Update – Risk Assessments and Risk Mitigation Activities in Polio-Free Areas

Working Group on Risk Assessments for Polio-free Regions

October 2012

Risk Assessments in Polio-Free Areas: Background

- Objective: Assess risk of an outbreak following an importation and recommend mitigation actions
- Risk Assessment Working Group (WHO, CDC) formed 2011
- Risk assessments consider risk by three main components:

SUSCEPTIBILITY	SURVEILLANCE	PROGRAM / POPULATION
WHO/UNICEF national	% with adequate stool	Probability of
POL3 coverage	specimens (14 days)	importation (borders, travel links)
Pol3 trends	Geographical gaps in surveillance	High risk, vulnerable or
Districts <80% DTP3,		underserved populations
WHO/UNICEF JRF	Non-polio AFP rate	
		Health system status
SIA conducted	Timeliness of lab result	
	(onset to isolation <31	Sanitation/hygiene
Non-polio AFP children	days)	
with ≥3 doses, zero-doses		Polio importation preparedness plan
cVDPV or aVDPV		

Risk Assessments in Polio-Free Areas: Priorities and Actions Taken – October, 2012

- Resource limitations: WHO and CDC Risk assessments considered during GPEI partner call for funding priorities and SIA programming
- Global visibility, communication, perception of risk
 - Working group calls opened to representatives from all GPEI partners
 - Manuscript submitted to Risk Analysis explaining methods used in each WHO region
- Across-region interactions
 - Joint Horn of Africa (AFRO, EMRO) assessment updated
 - SEARO/WPRO assessments compared for Myanmar VDPV
- Improving current methods
 - EMRO completed model validation with historic data (2004-12)
 - SEARO ongoing evaluation of model using historic data (2005-12)
 - EMRO, WPRO, SEARO evaluating sub-national assessments
 - AFRO ongoing feedback on model introduced in 2011

GPEI Partner Prioritization for SIA programming

- 1. Endemic: Afghanistan, Pakistan, Nigeria, India
- 2. Re-established: Chad, DR Congo, Angola, Sudan, S Sudan

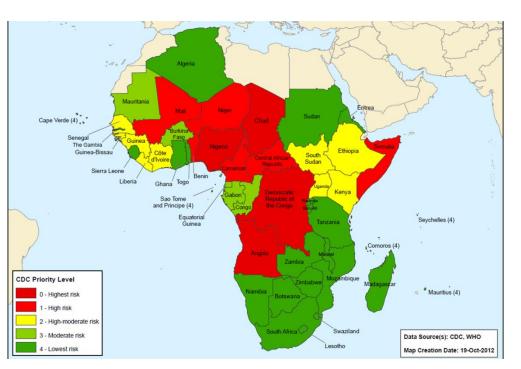


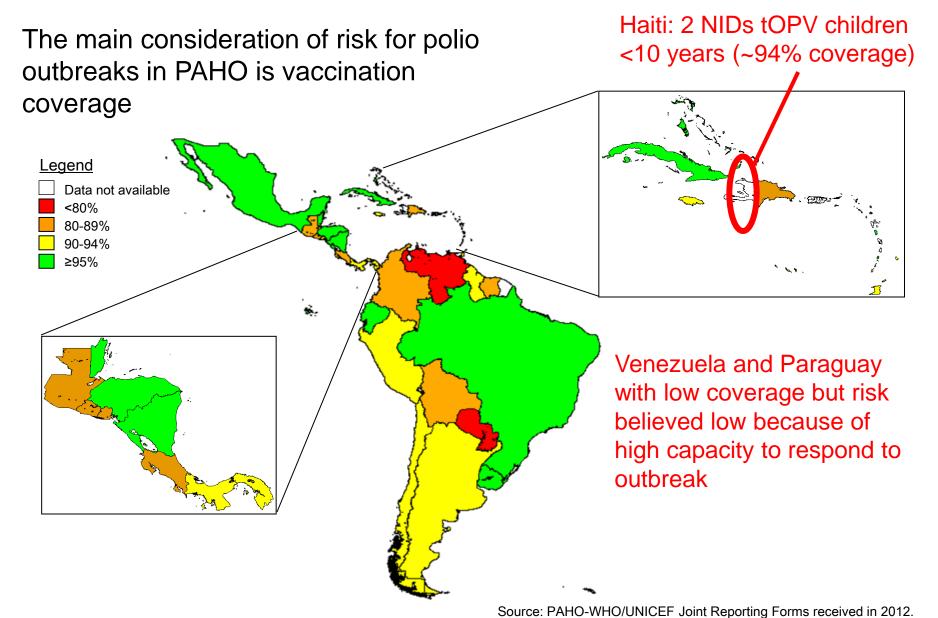
Figure. CDC Priorities based on CDC/WHO regional risk assessment model

