

Impact of the COVID - 19 pandemic and pathway to recovery through Immunization Agenda 2030

Kate O'Brien, Director Immunization, Vaccines and Biologicals

21 April 2022

### Agenda

21April 2022: Member State Briefing: 13h30-15h00 (CET)

	Opening Remarks (5 m ins)	DDG Zsuzsanna Jakab
2	COVID-19 pandemic and pathway to recovery through Immunization Agenda 2030 (25 mins)	Director Kate O'Brien
3	Regional perspective (10 mins)	AFRO Representative Messeret Shibeshi
4	Q&A Discussion (45 mins)	Unit Head Craig Burgess
5	Closing (5 mins)	Director Kate O'Brien

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COVID- 19 pandemic and pathway to recovery through Immunization Agenda 2030 (IA2030)

# Where are we & what have we learned?

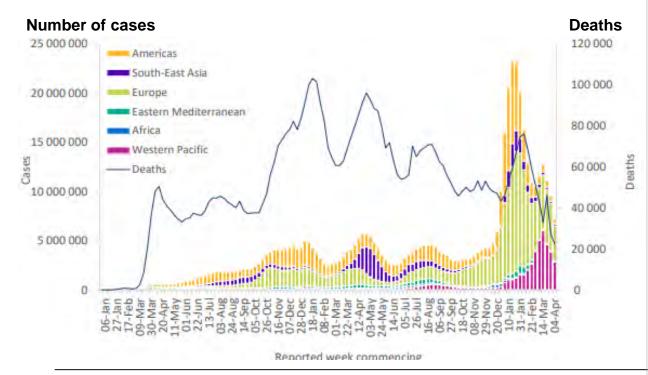
- COVID 19 pandemic and vaccine update
- 2. Unintended impacts
- 3. Opportunities for immunization and beyond



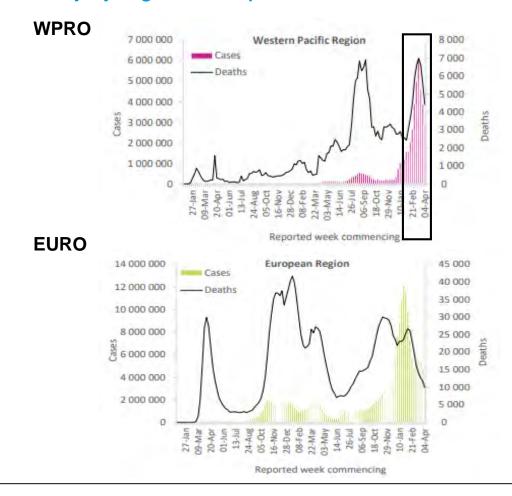
# Two years on, the COVID - 19 pandemic is 'far from over': while globally decreasing, the evolution of COVID - 19 deaths is region - dependent

#### Global evolution of COVID-19 cases and deaths

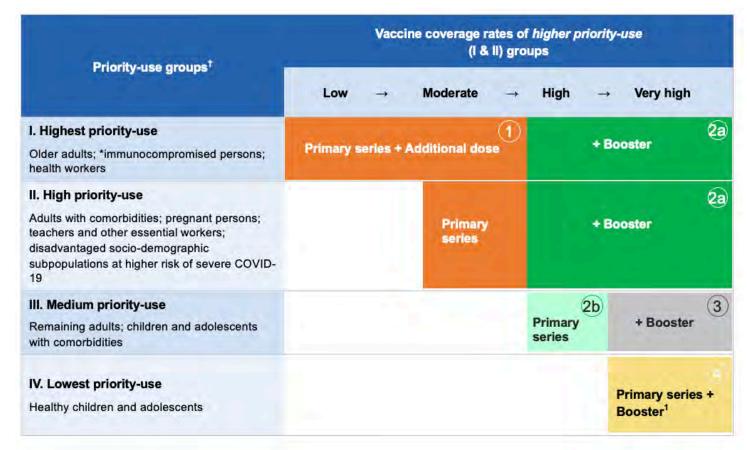
- New cases: > 7.2 mn
- Cumulative cases: > 496 mn
- New deaths: ~ 22'000
- Cumulative deaths: > 6.1 mn



#### Variability by region: examples of WPRO and EURO



# The WHO SAGE Roadmap highlights the need to prioritize protecting higher - risk groups and includes boosters



Issued 22 January 2022

Prioritizing vaccinating high priorit-use groups will have most impact on reducing morbidity, mortality & protect health systems

Several future policy issues could impact the COVID-19 vaccination programme:

- Hybrid immunity (protection afforded by vaccination+SARS-CoV-2 infection)
- Number of doses, repeat boosters
- Mix and Match schedules
- ....Others

### Vaccines Effectiveness (VE) remains substantial against Omicron

AS OF MAR 31

### 55 studies provide quality information on how vaccines perform against Omicron



#### **Conducted in 19 countries**





#### With 5 vaccines considered

Pfizer, Moderna, AstraZeneca, Janssen, Sinovac



#### **Studies showed several limitations**

- Minimal data for some VE estimates with large CI
- Early Omicron cases might have different risk profile
- Residual confounding
- Severe disease might include persons incidentally infected with omicron rather than due to omicron



#### **Key take-aways**

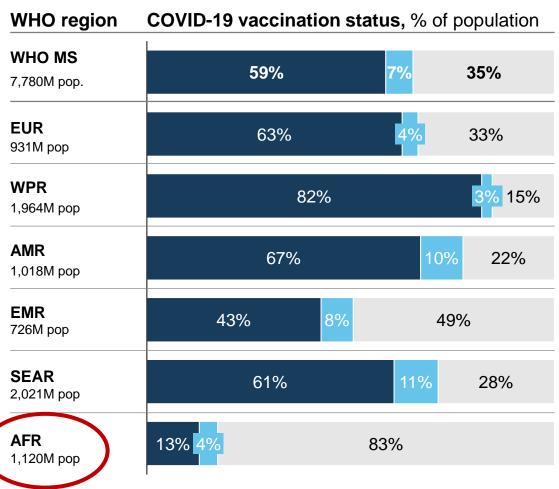
- 1 Primary series VE declines over time for all products, especially against symptomatic disease and infection
- Booster dose increases VE against all outcomes
- Booster dose VE against hospitalization/severe disease is ~80-90% and substantially higher than VE against infection/clinical disease
- 4 Very limited data, especially on boosters, for some products

