

Status of polio surveillance in transition countries

Jamal Ahmed

SUSTAINING ESSENTIAL POLIO FUNCTIONS IN THE CONTEXT OF POLIO
TRANSITION

Virtual Meeting of the Global Polio Partners Group (PPG) - Surveillance “Deep Dive - I”

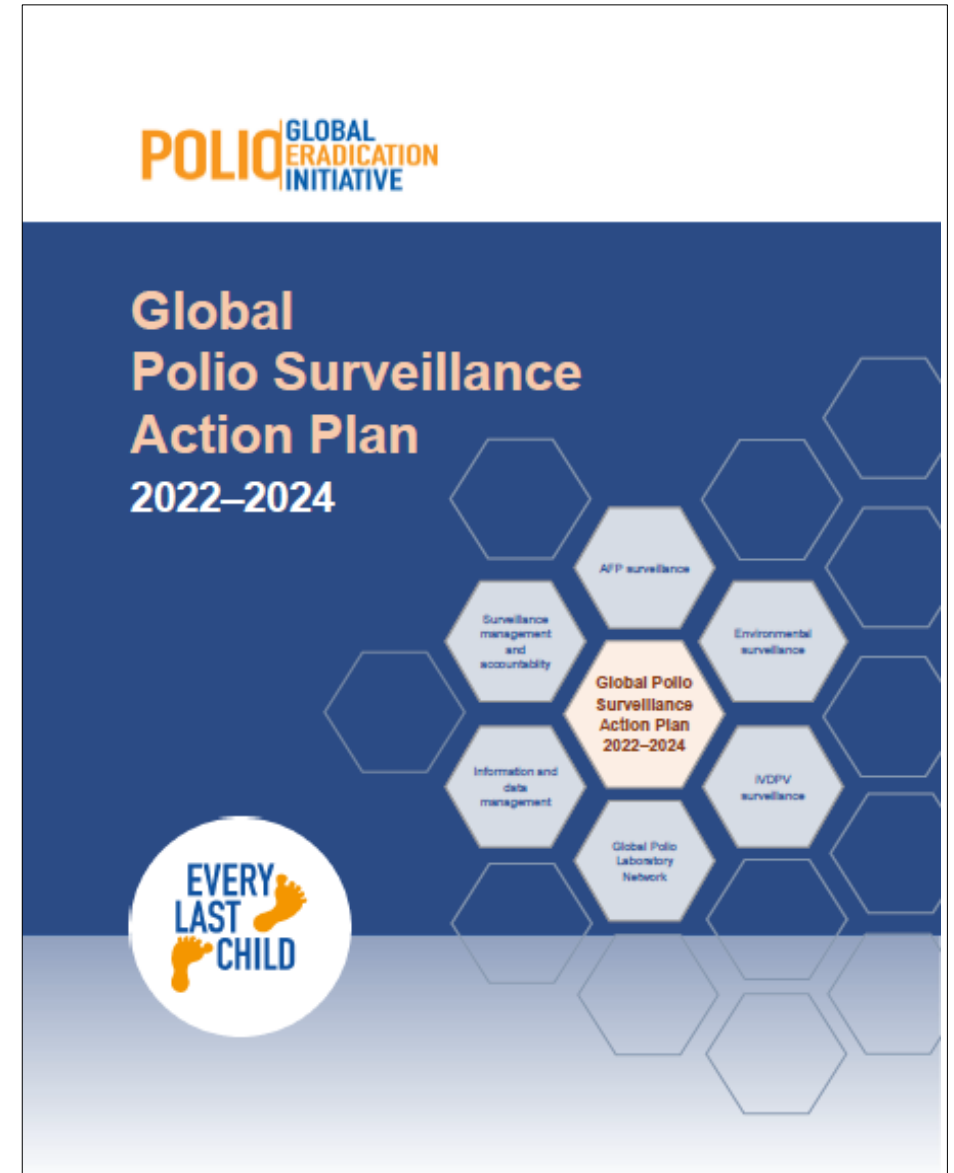
May 11, 2022

Outline

- GPEI Polio Surveillance Action Plan
 - Risk assessment
 - Priority countries versus GPEI supported countries
 - Priorities in the action plan: AFP incl. CBS, ES, Lab, Information Management
- Surveillance performance
 - Overview
 - Trends for 2022*
- Funding/resource allocation
- Management and accountability
- Risks

