

EPI 50 years and its impact on global public health

Ann Lindstrand Pediatrician, MPH, PhD

Head of EPI Unit, IVB, WHO HQ

lindstranda@who.int

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Vaksine- og smitteverndagene, Norway

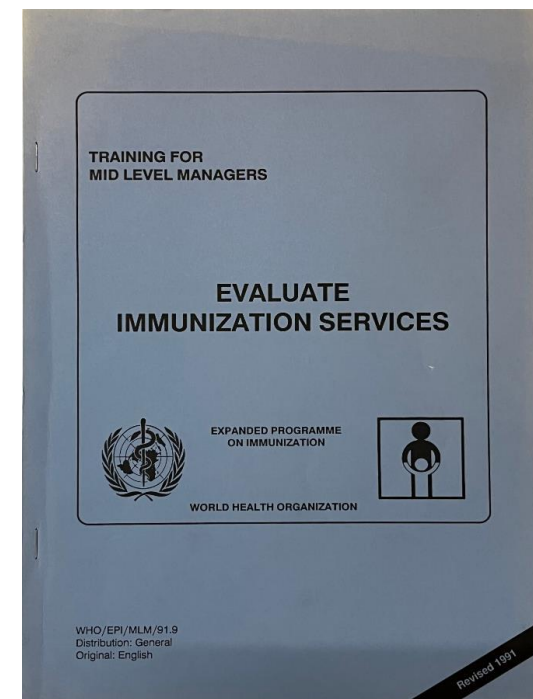
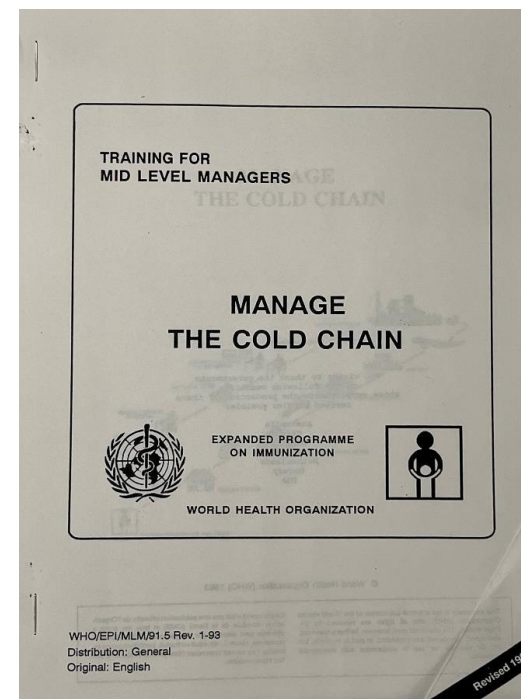
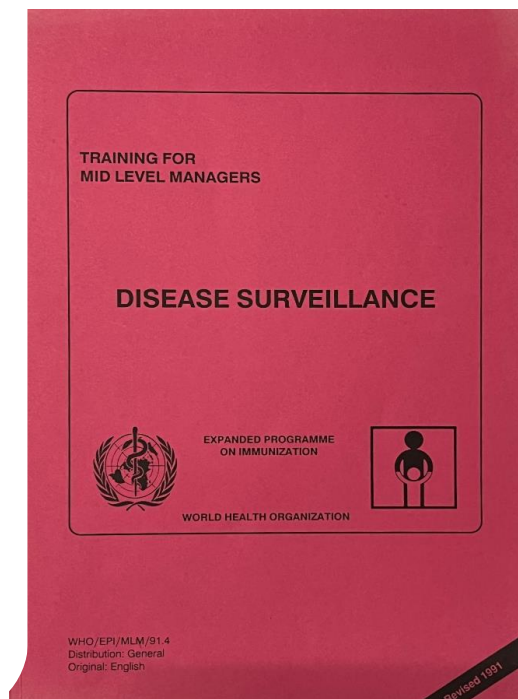
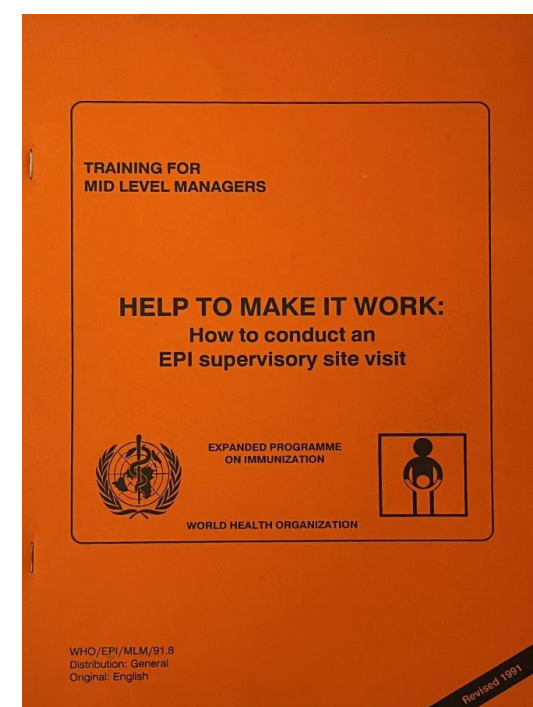
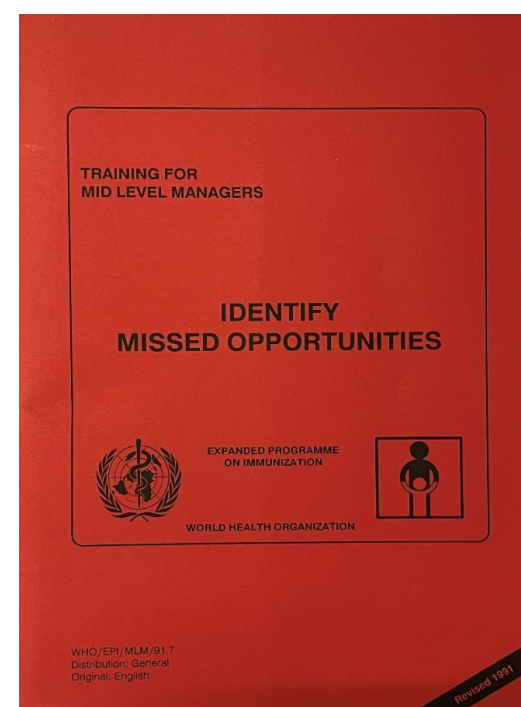
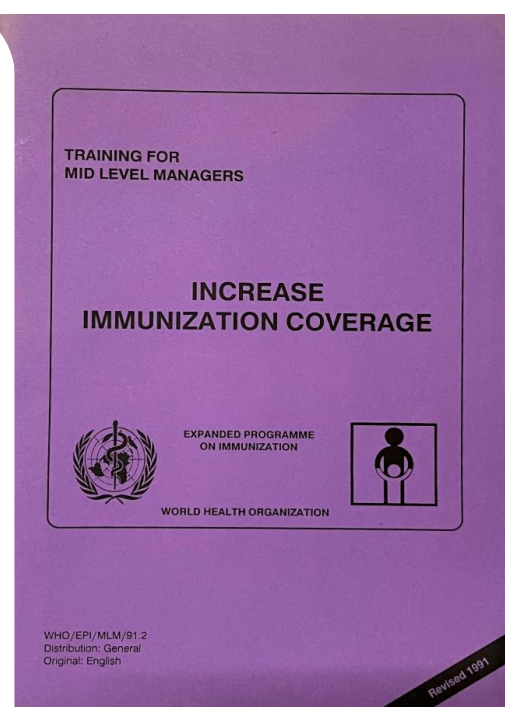