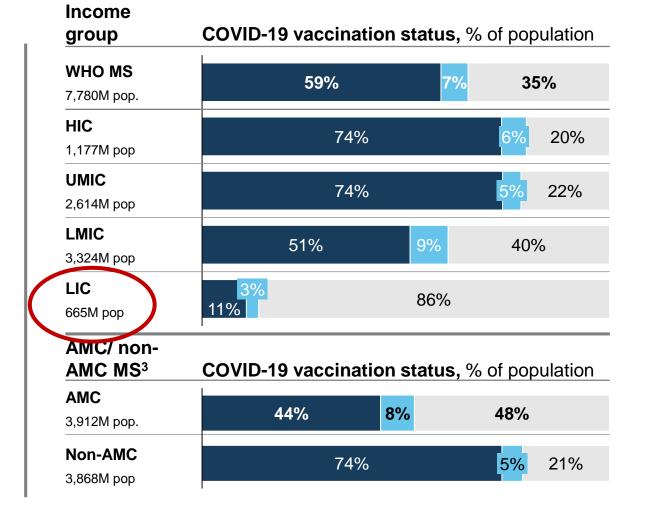
### Although 59% of the world's population <sup>2</sup> has been vaccinated with primary series, significant disparities exist between regions and income groups

Share of population vaccinated with complete primary vaccination

Share of population partially vaccinated 1

DATA AS OF APR 19, 11:00 AM CET



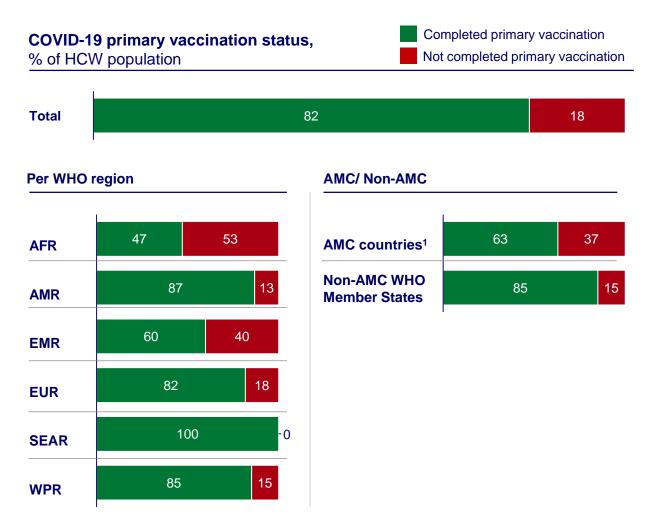


- 1. Excl. people that completed the primary vaccination
- The total population might also include children and other people not eligible for vaccination
- Including only the 90 AMC Member States; AMC = COVAX Advance Market Commitment (AMC)

# AMC countries have on average vaccinated 63% of their <u>Healthcare</u> Workers (HCWs) population based on reported data as of Apr 11

**DATA AS OF APR 11, 2022** 

**PRELIMINARY - FOR INTERNAL USE ONLY** 



#### **Key takeways**

- 1 In total, based on reported data, 82% of HCW population has completed primary series
- 2 AMC reporting countries have on average lower vaccination coverage than Non-AMC reporting countries

#### Several data limitations to highlight:

- Capping at 100%: some countries report coverage beyond 100%
- The target population definition is inconsistent especially in HICs, which can impact the HCW coverage reported
- Data from **press research** has been leveraged for some HICs<sup>2</sup>
- Few non-AMC countries are reporting HCW vaccination data
- Some non-AMC countries do not report regularly
- Data Caution: For some countries estimated number of HCWs varies between source (ILO estimates vs reported by country)

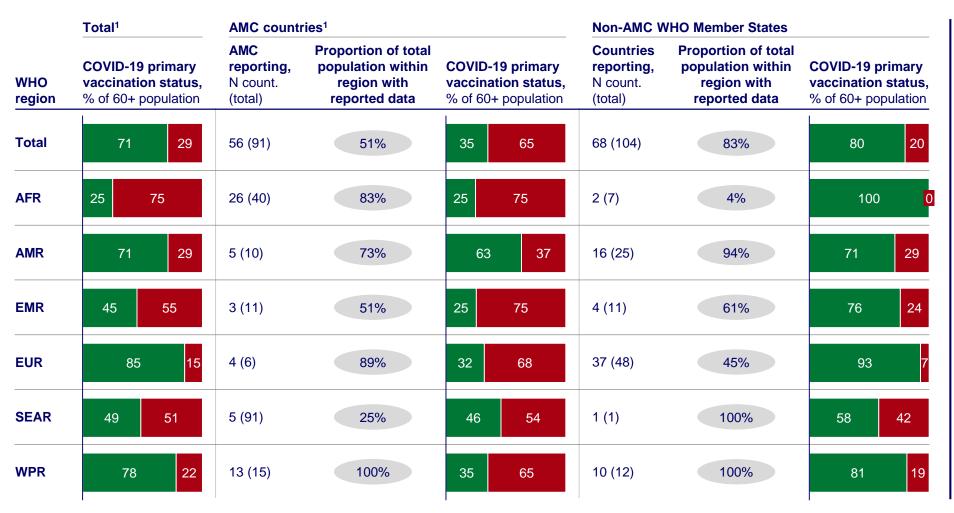
- 1. Excluding India
- 2. Publicly available HCW vaccination coverage data was leveraged for some HICs to compensate the difference in target population definition or lack of reporting (BEL, FIN, FRA, DEU, GRC, ITA, JPN, NLD, NOR, SVK, ESP, GBR, USA, URY) before further correction

# 35% of the 60+ population of AMC countries have completed primary vaccination based on reported data as of Apr 11

**DATA AS OF APR 11, 2022** 

PRELIMINARY - FOR INTERNAL USE ONLY





Based on available data from reporting countries, the vaccination coverage of the older population seems to be significantly lower in AMC countries

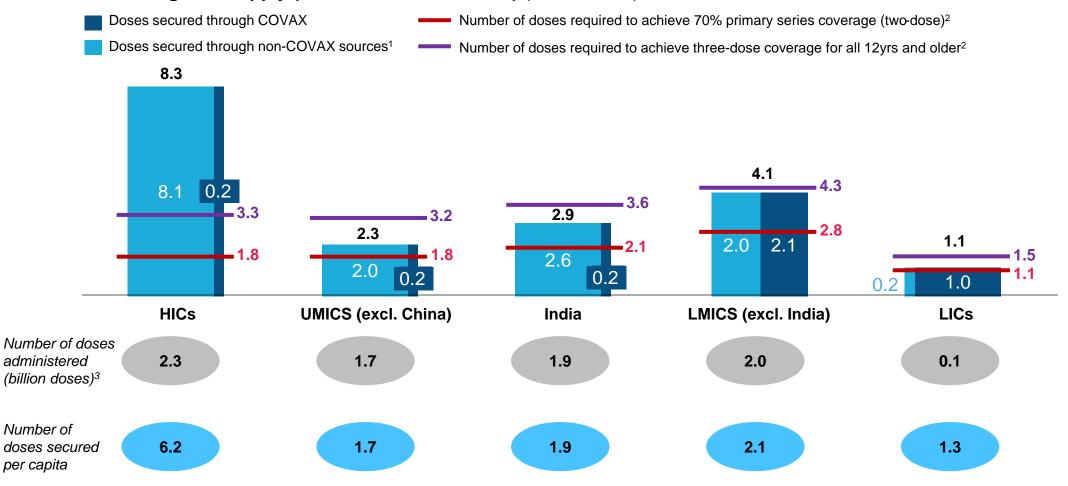
Caution: The data reported by EMR represents about half the population in the region while for AMR and WPR more than 75% of the population is represented