GPEI Strategy and GPEI Surveillance Action Plan

Global action plan developed to effect objectives of the GPEI strategy

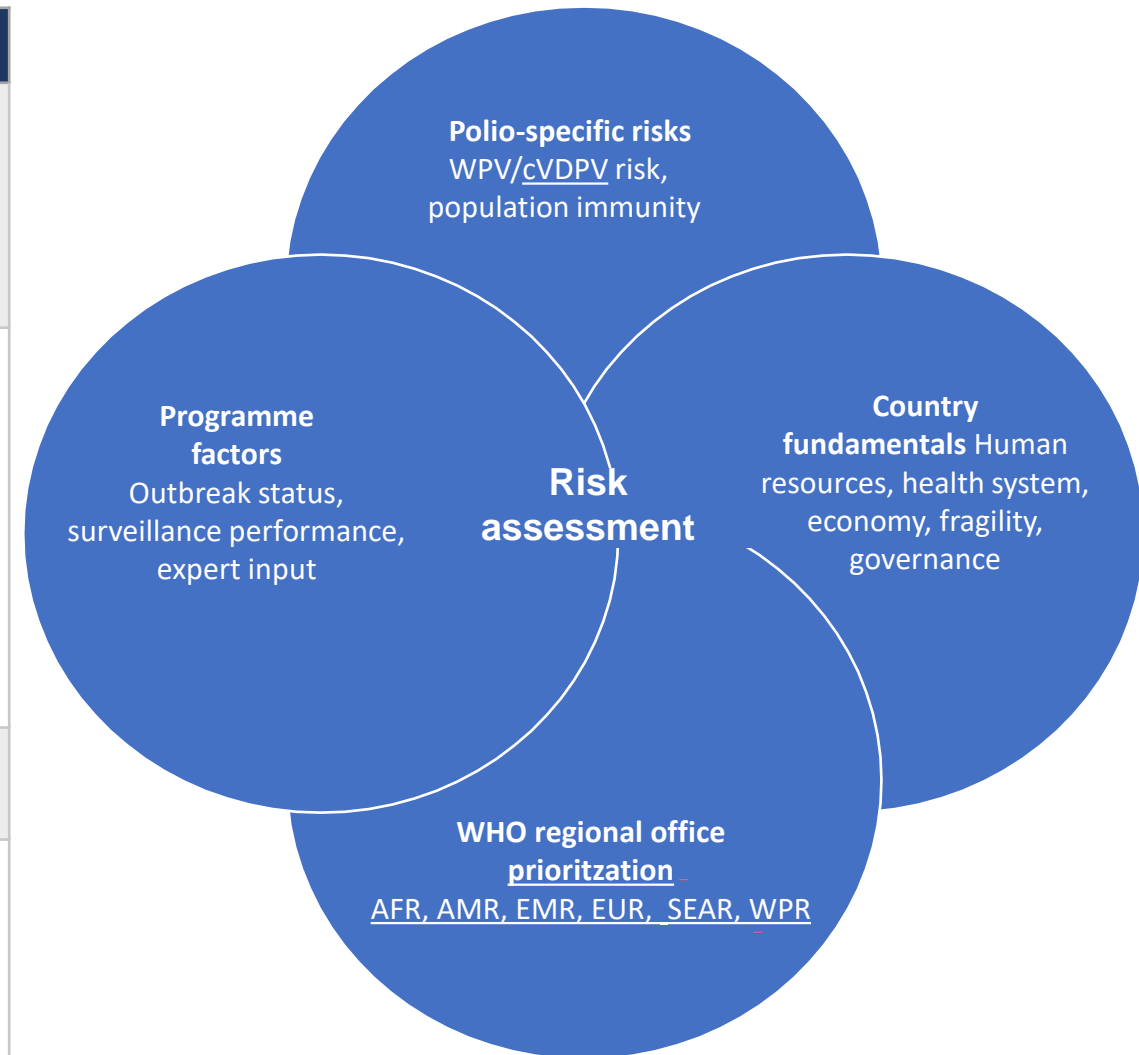


[Global Polio surveillance Action Plan](#) available here

Risk Assessment – key factors

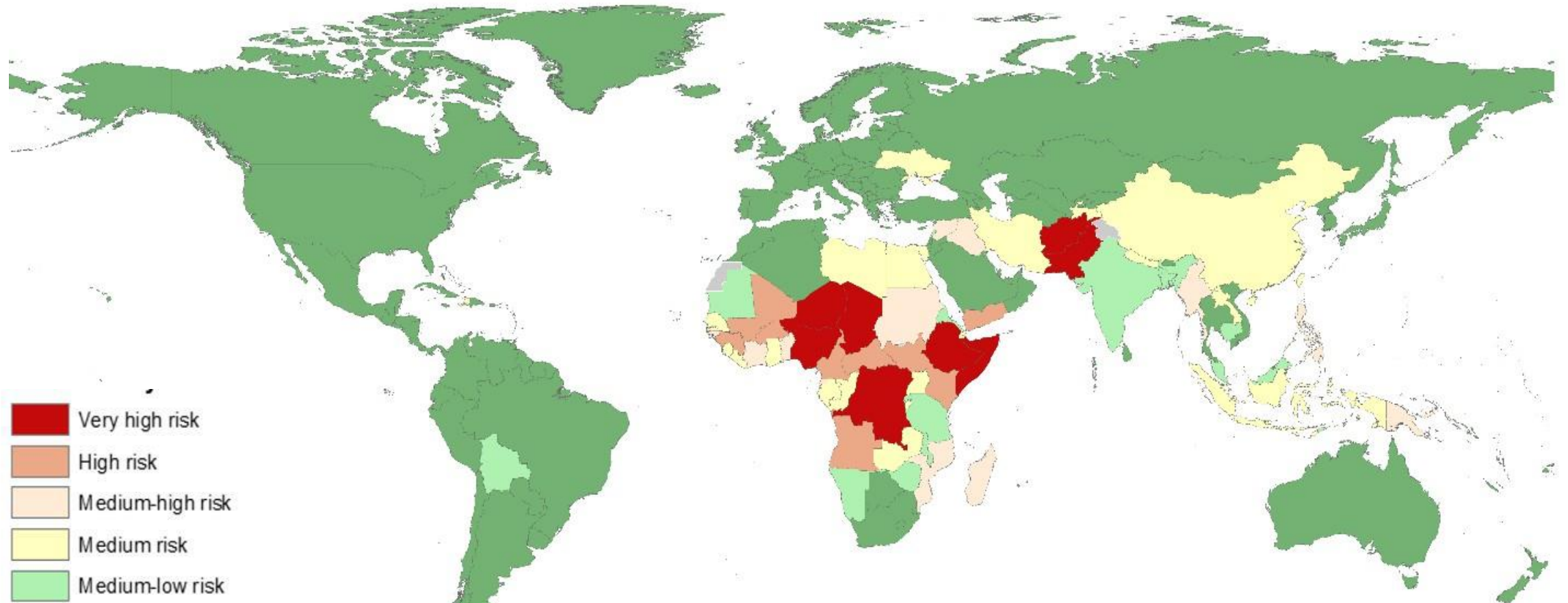
Transition NOT a consideration in the risk assessment

Factor	Description
Polio-specific risk	Includes: <ul style="list-style-type: none"> WPV and VDPV epidemiology over the past decade, with countries with prolonged and/or recurrent poliovirus circulation at higher risk; and population immunity level, including essential immunization, with countries with a higher number of underimmunized populations at higher risk.
Country fundamentals	Includes: <ul style="list-style-type: none"> governance and fragility, recognizing that fragile countries and countries with weaker governance are at higher risk; economy, recognizing that countries with weaker economies and/or dependent on external financing are in need of greater GPEI financial support; human resource capacity, recognizing that countries with lower human resource capacity need more in-country technical support; and health system indicators, recognizing that countries with weaker health systems require more focused polio-specific surveillance system development and support.
WHO regional office prioritization	<ul style="list-style-type: none"> WHO regional risk assessments included to further adjust risk.
Other programme factors	Includes: <ul style="list-style-type: none"> current outbreak status (for low-risk countries, risk is automatically increased if country has an ongoing outbreak); surveillance performance (underperformance, especially delayed timeliness of detection elevates the risk); and expert input by the GPEI Surveillance Group. (Without fundamentally changing the overall risk assessment, feedback from members of the Surveillance Group was used to make adjustments.)



