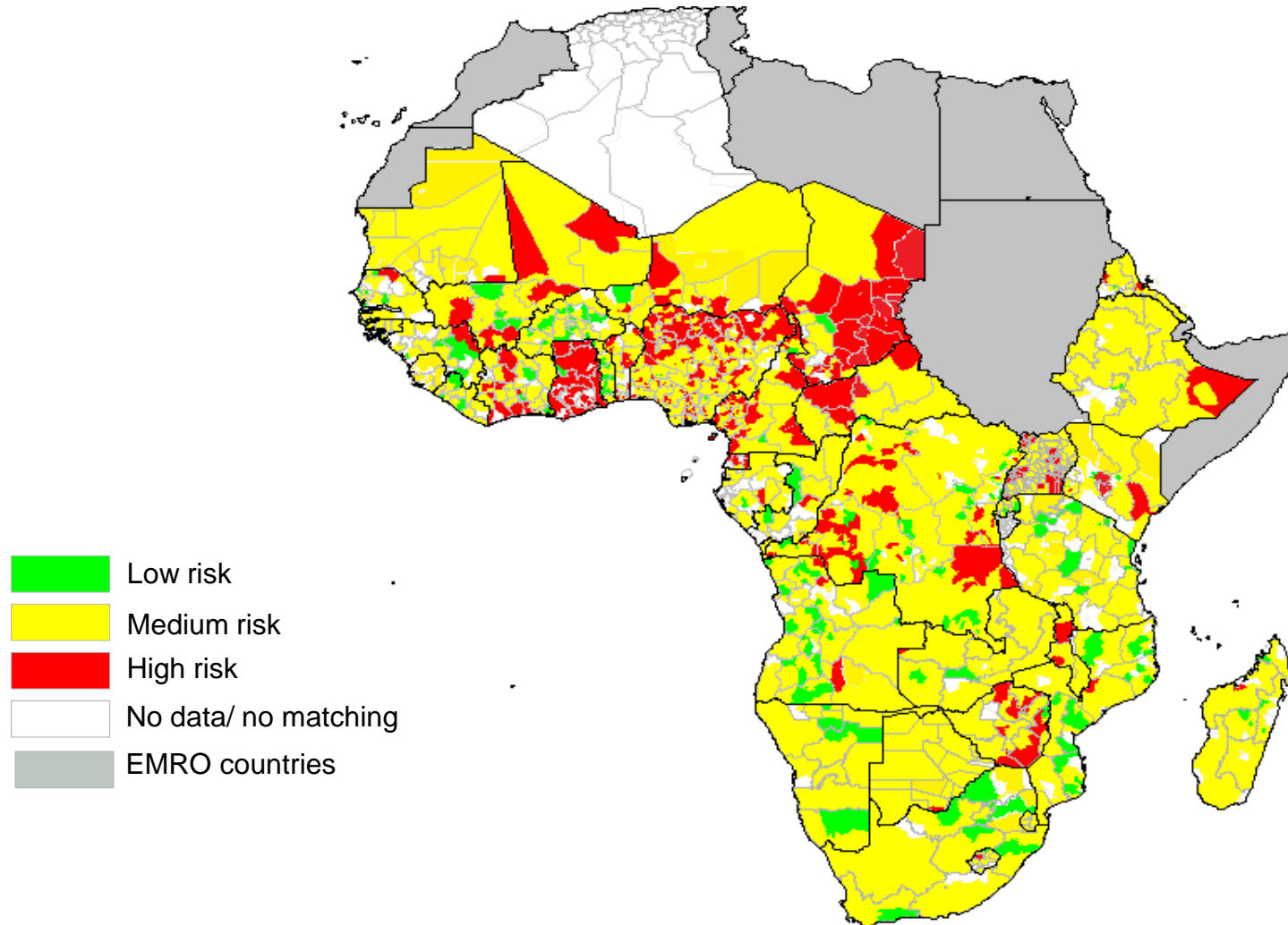


Eastern Mediterranean Region: High Risk Countries

Mitigation Actions

Country	Immunization	Surveillance
Lebanon	SNIDs Jan 2013 in border provinces with Syria SNIDs Mar 2013	Planned surveillance review
Somalia	CHDs Sept, NIDs Oct 2012 SNIDs Dec 2012	Somalia joint mission Nov 2012 6-month Emergency Action Plan to stop cVDPV Q1-Q2 2013
	SIAs Q1 2013 north and SCZ	Monitoring of reverse cold chain in S & C zones
		Somalia surveillance review Mar 2013 Planned follow-up outbreak assessment Jun 2013
South Sudan	NIDs Nov & NIDs Dec 2012 NIDs Mar & NIDs Apr 2013	
Yemen	SNIDs Nov 2012 NIDs Jan 2013	Planned follow-up outbreak assessment/ surveillance review May 2013
	SIAs in 7 priority governorates in May due to cVDPVs	