<sup>1.</sup> Excluding India

### Globally, there are more than enough vaccines available to protect every adult and adolescent (12yrs+) with a 3- dose regimen; however, distribution remains unequal

**DATA AS OF APRIL 6** 

Total available global supply (COVAX and non-COVAX) (billion doses)



#### **NOTES**

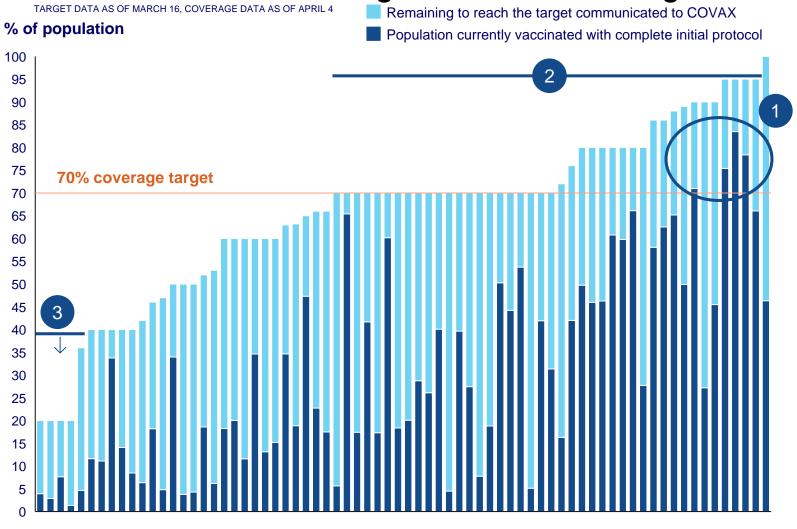
Chart figures show COVAX & non-COVAX doses. Ordering of the stack does not imply any 'time of use' for respective doses. Since 2021, COVAX & non-COVAX doses have been administered in parallel.

<sup>1</sup> Linksbridge Global Market Assessment analysis. In calculating number of doses secured per capita, assumes 10% wastage of doses.

<sup>2</sup> Both dose requirement calculations assume 10% wastage.

<sup>3</sup> WHO COVID-19 vaccine dashboard, as of 11 April 2022

## 43/72 <sup>1</sup> AMC countries are targeting 70% or above while 29 have targets below WHO target



#### **Key takeaways**

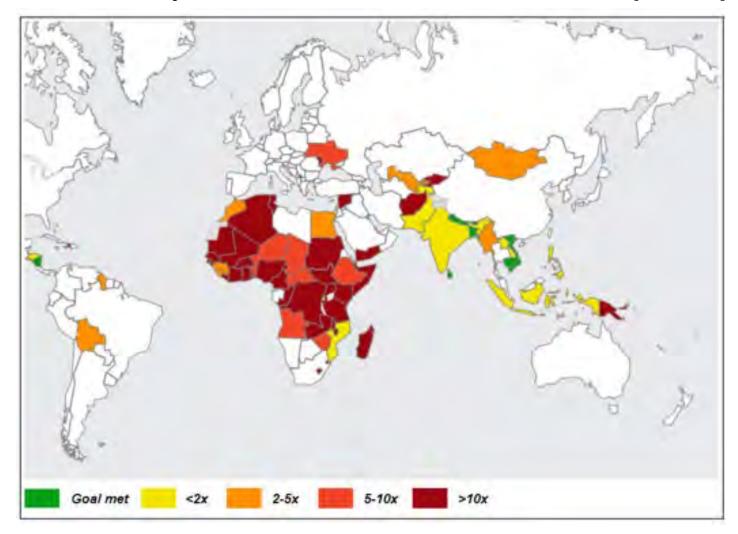
- Only 4 AMC91 countries have reached the 70% target
- 43 countries of the 72 that communicated their target through the demand planning process are targeting ≥ 70%
- 29 countries of the 72 are targeting below 70%, of these **only 5 are below 40%**

Reasons for lower targets include epidemiology, vaccine performance, and limitations of health systems/competing priorities locally

<sup>1.</sup> not all countries submitted targets

<sup>2.</sup> Excluding India. coverage of older adults populations including India is 56%

## Scale - up required to reach WHO 70% coverage target by 30 June 2022 based on current daily vaccination rates across AMC participants



COVID- 19 pandemic and pathway to recovery through Immunization Agenda 2030 (IA2030)

# Where are we & what have we learned?

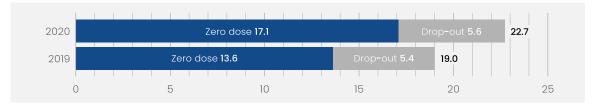
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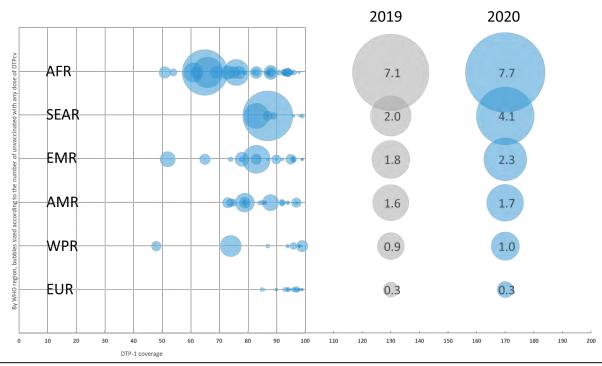


## COVID- 19 pandemic led to major backsliding on childhood vaccinations in 2020

Number of "zero-dose children\*" increased across all regions in 2020

- 23 million children missed out on basic vaccines through routine immunization services in 2020
- Most of these up to 17 million children did not receive a single vaccine (zero dose children)
- Zero-dose children live disproportionally in the African continent & in countries affected by conflict.