Country-level risk assessment (as of January 2022)*

Countries classified as Very High Risk, High Risk and Medium High Risk considered priority countries



- Prioritization adjusted biannually with detailed data review occurring annually
- Changes also made if outbreak occurs in otherwise low risk countries
- Following WPV1 detection in Malawi, Malawi and neighbouring countries included in priority countries

Acute Flaccid Paralysis (AFP) and Environmental surveillance

Focus is on enhancing quality at subnational level and improving timeliness of detection

Priorities for 2022/2024

- Cross-cutting
 - **Improve timeliness** at every level in priority countries
 - Facilitate a **skilled workforce** and promote integration
 - Expand the use of electronic data collection tools
- AFP surveillance
 - Targeted efforts to identify and **address subnational gaps** in priority countries
 - **Targeted** community-based surveillance
 - **Implement focused M&E activities**, including critical review of surveillance processes and data for action
 - Promote integration of AFP surveillance with other health programmes
- Environmental surveillance
 - **Improve quality** of ES in underperforming countries

Strategic **expansion of ES network**

Countries planning to initiate, expand, or optimize environmental surveillance

WHO region	ES initiation planned	ES expansion planned	ES optimization planned
African	Botswana, Eritrea, Malawi, Rwanda, Zimbabwe		Burkina Faso, Cameroon, DRC, Eq Guinea, Gabon, Mozambique, Niger, Togo
Eastern Mediterranean	Iraq, Libya, Oman, Saudi Arabia, Tunisia, United Arab Emirates	Afghanistan, Iran, Lebanon, Somalia, Yemen	Pakistan
South-East Asian		Bangladesh, India, Nepal, Thailand	Indonesia
Western Pacific	Cambodia, Republic of Korea, Lao, Mongolia	Viet Nam	Papua New Guinea*
European	Kyrgyzstan		
Americas		Guatemala, Haiti	

*ES has not been operational during COVID-19 pandemic and needs to be reactivated

Information and Data Management

Priorities for 2022/2024

Major activities

- **Assess** information and data management **needs** for priority countries
 - Joint assessment starting with VHR and HR countries
- **Upgrade** archaic polio information systems to web-based systems
 - Special focus on labs
 - Interoperability a priority
- Develop an **online system to track specimen collection and transport**
 - Implementation in at least 4 priority countries
- Adapt the information management system and **shift from paper-based to electronic data collection tools**
 - ✓ Tools for active surveillance e.g. eSurv, ISS other ODK-based tools
 - ✓ Tools for case investigation e.g. electronic CIF
 - ✗ Community-level tools e.g. AVADAR

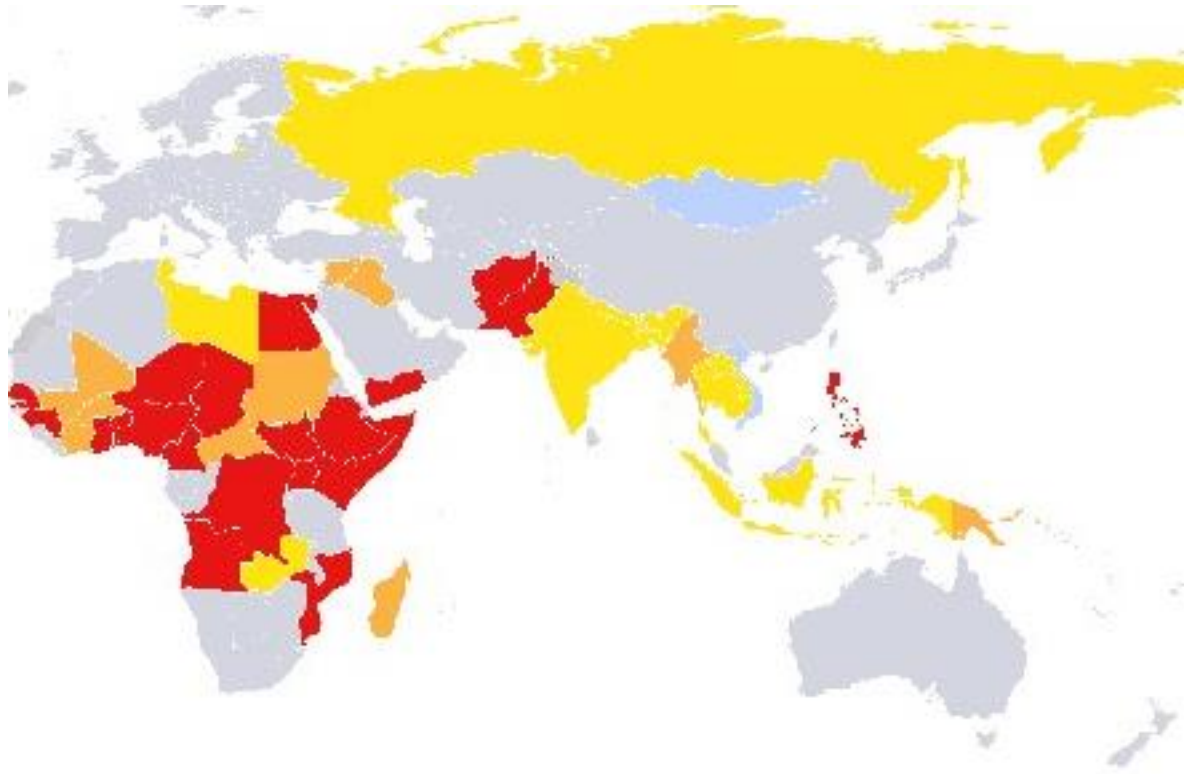
Upgrading from archaic IFA systems to WebIFA