3. Recurrent importations

- West Africa 1st priority: Niger, Cote d'Ivoire, Mali, Guinea, Burkina Faso, Liberia, Sierra Leone, Benin, Mauritania
- Central Africa 1st priority: CAR,
 Cameroon
- West Africa 2nd priority: Ghana,
 Senegal, Gambia, Guinea Bissau, Togo,
 Cape Verde
- Horn of Africa 3rd priority: Kenya,
 Ethiopia, Uganda, Somalia, Djiouti,
 Eritrea, Yemen
- Central Africa 3rd priority: Gabon,
 Congo, Burundi, Rwanda, Madagascar,
 Zimbabwe
- Southeast Asia: Nepal, Bangladesh,
 Myanmar, China
 - Europe: Tajikistan, Uzbekistan, Georgia, Ukraine, Kyrgyzstan, Kazakhstan, Turkmenistan

UPDATES FROM REGIONS

PAHO: Reported Polio 3 coverage in children <1 year of age, 2011

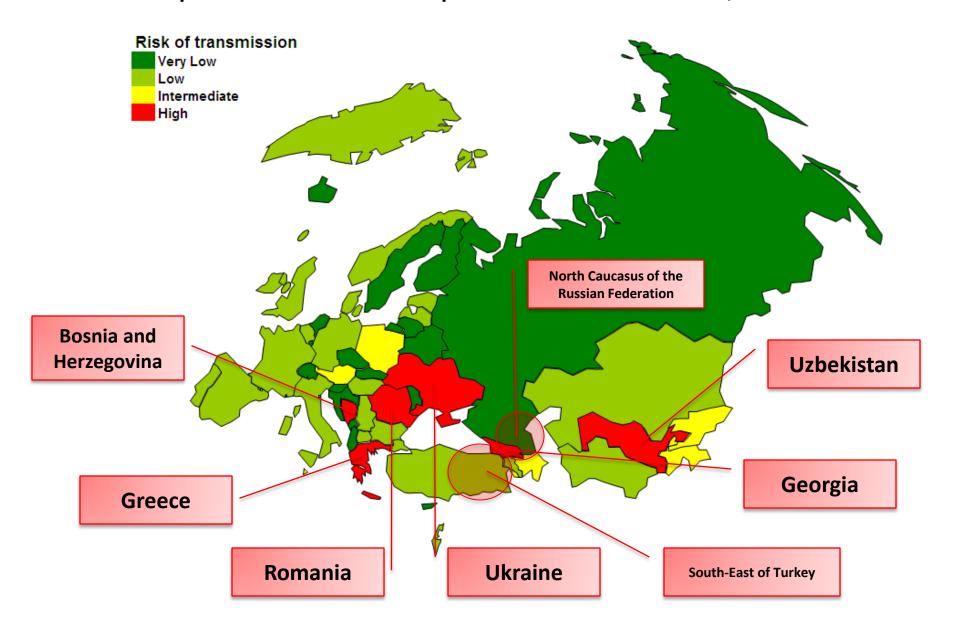


PAHO: Risk Assessment and Mitigation Activities — October, 2012

Vaccine changes: Discussion at Technical Advisory Group on Vaccine-Preventable Diseases, October 18:

- Rationale and scientific background for the WHO recommendations on transitioning from tOPB to bOPB/IPV
 - OPV remains vaccine of choice: Countries considering IPV introduction must comply with conditions 2011 TAG meeting
 - If countries do not comply, they must conduct at ≥ NIDs/year, for all children < 5 years of age
 - PAHO to wait for comprehensive polio endgame plan before TAG will consider any new recommendation
- •Costa Rica, Mexico, Brazil introduced IPV and will conduct NIDs with OPV to <5 years of age
- Uruguay has introduced IPV, NID status not determined

European Region: Risk of transmission following importation of wild poliovirus: October, 2012

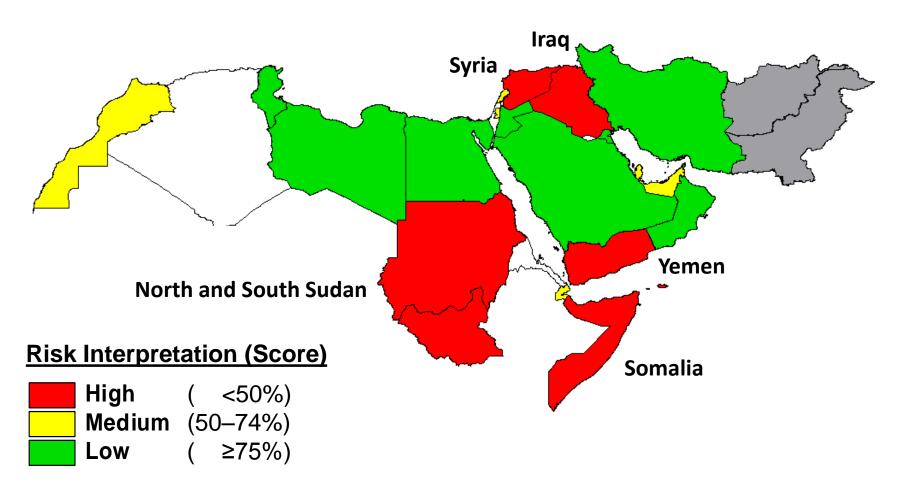


EURO: Actions to mitigate high risk (2011-12)

Country	Immunization	Surveillance	Capacity building	Other
•	NID'11 SNID'12 (plan)	Desk review'12 (plan)	Personnel & training	
_	SNID'11-12 DQA	Field review	Training for clinicians	POSE-2 (plan)
Bosnia & Herzegovina		Desk review'12 (plan)	AFP training	POSE
Georgia	SNID'11	Desk review		POSE-2 (plan)
Russian (SNIS'11-12	Desk review'12	AFP training	POSE-2 (plan)
Kyrgyzstan	SNID'12 (plan)	Field review	IAC meeting Training for clinicians	
Uzbekistan	NID'11-12	Desk review'12 (plan)		
Montenegro		Supervision	National training	POSE
Ukraine		Desk review		POSE-2 (plan)

Italics = Planned; POSE – Polio outbreak simulation exercise; Greece and Austria no activities; *Russian Federation uses subnational assessment, all others national-level; DQA Data Quality Audit

Eastern Mediterranean Regional Risk Assessment Map, October 2012*



^{*}Data up to 02 Sept 2012 Core & Optional National Model

EMRO Risk Assessment and Mitigation Activities – October 12

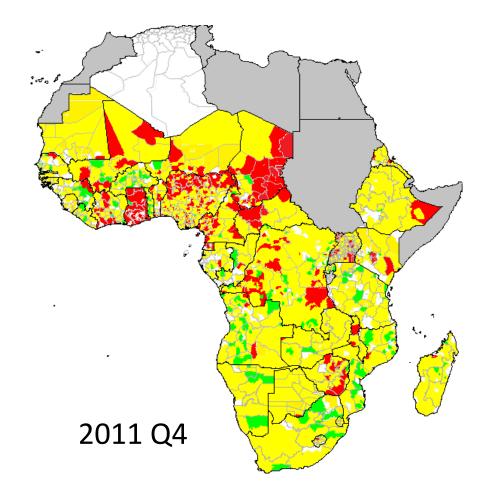
- Retrospective analysis of historic data 2004–2012 validated model
- Subnational Risk assessment piloted at EPI managers meeting and database development
- Mitigation activities conducted and *planned*:

Country	Immunization	Surveillance
Djibouti	measles + OPV (February), NIDs (tentative Nov 2012); tech assist visit	
Somalia	CHDs (February), NIDs (March & July) CHDs (Oct)	
South Sudan	NIDs (Feb & March), NIDs (Nov & Dec)	
Sudan	NIDs (March & April), NIDs (Nov & Dec)	Surveillance review (January)
Yemen	NIDs (January); NIDs measles + OPV (April); NIDs (June), outbreak assessment (June), tech assist visit Oct	
Iraq		AFP surveillance review (Jan 2013)

AFRO: Risk Assessment Methods and Mitigation in non-priority countries - October, 2012

West Africa

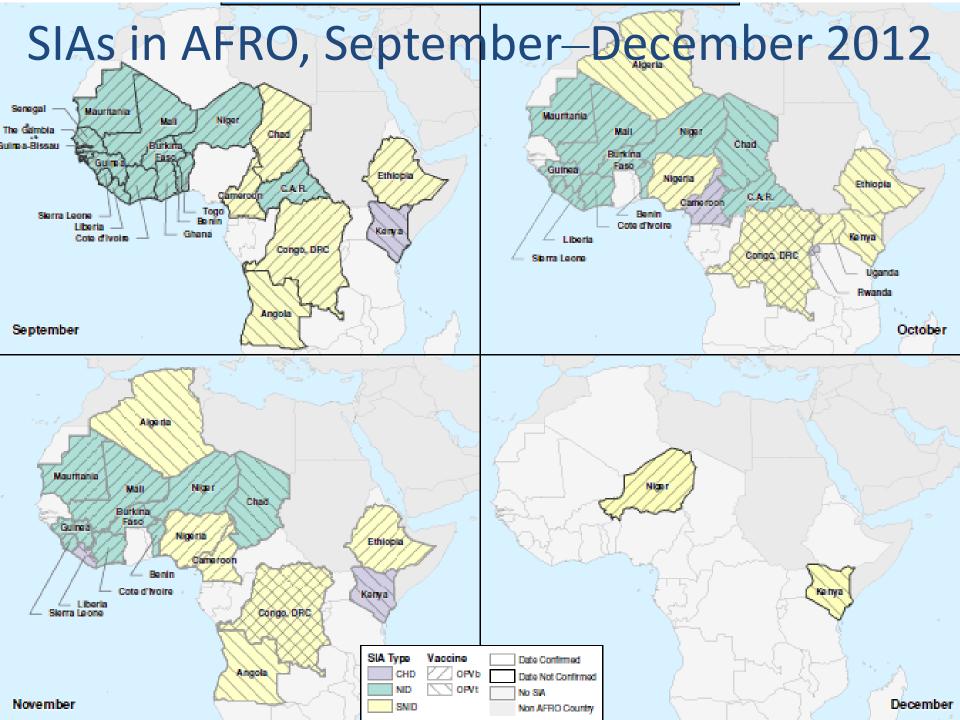
- Coordinated response approach
- •Humanitarian response in Mali, Niger
- •Workshop on migrant populations (Burkina Faso, Niger, Nigeria, Chad, Mali, Mauritania) Surveillance reviews conducted, planned 2012:
- •Algeria, Burkina Faso, Congo, Cote d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Niger, Madagascar, Mauritania, *Mauritius*, Mali, Senegal, Tanzania, Uganda,