African Region Risk, May 2013



Source AFRO: Countries' risk assessment report submitted to AFRO in a quarterly basis

African Region: Mitigation Actions

West Africa

Country	Immunization	Surveillance
Niger		3 month outbreak assessment
Ghana, Cape Verde, Guinea Bissau		Surveillance reviews (planned)
Cote d'Ivoire, Mali		External reviews
Benin, Burkina Faso, Cote D'Ivoire, Guinea, Mali, Sierra Leone, Liberia	Synchronized SIAs in April and May	
Ghana, Senegal, Gambia, Togo, Guinea Bissau, Mauritania	Synchronized SIAs in May	

African Region: Mitigation Actions

Central Africa

Country	Immunization	Surveillance
DRC	SIAs in June, July	Training in Orientale, Bandundu, Bas Congo, K. Orientale, Nord Kivu, Sud Kivu in May 2013 Post cVDPV assessment in Q3
CAR	SIAs delayed since Dec 2012 due to insecurity SIAs in April, May	EPI review 2012, evaluation Q3 2013
Cameroon	SIAs in Far North, North, and Adamaoua in April, May 2013	
Angola	SIAs in April and May	
Chad	SIAs in April, May, June	Post 12-month WPV and 6-month cVDPV assessments Q3

African Region: Mitigation Actions Horn of Africa

Country	Immunization	Surveillance
Ethiopia	SIAs postponed to Q4	EPI review May 2013
Eritrea	SIAs April and May in high risk districts	Cross border coordination meeting with Sudan in Q3 EPI review 2012, evaluation Q3 2013
Uganda	SIAs postponed to Q3 2013	
Kenya	SIA in Q3 2013	

Maintaining Support & Building on Polio in Outbreak Vulnerable Countries

Maintaining Support

- Ongoing SIAs and program support by risk
- No reduction in staff
- No reduction in planned financing, 2013-14
- Increasing support for immunization systems