Country	Country field surveillance	AFP and/or ES	Status for planning
PAK	Afghanistan	AFP and ES	Completed
	Pakistan	AFP and ES	Completed
UGA	South Sudan	AFP and ES	Underway
	Uganda	ES only	Underway
NIE	Nigeria	AFP and ES	Halted
BAN	Bangladesh	AFP and ES	2022
EMR	ALL Eastern Mediterranean countries	AFP and ES	2022/23
ETH	Ethiopia	AFP and ES	2022
KEN	Kenya	AFP and ES	2022
	Somalia	AFP and ES	2022
SA	(As a regional reference lab)	AFP and ES	2022
SEN	Niger	AFP and ES	2022
	Senegal	AFP and ES	2022
CIV	Côte d'Ivoire	AFP and ES	2023
CMR	Cameroon	AFP and ES	2023
	Chad	AFP and ES	2023
DRC	Democratic Republic of the Congo	AFP and ES	2023

Laboratory Network

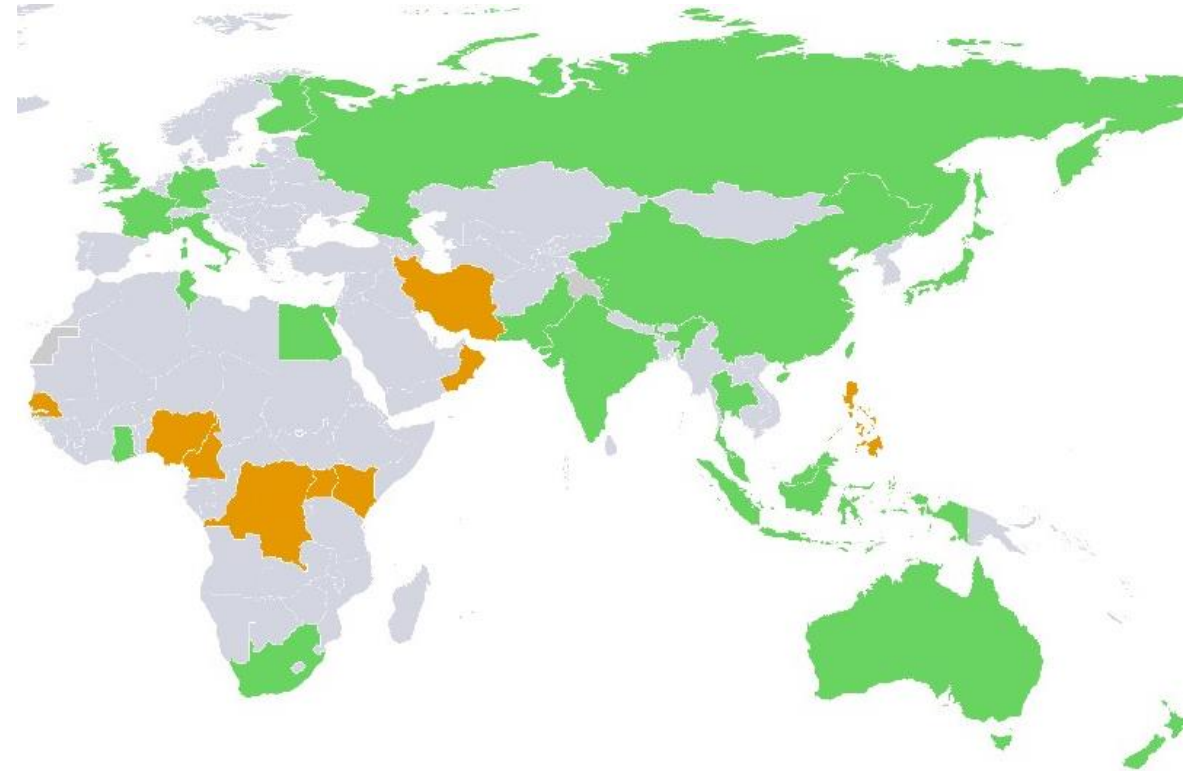
Implementation of direct detection and expansion of sequencing capacity prioritized

Phased implementation of direct detection (countries)



- Phase 1: All VHR (8) + HR (6) + MHR (6)
- Phase 2: HR (3) + MHR (7)
- Phases 3 and 4: other countries
- Not applicable