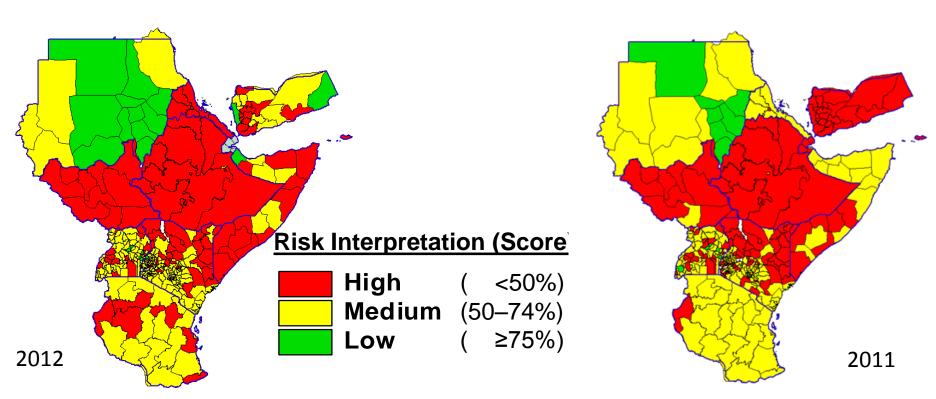




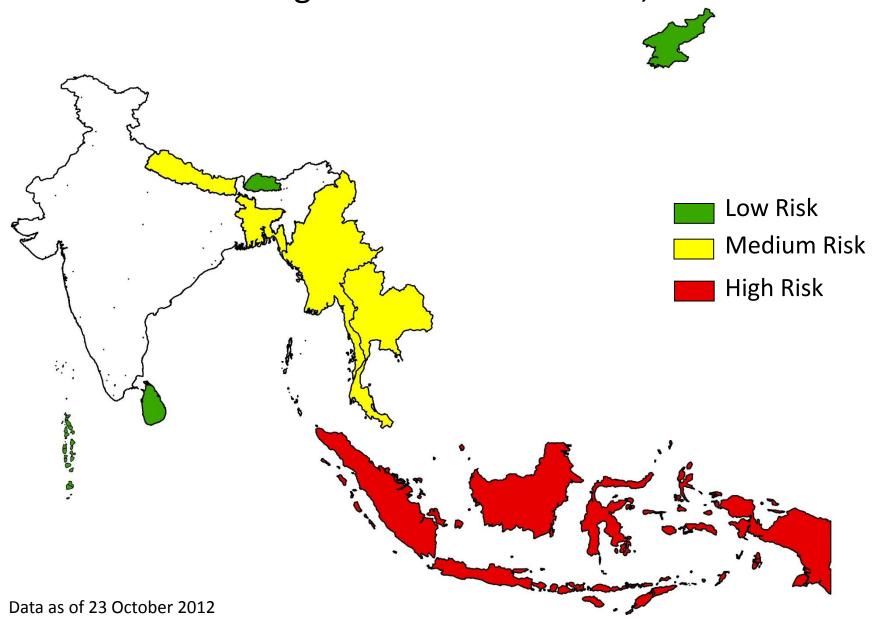


Horn of Africa Joint Risk Assessment, September 2012

- AFRO and EMRO countries combined data during Horn of Africa meeting, Sept 2012 using core indicators
- Compared current risks with 2011 data evaluated during February 2012 HoA meeting: Little overall change between February and September 2012
- September: Kenya-Somalia cVDPV-2 outbreak and response SIAs (October)
- Subnational levels differ from national level because of different data used
- AFRO and EMRO risk models differ, so HoA combined approach allows similar comparisons to be made



South-East Asia Regional Risk Assessment, October 2012



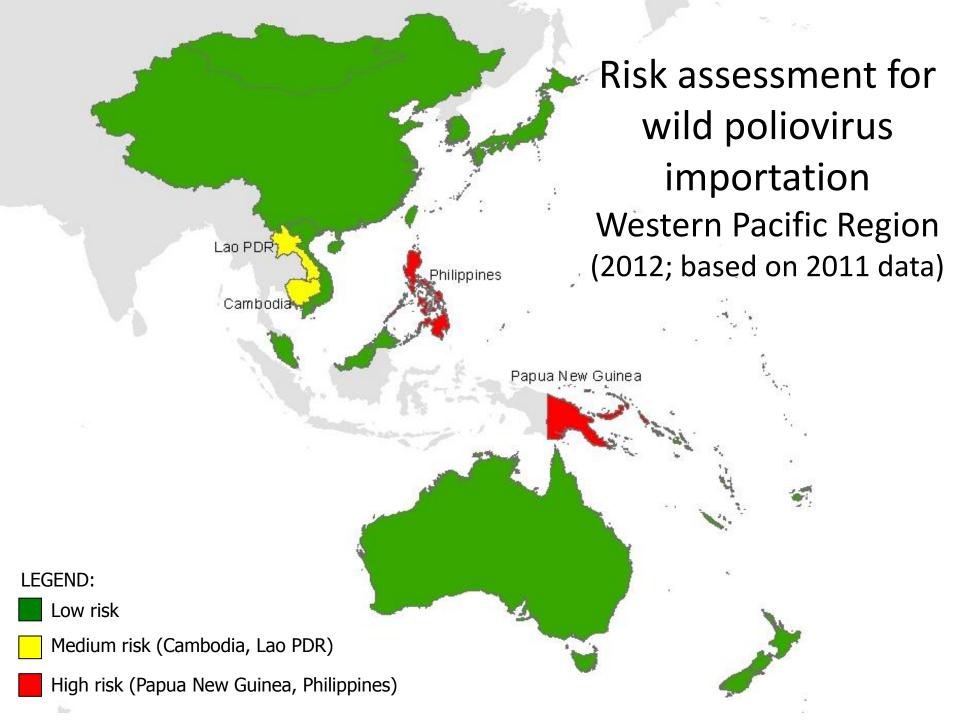
South-East Asia Region Risk Mitigation Activities, Update October 2012