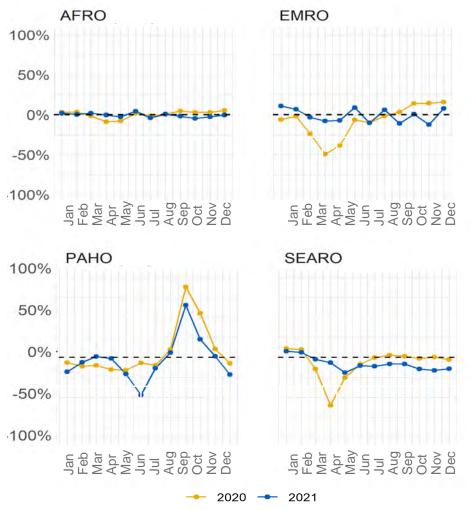






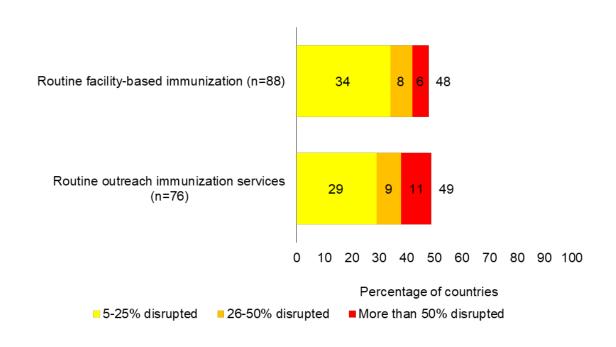
### Impact of COVID on Routine Immunization: Mixed picture

Weighted relative difference in #DTP3 vaccinated in 2021 & 2020, compared to 2019



Diff. for each country weighted by surviving infants for each country. Source: Monthly admin estimates, March 2022. Analysis includes countries with consistent reporting through December 2021(AFRO: 32, EMRO: 5, PAHO: 18, SEARO: 6, WPRO: 0).

Percentage of countries reporting disruptions in routine immunization services in Q4 2021 due to COVID - 19





Almost half of countries reported disruptions to both routine facility-based and outreach immunization services

# Threats against gains in the Western Pacific Regional Measles Elimination

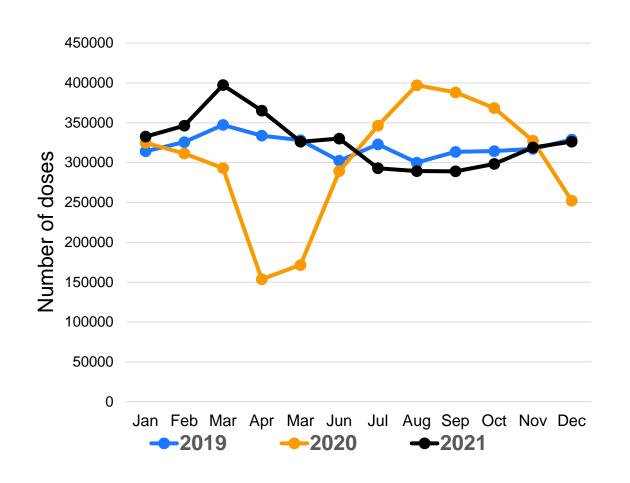
Decreased measles vaccination coverage amid COVID

- 19 Pandemic



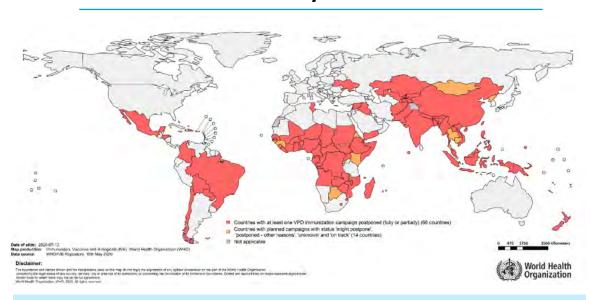
### Bangladesh: recovery by early 2021

- Dip in RI coverage in April and May 2020 due to lockdowns (1st wave)
- Recovery of coverage in 2nd half of 2020
- Coverage sustained in 2021
- No major impact on RI coverage during delta and omicron waves
- ....proactive preparedness based on lessons learned during the first wave



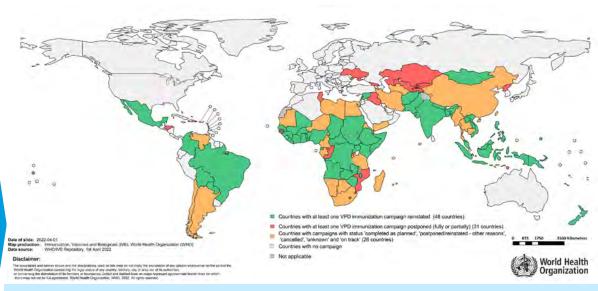
## Immunization campaigns being reinstated after initial disruptions in 2020, but many gaps remain in 2022

#### 15 May 2020



 66 countries with at least one campaign postponed due to COVID-19.

#### 1 April 2022

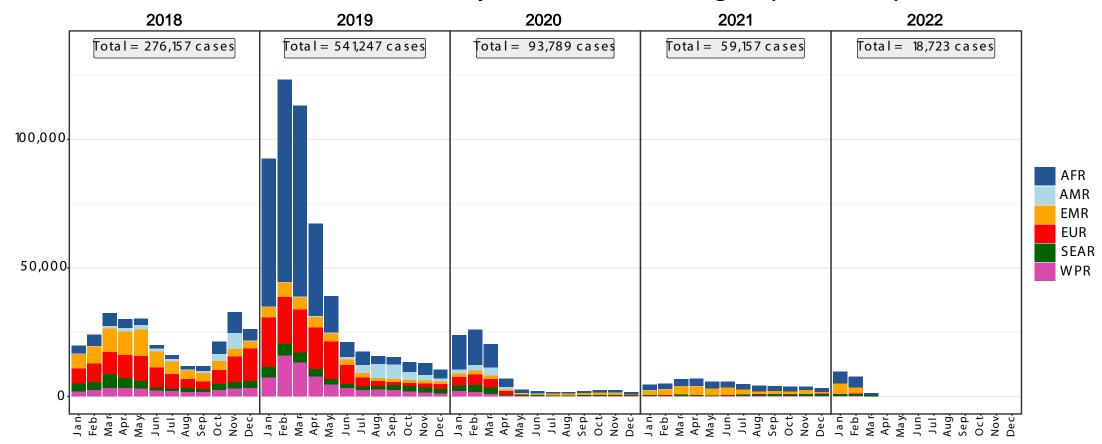


- 31 countries with at least one campaign postponed due to COVID-19 (35 campaigns postponed: estimated target population affected approximately 133 million).
- 48 countries reinstated 92 campaigns (preventive or outbreak response). Of those, 15 countries conducted multi-antigen integrated campaigns (Sept 2020 – March 2022)

### VPD Surveillance impacted by COVID

### - 19 control interventions

#### Measles case distribution by month and WHO Region (2018-2022)



- All VPDs decreased field surveillance
- Global VPD laboratory networks providing critical support for COVID-19 testing, disrupting other surveillance activities

Opportunities from Crisis: Leveraging the COVID - 19 pandemic.