Current and planned expansion of sequencing capacity

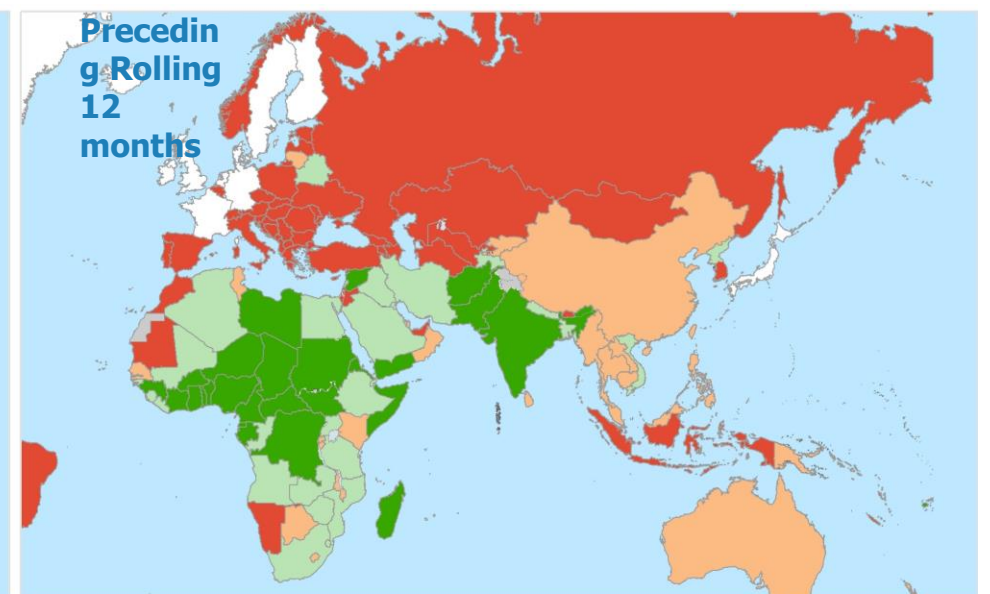
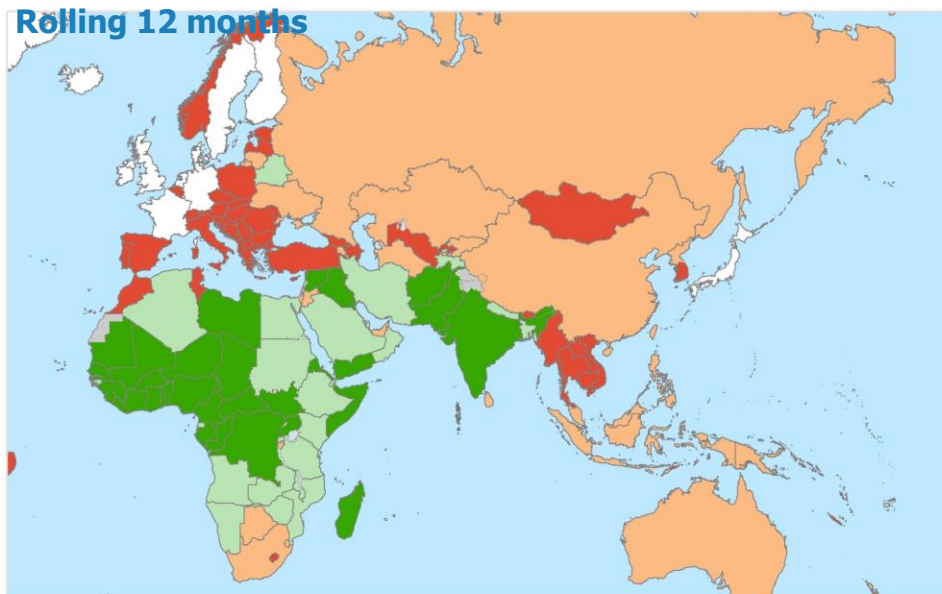
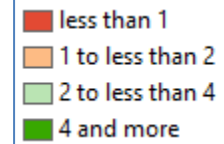


- Current
- Planned
- Not applicable

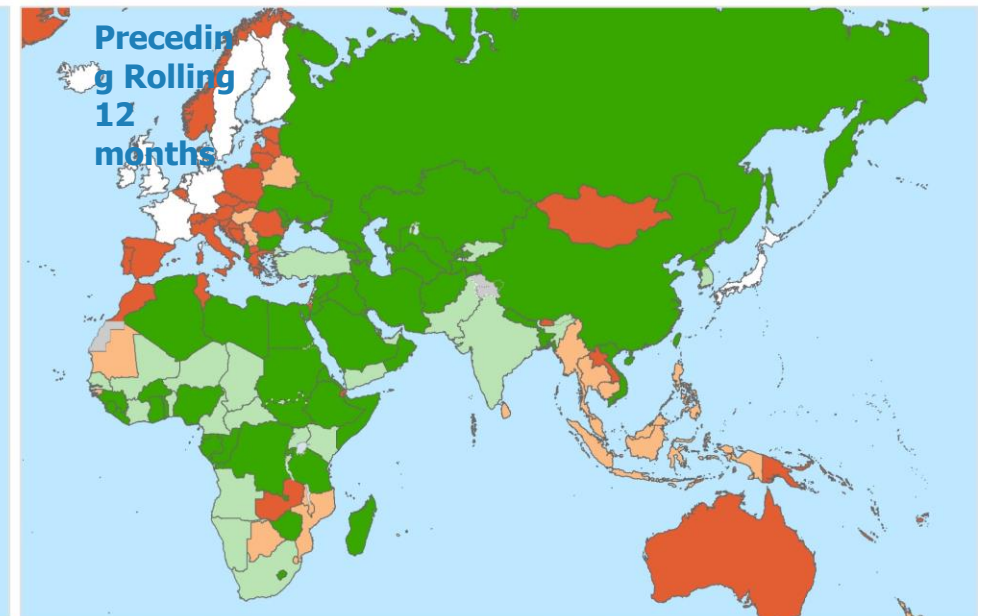
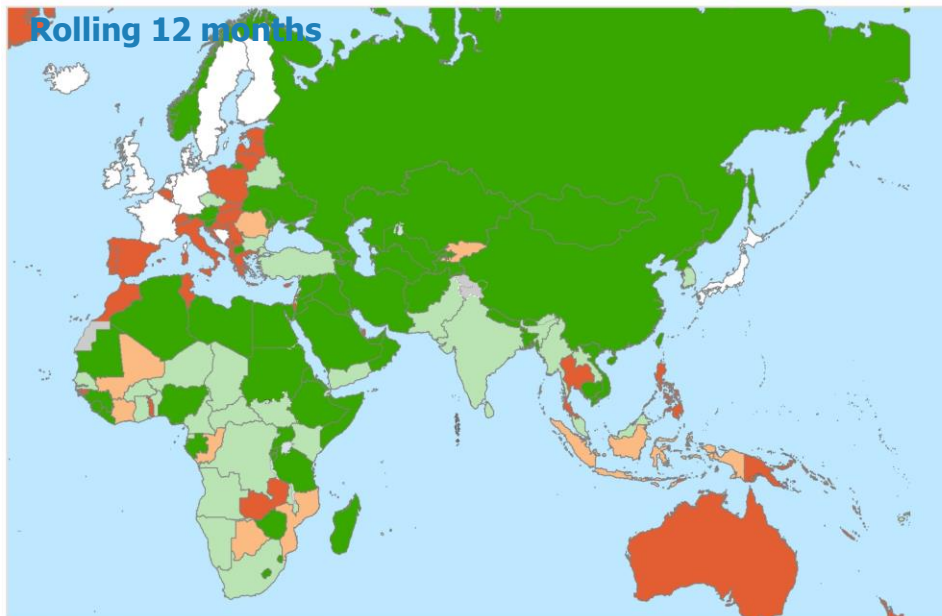
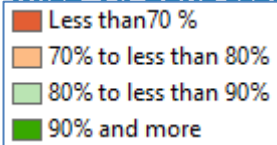
Global surveillance performance at country-level