Country	Immunization	Surveillance
India	NIDs (February/April) SNID (January, March, June, September, November)	Sub-national Surveillance Reviews: Madhya Pradesh (May), Chhattisgarh (June), Punjab (August), Haryana (October), Rajasthan (December)
Myanmar	SNID, Northern Shan State, response to VDPV-P1 case: (October, December)	State-wise surveillance risk assessment review (July)
Nepal	NID (April) Integrated Measles-Rubella Campaign with OPV (February, September, December)	No supplementary surveillance activities currently planned
Bangladesh	NIDs (January, February)	EPI/VPD Surveillance Review (March)
Indonesia	No NID/SNIDs currently planned	EPI/VPD Surveillance Review planned (2013) National application of risk assessment model at the district level (November)

^{*}SEARO workshop for WHO/Government data managers (December) to include management of risk assessment data at the national/sub-national level

SEARO and WPRO: Subnational Polio Risk Assessment: 2011 Cross-border meeting China, Myanmar, Laos, Thailand, Viet Nam planned Feb 2013 LEGEND: (WPRO, SEARO) Low risk Medium risk High risk * Source for WPRO: country progress reports submitted to RCC17 (Nov 2011)

Work in progress - not for distribution



Western Pacific Region - Polio Risk Assessment, October 2012

- Regional model reviewed and updated to better reflect susceptibility and reduce bias in surveillance indicators
- Normalization conducted; no major change in risk status
- Comparison of different scores established by country 2010-2012;
 as means to measure impact of risk mitigation activities
- In 2012 risk assessment, Cambodia and Laos moved from high to medium risk
- Comparison established for subnational risk assessments; for further individual country discussion
- All results to be presented to RCC at 28-29 Nov meeting
- PNG: OPV in TT SIAs 4th quarter 2012
- AFP surveillance desk review Malaysia, Philippines, Viet Nam 4th quarter 2012



Global Polio Transmission Status and Risk of Outbreak Following Importation



Oct 2012



Summary of Regional Risk Mitigation

Regio n	Importation Risk	Susceptibility	Surveillance	Major Gaps/Challenge s
AFRO	Highest	SIAs in W, Central Africa, Horn of Africa partially implemented	Surveillance reviews in 17 countries	SIAs limited - funding gaps
EURO	Medium	SIAs in 5 of 9 highest	Surveillance review in	Several high risk

SIAs in 5 of 6 highest

risk countries

risk countries

Greatest risk

risk countries

countries

mitigated (Haiti)

SIAs in 4 of 5 highest

SIAs in 1 of 2 high &

High

Lowest

Medium

Medium

EMRO

PAHO

SEARO

WPRO

9 high risk countries

Surveillance reviews in

Same levels as polio-

highest risk countries

Reviews in 3 of 4 high

free certification

Reviews in 2 of 5

& medium risk

2 of 6 highest risk

countries

countries not

mitigating risk

Unrest (Syria),

Shift to IPV/OPV

implications

Loss of focus

without WPV

reduced priority

when last WPV

insecurity

(Yemen,

Somalia)