# Where are we & what have we learned?

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# Pathway to recovery through Immunization Agenda 2030 (IA2030)



#### **Current context**

- Global priority is rapid and equitable scale-up of COVID-19 vaccines
- Disruption of immunization and other essential primary health care services due to pandemic and lockdowns
- Resources drawn away from routine vaccination activities
- Risk of Covid-19 vaccine roll-out impact in vaccine acceptability
- Countries using new approaches to target adults

#### **IA2030** opportunities and focus

- Immunization as a **global priority, including PPR**
- Strong case for role of vaccine deployment in economic recovery and global security
- Focus on recovery and do no harm
- Need for collective action to rebuild essential services & systems, while reducing number of zerodose children
- 'Umbrella' partnership models emerged (e.g., COVAX, ACT-A,...)
- Opportunity for life course immunization approach

Source: https://www.immunizationagenda2030.org/

# Leveraging COVID - 19 vaccine roll - out to strengthen immunization and primary health care



Health
 Workforce

Increased technical & management skills ("doing things differently")



ServiceDelivery

Promote broader immunization agenda (IA2030, Gavi 5.0, PHC)

- life course im m unization
- integrated service delivery

Social listening and misinformation management



3. Health
Information
Systems

Real-time monitoring C-19 vaccination & digital solutions (e.g. reminders, default trackers, disease and AEFI surveillance..).

Cold chain and vaccine management



4. Access to Vaccines

Improvement of C - 19 vaccine supply

Strengthened regional procurement mechanisms



5. Financing

Unprecedented level of prioritization, resource availability for C - 19 vaccine roll-out & strengthen systems



6. Governance

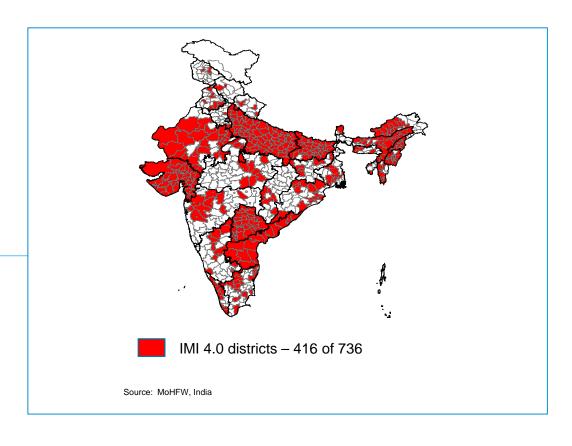
Global attention to immunization

Expanded partnerships

### Using Campaigns to Facilitate Catch

- Somalia, 2021: three rounds of integrated measles,
   OPV, vit A, and deworming campaign
- Mexico, Apr-Sep 2021: used measles-rubella campaign to catch up children on routine vaccines (e.g. hexavalent)
- India, Feb April 2022: three rounds of Intensified Mission Indradhanush in 416 selected priority districts in the country

### - Up Vaccination



Plan integrated campaigns to the extent possible: every vaccination campaign should be considered for opportunity to deliver multiple antigens and other health interventions

# Synergies between COVID - 19 vaccination and routine childhood immunization and other interventions

#### Sri Lanka<sup>1</sup> – combined delivery strategies

- RI sessions provided opportunity to screen parents for C-19 booster doses and provide/motivate for vaccination
- Targeted questions

   facilitated to identify high
   risk unvaccinated
   household individuals and
   get them to community or
   mobile clinics



#### **Bolivia<sup>2</sup> – strengthened AEFI surveillance**

- Sites of mass vaccination complies with AEFI's technical standards for prevention and care.
- Relying on multidisciplinary perspectives from outside Ministry allowed for more detailed investigation and analysis process of serious AEFI cases

#### Cambodia<sup>3</sup> – integrating noncommunicable disease screening

 A pilot provided adults over 40 with diabetes and hypertension screening while they received their C-19 vaccinations



<sup>1.</sup> SEARO Regional Working Group meeting March 2022. WHO. Sri Lanka country experience on combining routine immunization sessions and COVID-19 vaccination.

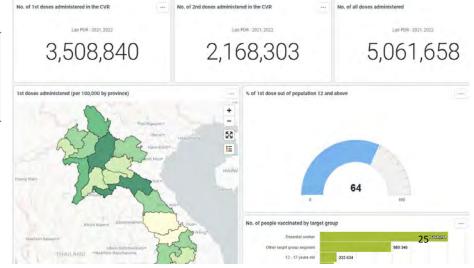
<sup>2.</sup> Bolivia. Mini-cPIE results. November 2021.

<sup>3.</sup> CHAI. December 2021. https://www.clintonhealthaccess.org/integrating-early-non-communicable-disease-screening-and-counseling-with-covid-19-vaccinations-in-cambodia/

### COVID- 19 vaccine electronic registry, Lao PDR

System Attributes	Routine Immunization Information System	COVID- 19 Vaccination Registry
Underlying programme	DHIS2	DHIS2
Track individual vaccination status	×	<b>✓</b>
Auto reminder function	X	<b>~</b>
Health Facility Level Data Reports and Dashboards	X	
End to end solution	×	<b>✓</b>
Defaulter Tracing	<b>X</b> Manual	Automated
Functional	(planned to pilot)	<b>~</b>