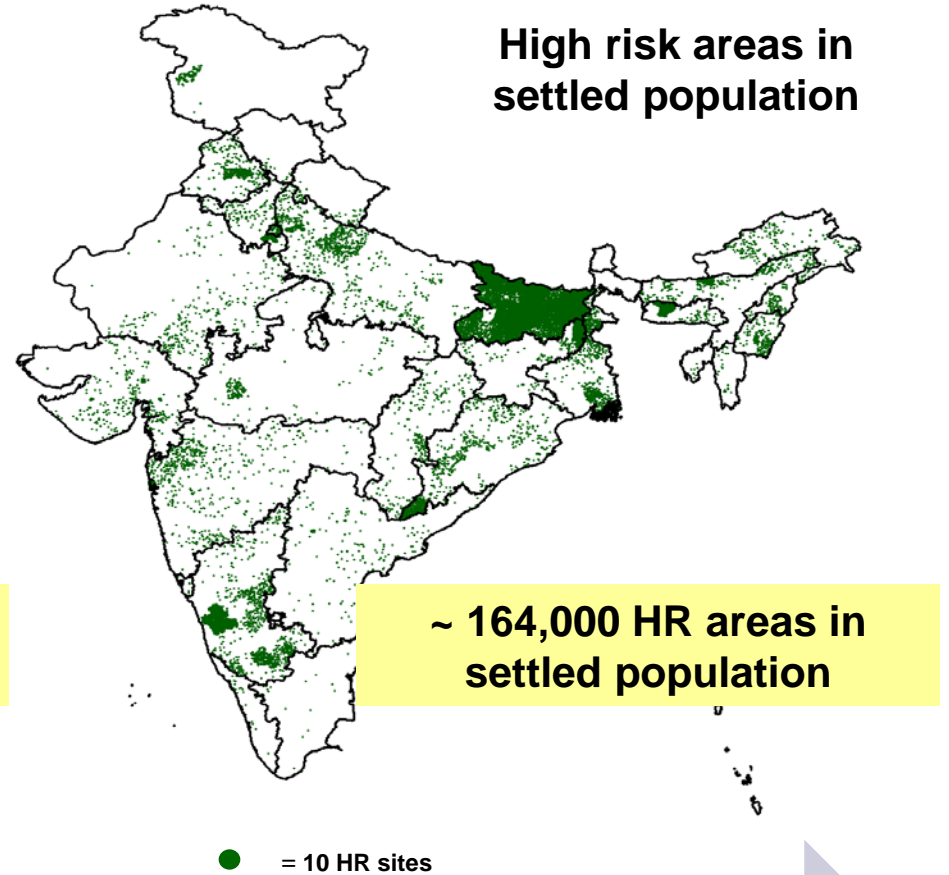
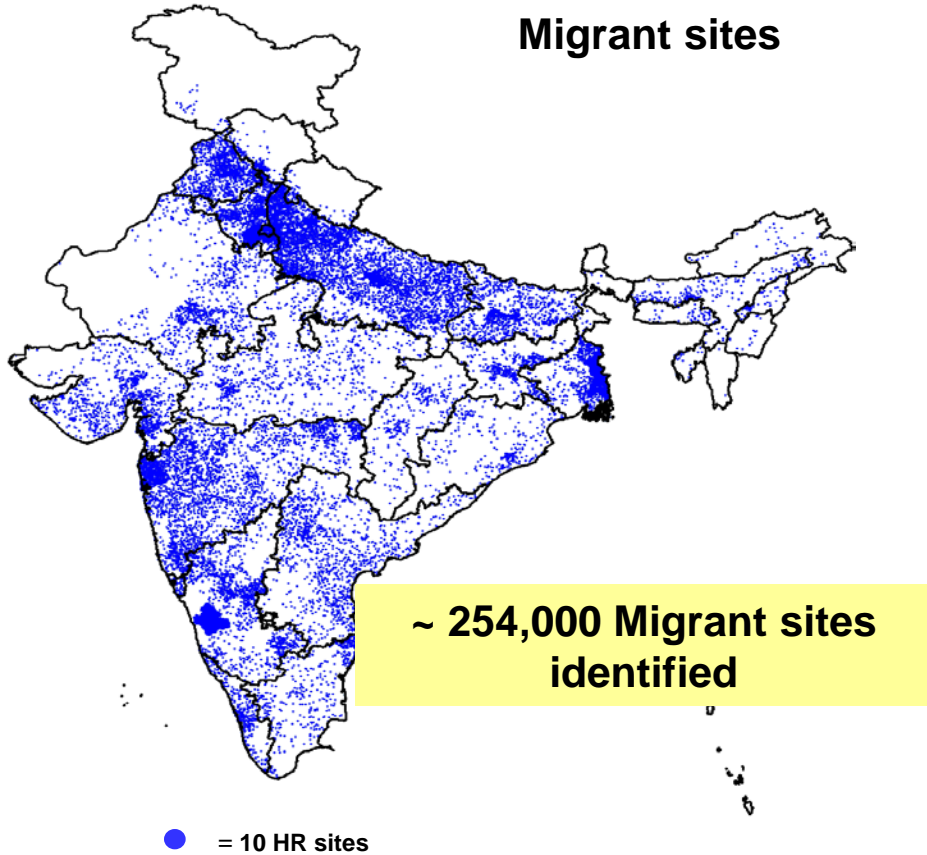
Building on Polio – Strategic Plan 2013-18

- 10 focus countries for immunization support
 - 50% of polio staff time
 - Management, micro-planning, mobilizing, monitoring
 - 10% year-on-year coverage increase in HR districts
- Support tOPV withdrawal and IPV introduction
- Cross-agency Immunization Management Grp

Africa

- Integrated communicable disease surveillance
- Outbreak detection
- Measles, YF and meningitis campaigns
- Routine immunization
- Bed nets, deworming