Rebound in quality from the decline associated with COVID19 ongoing

Non-Polio AFP rate



Adequate Stool Collection Rate (2 Stool samples collected with 14 days from onset)



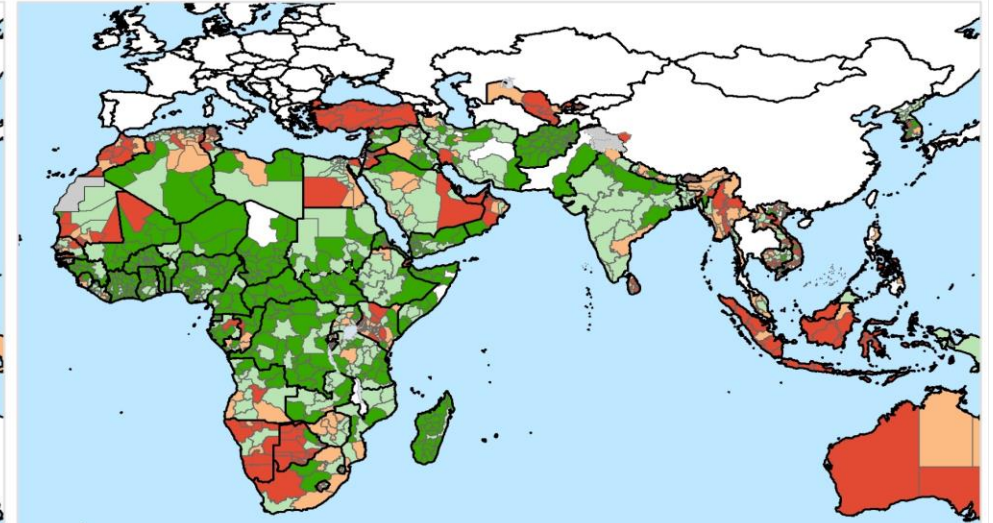
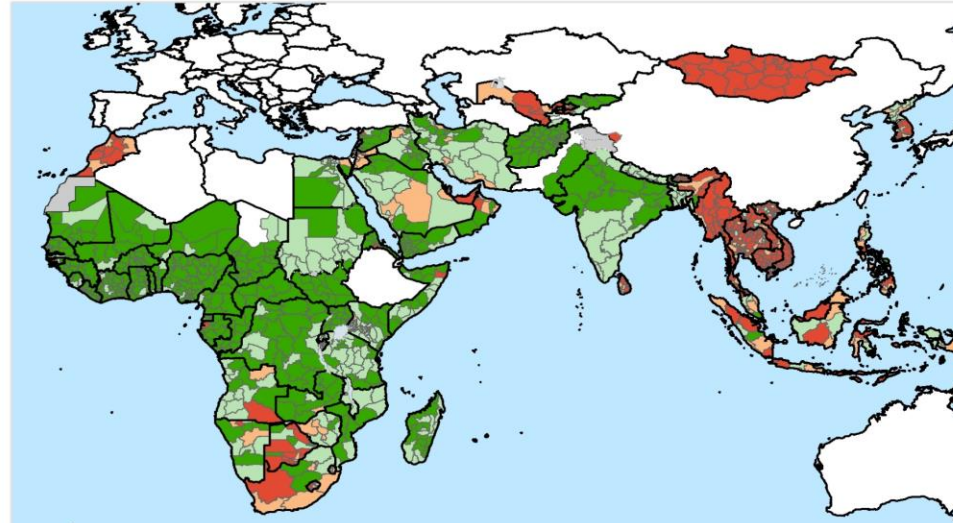
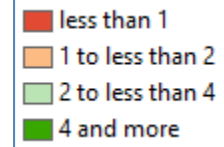
Rolling 12 months ending on
31 March 2022

Preceding Rolling 12 months
ending on
31 March 2021

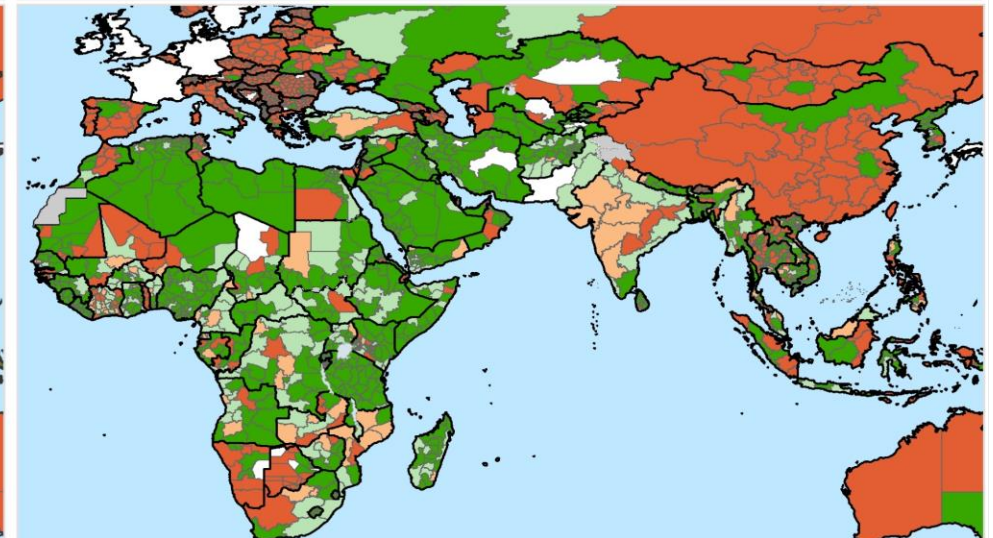
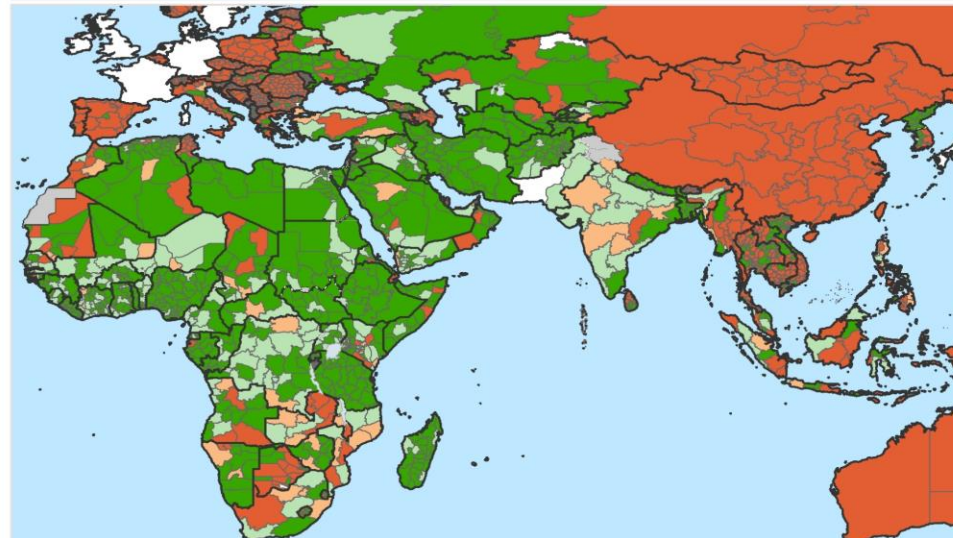
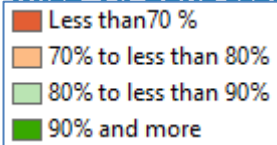
Global surveillance performance – provincial level