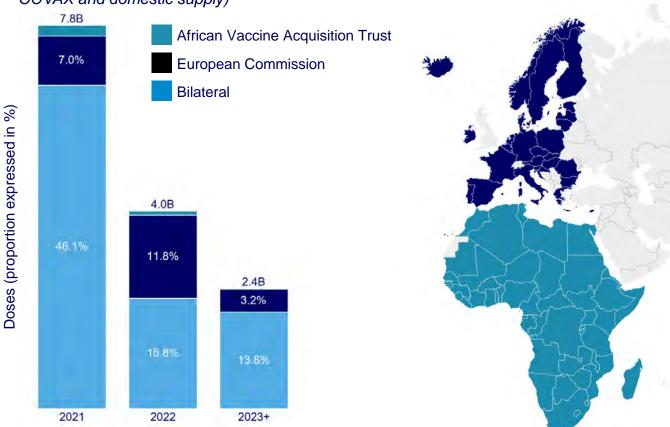


# COVID-19 has brought us new technologies & a clear push for regional supply security



# COVID-19 created an opportunity to launch & strengthen regional procurement mechanisms

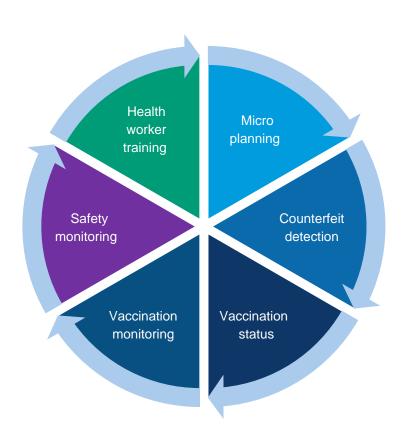
Share of global COVID-19 vaccine doses secured through regional procurement mechanisms (excludes COVAX and domestic supply)



- Nearly a quarter of the doses of COVID - 19 vaccines secured by countries so far were through <u>new</u> multilateral <u>regional</u> procurement mechanisms
- 30 European Commission/ European Economic Area countries and 54 countries in Africa procured all or a portion of their COVID - 19 vaccine supply through established regional mechanisms

Expected delivery date

# COVAX Innovation Working Group: Priority problem areas and opportunities





Challenge: Targeting previously untargeted groups for vaccination

**Solution:** GIS-based digital mapping

**Accomplishment:** WHO-UNICEF GIS working group supporting >15 countries



Challenge: Counterfeit vaccines, damaging trust and demand

**Solution:** Barcode-enabled track and trace solutions **Accomplishment:** Global Trust Repository consortium



Challenge: Lack of real time, authenticated information on proof of vaccination

**Solution:** Digital vaccine certificates

Accomplishment: Digital Documentation of COVID-19 Certificates (DDCC)



Challenge: Ensuring targeted populations have been fully reached and no drop-outs

**Solution:** Community-level digital monitoring of doses given

Accomplishment: Operational Guide for the collection and use of COVID-19 vaccination data



Challenge: Record COVID-19 vaccine development time, making monitor AEFIs more critical than ever

**Solution:** Digital tools for safety monitoring

**Accomplishment:** Development and deployment of DHIS2 AEFI tracker module and integration with

VigiFlow



Challenge: Rapid training of health and vaccination workers needed

**Opportunity:** E-Learning for low-bandwidth settings

**Accomplishment:** COVID-19 vaccine training adapted for SMS, WhatsApp and Moodle and deployed in >10

countries

### First IA2030 Report —to WHA in May 2022

Theme: Reaching zero dose children by safeguarding and strengthening national immunization programmes and primary healthcare in the context of COVID-19 vaccine roll out.

#### Key messages :

- New decade for immunization, framework in place to drive forward universal vaccination
- Strong focus on equity and the zero-dose child
- COVID-19 has disrupted implementation and led to backsliding much to do to catch up and expand
- Leveraging COVID- 19 responses to boost immunization programmes and innovative research and development
- Immunization is a crucial component of pandemic preparedness and response

### World Immunization Week

### "Long Life for All"

24 – 30 April 2022

### **Messaging Priorities**

Safety & Effectiveness
Emphasizing how vaccines
work to protect us

2

Equity
Addressing accessibility
challenges and
reinforcing the right to
vaccines for all

3

Diseases prevented
Broadening the scope of vaccines' impact on healthy, long lives

Lead - in line:

Vaccines: In pursuit of a long life well lived

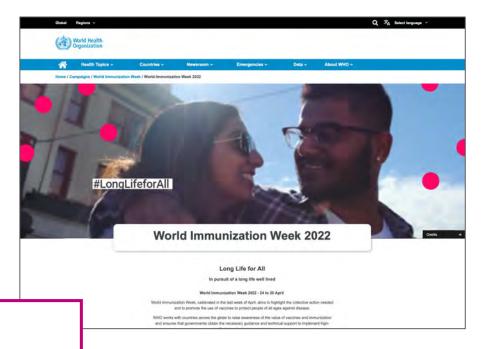
Hashtags:

# Long Life For All # World Immunization Week

#### Materials and toolkit available at

https://www.who.int/campaigns/world-immunization-week/world-immunization-week-2022

Call on Member States to advocate for immunization and vaccine uptake at home and globally during WIW



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COVID- 19 pandemic and pathway to recovery through Immunization Agenda 2030 (IA2030)