Inclusion of ~400,000 migratory and settled high risk areas in RI micro-plans



- Immunization Weeks 2012: ~5 million
- 4 Immunization Weeks planned for 2013

24-30
Apr

3-8
Jun

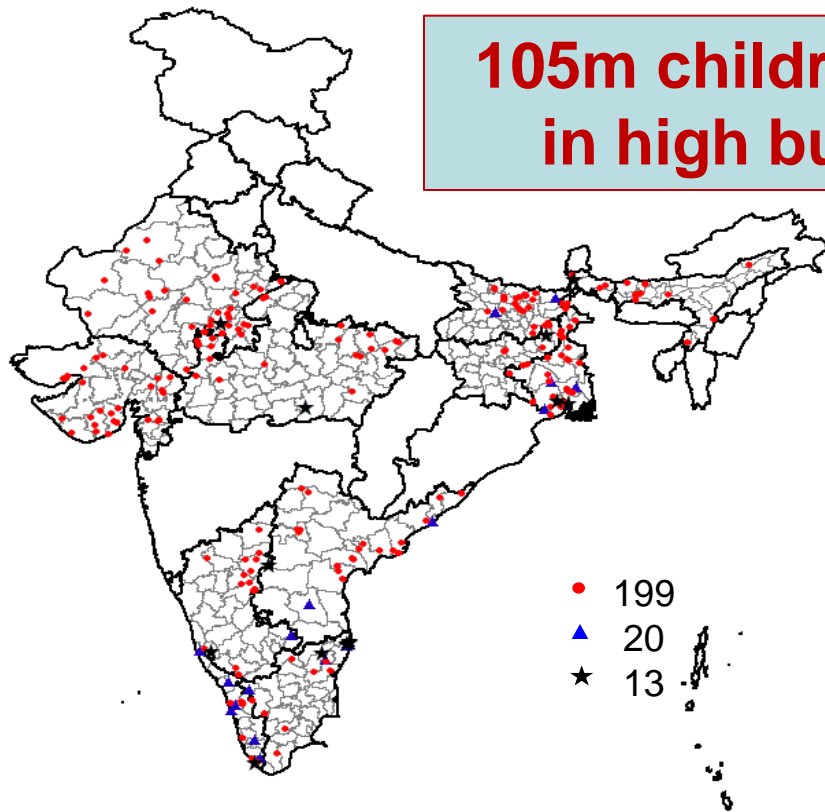
8-13
Jul

19-24
Aug

Measles/Rubella Surveillance Built on AFP Surveillance, India

Serologically confirmed[#] measles, rubella and mixed outbreaks

2011



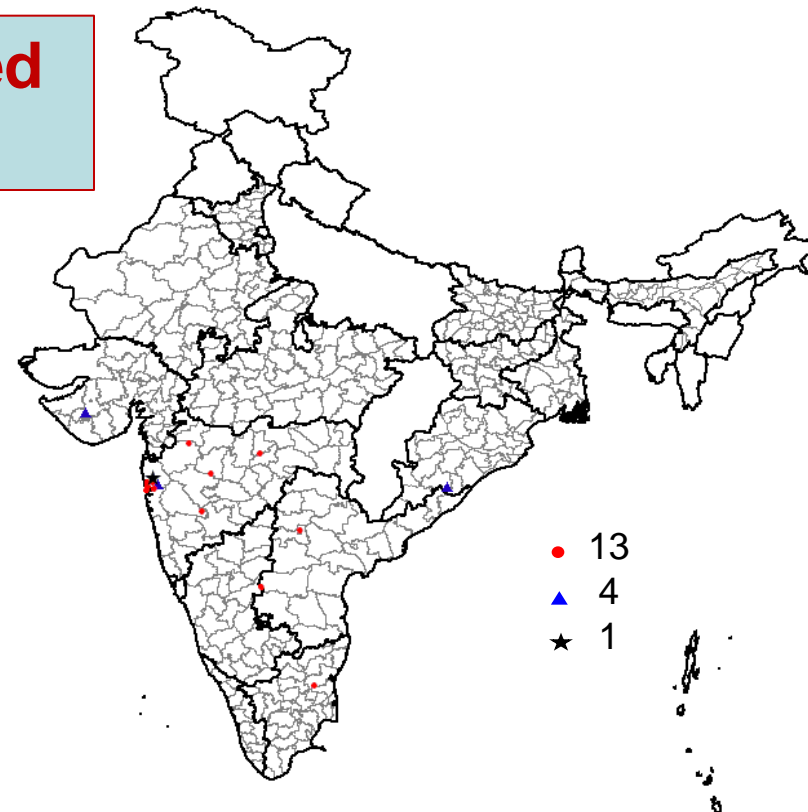
232 outbreaks

**105m children vaccinated
in high burden states**

● 199
▲ 20
★ 13

- Measles outbreaks confirmed
- ▲ Rubella outbreaks confirmed
- ★ Mixed outbreaks confirmed