Sub-national gaps decreasing in AFR but persisting Southern Africa, parts of SEAR and WPR

Non-Polio AFP rate



Adequate Stool Collection Rate (2 Stool samples collected with 14 days from onset)

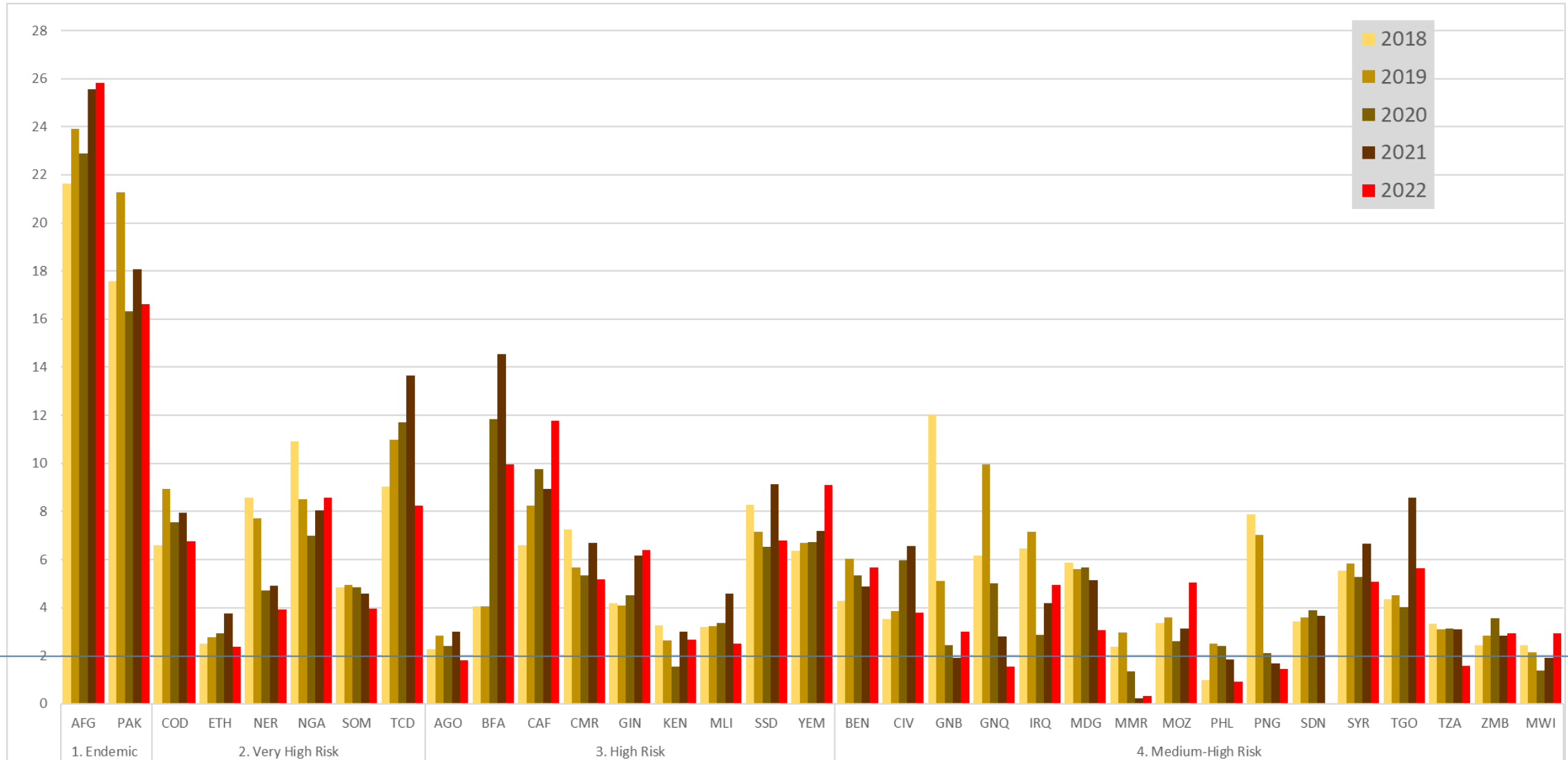


Rolling 12 months ending on
31 March 2022

Preceding Rolling 12 months
ending on
31 March 2021

Trends of NPAFP rate in priority countries

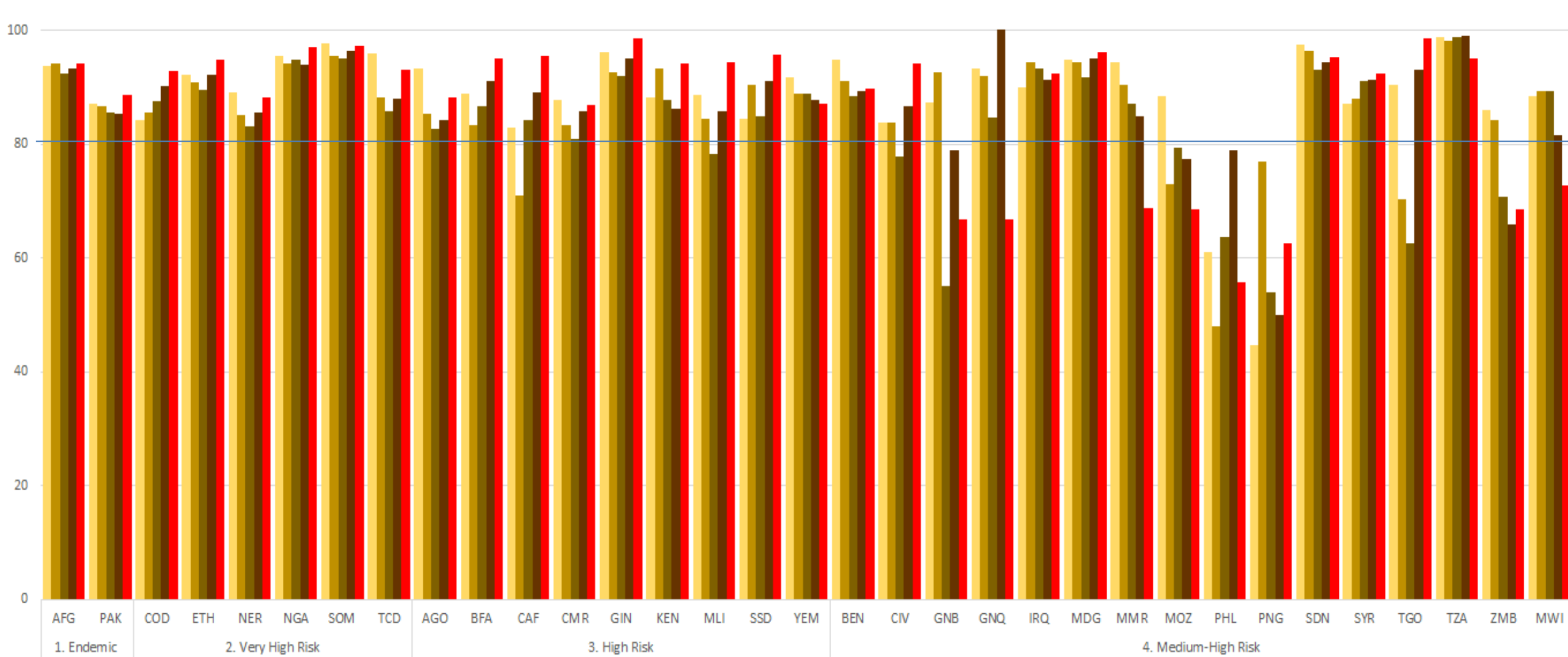
Performance varied across risk tiers but no evidence variations linked to transition



* Annualized NPAFP rates for 2022

Trends on adequate stool collection rates, 2018-2022*

Performance varied across risk tiers but no evidence variations linked to transition



Surveillance Resource Allocation

All countries - regardless of transition status – received surveillance funds for 1st half of year

- **GPEI Surveillance Budget**
 - Endemics + AFR 10 + Somalia
 - Laboratory
 - HQ/RO
- **WHO Base Budget**
 - Countries previously supported and transitioned to integrated public health
- **Outbreak Budget**
 - Countries experiencing outbreaks and/or included in the outbreak zone

Example from ongoing African Region Inter-country Review and Planning Workshop

#	Country	Outbreak	GPEI	WHO Base
1	Angola	✓	✓	
2	Botswana			✓
3	Burundi			✓
4	DRC	✓	✓	
5	Ethiopia	✓	✓	
6	Kenya	✓	✓	
7	Malawi	✓		✓
8	Mozambique	✓		✓
9	Namibia			✓
10	Rwanda			✓
11	South Sudan	✓	✓	
12	Tanzania	✓		✓
13	Uganda	✓		✓
14	Zambia	✓		✓
15	Zimbabwe			✓

Polio surveillance – management and accountability

GPEI fully involved in supporting countries address surveillance gaps



GPEI
Surveillance
Group in-
person