### **Regional Perspective**

Dr Messeret Shibeshi

Acting Programme Coordinator

Dr Phionah Atuhebwe

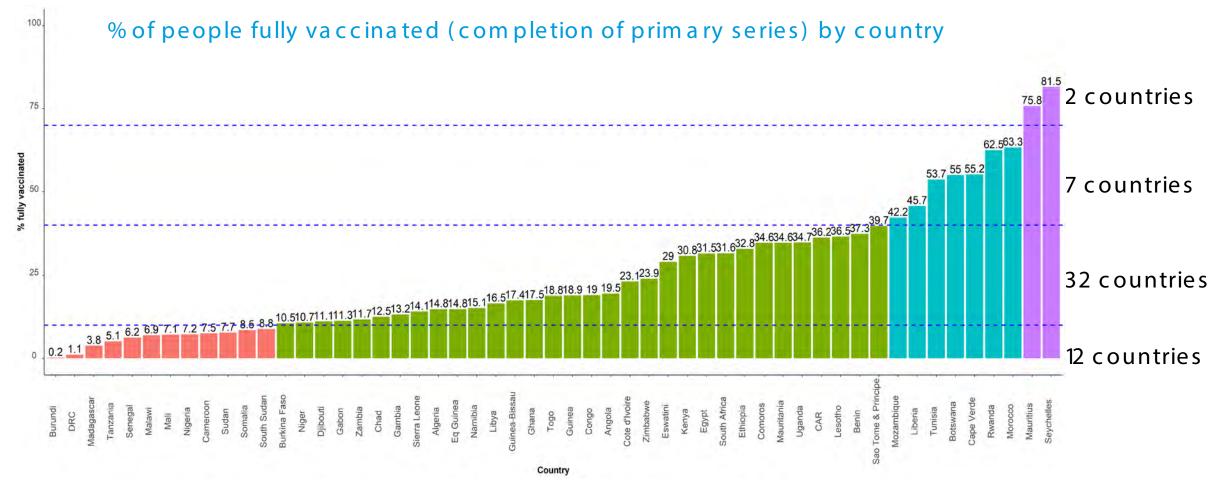
New vaccine introduction, Officer

**VPD AFRO** 



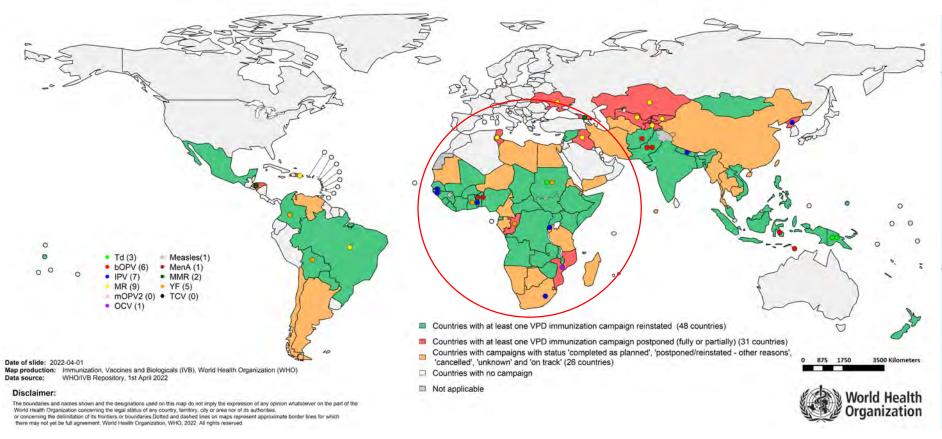
# 19% of the total population in AFRO have been fully vaccinated with two countries above the 70% target coverage





## The COVID - 19 disrupted the EPI program with 11 VPD campaigns postponed in the AFRO region as a result



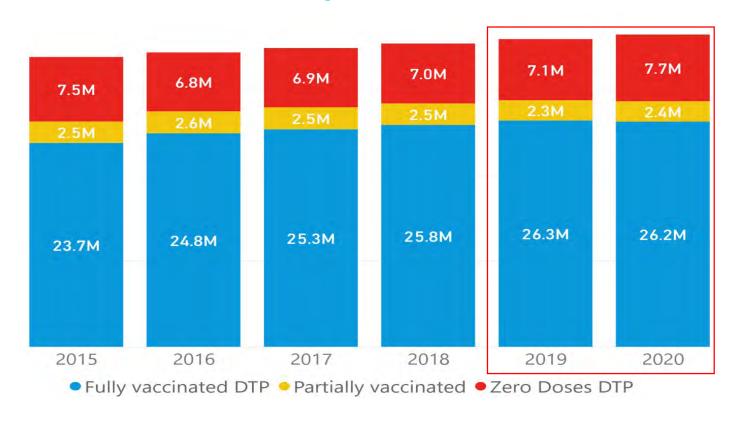


- In 2022, countries are beginning to show progress with Measles and Yellow Fever campaigns being reinstated despite the COVID-19
- CAR, Chad, Equatorial
  Guinea, Ethiopia, Nigeria,
  Somalia & South Sudan
  have reinstated
  Measles campaigns

# Similarly, there was an 8% increase in zero dose populations in 2020 in comparison with 2019



#### Trend of zero dose coverage in AFRO 2019 vs 2020

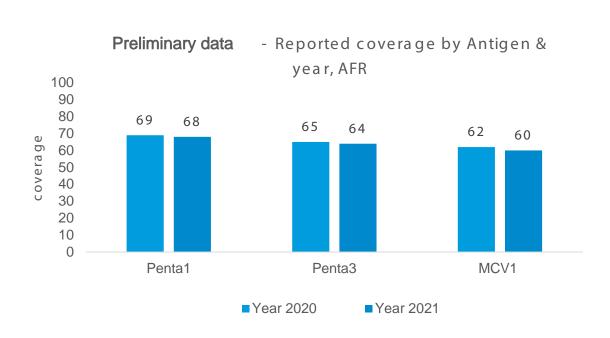


- with of DTP3 in 2020 compared to 2019
- 600K more zero dose children in 2020 compared to 2019
- Africa has the highest number of zero dose children
- 3 out of 5 countries with the highest number of zero doses globally are in Africa

Source: WUENIC

# Decline in Penta1, Penta 3 and MCV 1 in 2021 in comparison with 2020. The number of unimmunized children also increased





- Additional ~140,000 unimmunized children with DTPCV1(Penta1) in comparison to 2020
- Additional ~30,000 children did not receive DTPCV3 (Penta3) in comparison to 2020
- Additional ~200,000 unimmunized children with measles first dose
   (MCV1) in comparison to 2020

- Ongoing outbreaks that are rsurfacing
- Countries are using sub national data to prioritize areas for special attention to address inequity
  - Malawi, Uganda and Ethiopia
- Plan to do screening for immunization during the SIAs

### Despite the attendant gaps, countries have commenced the implementation of targeted strategies to revamp their Routine Immunization program



#### **Strategies Deployed**



Microplanning, development and implementation of RED / Equity plans

Liberia

Ma la wi

Integrated strategies to reach zero dose and unimmunized populations

Liberia (PIRI) Nigeria (IMOP), Burkina Faso, Guinea, Kenya, Ethiopia; Tanzania

Senegal, Nigeria, Niger, Ethiopia, Uganda,

Deployment of survey instruments LQAS

e.g. RI Nigeria, South Sudan

Community engagement – line listing by traditional leaders and community volunteers

Nigeria, Mali, Guinea, Benin

Support for the development of vaccination and catch - up guidelines for zero dose and under - vaccinated in insecure areas.

Burkina Faso, Mali, Niger, Kenya, ,Uganda, Zimbabwe

Capacity building of health workers and managers (e.g. MLM)

Guinea, Burkina Faso, Uganda, Kenya, Ethiopia, South Sudan, Zambia, Zimbabwe

# Operational readiness & service delivery towards recovery of the immunization system including integration



Integration of Covid - 19 vaccination with other vaccines	<ul> <li>Kenya has used rapid result initiative accelerating the catchup campaign for missed doses</li> <li>Angola is planning integration of COVID vaccination with Measles outbreak immunization response for this year</li> </ul>	
Identification of target population	<ul> <li>Senegal, Rwanda, Botswana, and Tanzania enumerated the target population to better understand the amount of resources and vaccine doses needed.</li> </ul>	
Integration of Covid - 19 vaccine roll - out and PHC	• Tanzania partnered with HIV program to vaccinate people living with HIV/AIDs for COVID 19 while others collaborated with physicians treating Chronic diseases (Diabetes, Hypertension etc) and vaccination is being provided in such specialist clinic days.	