2013*

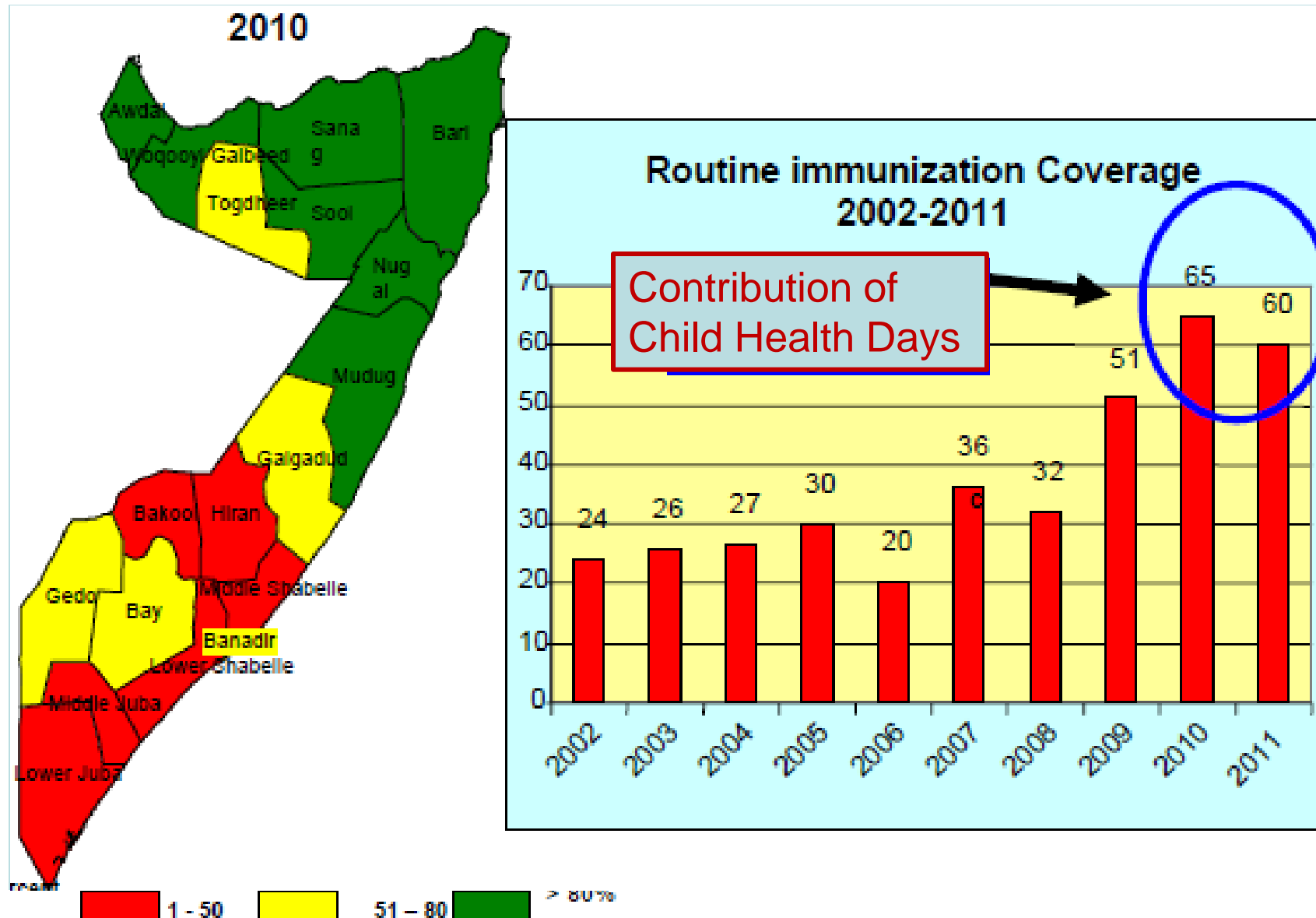


18 outbreaks

● 13
▲ 4
★ 1

[#]Outbreak confirmation for Measles: ≥ 2 cases IgM positive for measles, Similarly for Rubella
© Surveillance started from June, 2011 in Bihar and July 2011 in Assam and Jharkhand

Routine DPT3/OPV3 Coverage, Somalia



Source: JRF Somalia

Summary

- No further virus spread in Egypt and Niger
- Global risk assessments
- Resources prioritized for countries at risk
- Regional vulnerability assessment
- Support and advocacy for vulnerable countries
- No scaling back in risk countries
- Countries building on polio