meeting
27 – 29 April
2022, Geneva
Switzerland



African Region
Inter-country
Review and
Planning Workshop
9 – 12 May 2022,
Nairobi, Kenya



Eastern
Mediterranean
Region Inter-
country Polio
Surveillance
Meeting
10 – 12 May 2022,
Muscat, Oman

Risks and mitigation

Risk	Mitigation
<p>Overall GPEI funding under severe stress has implications for surveillance budget too</p> <ul style="list-style-type: none">- Budget underfunded by USD100- Outbreak response pace has increased following challenges in preceding years- Additional demands on outbreak response budget e.g. increased demand for nOPV2, importation of WPV1	<p>Fully funding GPEI FRR</p> <ul style="list-style-type: none">- Intensive effort underway on both resource mobilization- Active management of budget enhanced and work underway at all levels to enhance efficiencies
<p>Decreased flexible funding</p>	<p>As much possible, providing flexibility. This includes funds allocated for surveillance not being linked specifically to surveillance sub-elements (e.g. environmental surveillance, lab)</p>
<p>Support for transition countries beyond 2022</p>	<p>Supporting surveillance funding for all priority countries</p> <ul style="list-style-type: none">- DG committed to provide necessary support; RM efforts for 2023 should be supported
<p>Surveillance performance declining in transition countries due to decreased scrutiny at all levels</p>	<p>Continued engagement with all relevant departments within WHO and across all levels</p> <p>Maintaining GPEI monitoring</p> <ul style="list-style-type: none">- GPEI monitoring and support remains robust