#### Innovations to monitor coverage and data analytics



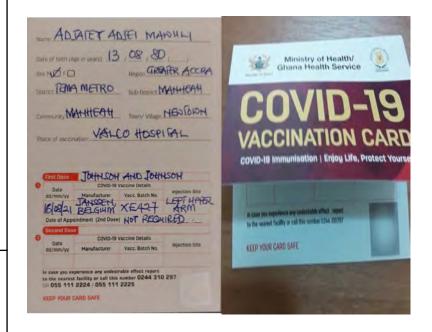
# Ghana being among the first countries

Now implemented in most of the countries of the African Region

- SMS reminders for subsequent time, date & venue for the subsequent doses.
- Use of QR codes for vaccination status verification
- Use of a hologram in the vaccination card for authentication

#### Rwanda

 Use of an electronic Immunization Registry plus a custom application linked to DHIS2 to generate digital vaccine certificates.



# COVID-19 vaccination legacy: Strengthening vaccine Safety & AEFI surveillance



Uganda	<ul> <li>Safety Data harmonization between Uganda MoH and Uganda National Drug Authority (NDA)</li> </ul>
Burkina	<ul> <li>Free-toll phone number and available data management</li></ul>
Faso	systems to collect and share COVID-19 AEFIs

## COVID-19 vaccination legacy: Improving supply chain and logistics



Ethiopia, Tanzania, Nigeria, Uganda, Burkina Faso, Senegal, Kenya, Gambia	<ul> <li>Introduction of a reverse logistics system that entailed <u>real time monitoring of the utilization of vaccines</u> that had been sent to various vaccination sites to minimize vaccine wastage.</li> <li>Active monitoring to identify vaccine doses at risk of expiry and reallocation to higher performing sites/districts</li> </ul>
Ghana Rwanda	Drone delivery of vaccines to hard-to- reach vaccination sites
Senegal	Use of Logistimo, a real-time stock monitoring tool in each health facility, rationally redirecting stock flows to points of care based on consumption rates



# Risk mitigation actions to address the impact of COVID-19 on the immunization programme



- 1. The existing immunity gaps need acceleration of implementation of strategies to ensure every eligible person receives vaccines missed before or during the pandemic resulting in outbreaks of measles, importation of WPV1, cVDPV2
  - Intensify approaches to reduce zero dose populations
  - Prioritize strategies that target hard to reach and missed communities
- 2. Strategies to recover immunization programmes using the Primary Health Care approach:
  - Facilitate screening at every health contact to reduce missed opportunity
  - Promote **catch up vaccination (campaigns) at every opportunity** (life course) e.g. RI intensification using Maternal Child Health Days, PIRI etc
- 3. Strategies to strengthen VPD surveillance- complemented by periodic risk assessments
- 4. Strategies to strengthen routine immunization and build resilience, leveraging COVID-19 vaccination practices observed in the Region:
  - Integration of COVID-19 vaccination in existing Immunization programmes / with routine outreach services
  - Targeting adults/higher-risk groups:
    - Elderly: Household vaccination using HCWs with CHW
    - People with co-morbidities: Integration of COVID-19 vaccination in Diabetes and HIV/AIDS Clinics
    - Pregnant women: Integration of COVID-19 vaccination in ANC and PNC services (Pregnant women)
  - Targeting adolescents, young and middle-aged populations: Use of sports, fine arts, drama and music to reach them with COVID-19 vaccination services

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21 April 2022: Member State Briefing: 13h30-15h00 (CET)

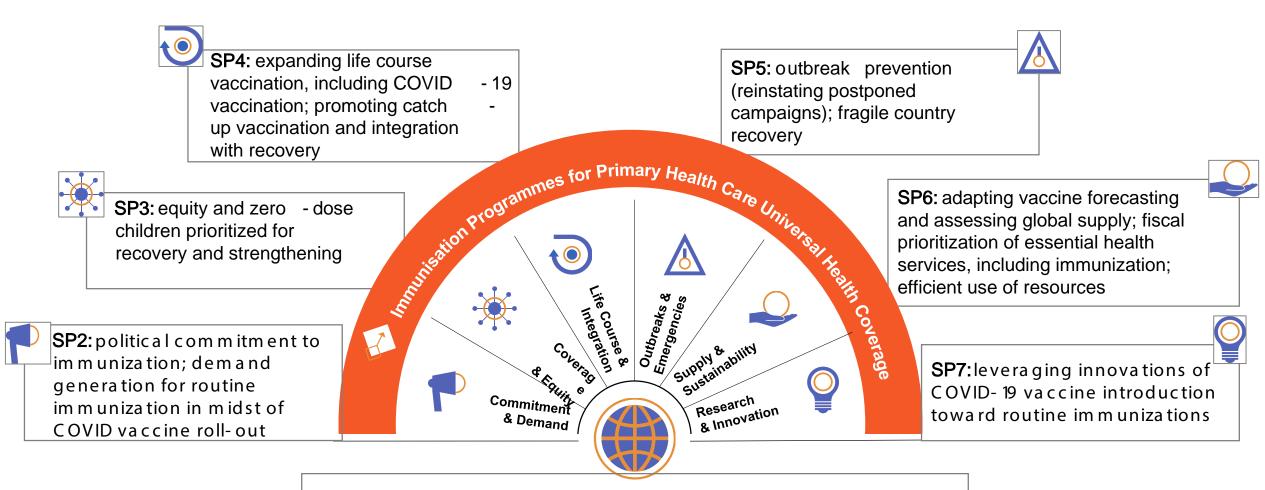
	Opening Remarks (5 m ins)	DDG Zsuzsanna Jakab
2	COVID-19 pandemic and pathway to recovery through Immunization Agenda 2030 (25 mins)	Director Kate O'Brien
3	Regional perspective (10 mins)	AFRO Representative
4	Q&A Discussion (45 mins)	Unit Head Craig Burgess
5	Closing (5 mins)	Director Kate O'Brien

### Conclusion

- After two years of health system strain and disruptions, urgent need to close immunity gaps, recover immunization programmes, and prevent risk of outbreaks
- Goal is to build back beyond pre-pandemic levels
- Transformative opportunity to leverage immunization recovery and COVID-19 vaccination toward resiliency and strengthening of primary health care and leave no one behind across the life course
- IA2030 framework and strategic priorities aligned with efforts toward recovery, resiliency, and strengthening --- which is pandemic preparedness, and response



# IA2030 framework and strategic priorities align with efforts toward recovery, resiliency, and strengthening



**SP1:**reviving routine immunization as part of Primary Health Care, recovery of immunization and PHC services, leveraging opportunities of COVID vaccine rollout to strengthen health systems