Moving from the **expanded** to the **essential** programme on immunization:

AGENDA

1. From then (1974) to now
2. Looking forward

Achievements of the last 50 years and inspirations for the next 50



WHO Expanded Programme on Immunization, 23 May 1974

14th plenary meeting, WHA Resolution 27.57

WHA27.57 WHO expanded programme on immunization

23 May 1974

The Twenty-seventh World Health Assembly,

Having considered the statement on immunization against the childhood diseases and the allocation of funds for an integrated programme on immunization contained in the proposed programme and budget estimates for 1975;¹

Recognizing the immense contribution immunization has made to the control of many of the common communicable diseases in the countries where it has been effectively applied;

Noting that in extensive regions of the world immunization is available for only a small proportion of children in the susceptible age-groups;

Aware of the potential for disease control when a well-planned and well-coordinated programme is instituted;

Reaffirming the importance of systematic immunization programmes in all countries; and

Expressing its satisfaction at the readiness of the World Health Organization to further promote measures to assist countries in extending their immunization programmes to cover the greatest possible percentage of the susceptible populations,

1. RECOMMENDS that Member States develop or maintain immunization and surveillance programmes against some or all of the following diseases: diphtheria, pertussis, tetanus, measles, poliomyelitis, tuberculosis, smallpox, and others, where applicable, according to the epidemiological situation in their respective countries;

2. REQUESTS the Director-General

(1) to intensify at all levels of the Organization its activities pertaining to the development of immunization programmes, especially for the developing countries;

(2) to assist Member States (i) in developing suitable programmes by providing technical advice on the use of vaccines and (ii) in assuring the availability of good-quality vaccines at reasonable cost;

(3) to study the possibilities of providing from international sources and agencies an increased supply of vaccines, equipment and transport and developing local competence to produce vaccines at the national level;

(4) to continue to support research on the efficacy of vaccines and on as yet unsolved practical problems encountered in immunization procedures;

(5) to arrange seminars and other educational activities on the design and execution of programmes; and

WHA27.57
page 2

3. FURTHER REQUESTS the Director-General

(a) to establish a special account under the Voluntary Fund for Health Promotion to be credited with the values of gifts intended for the expanded programme on immunization and to ensure that vaccines donated to the programme conform with the relevant WHO requirements;

(b) to report progress annually to the World Health Assembly.

Fourteenth plenary meeting, 23 May 1974
A27/VR/14

Member States recognized

- Immense contribution of immunization
- Lack of access in many parts of the world
- Remaining potential for disease control

Recommended & Requested

1

MS develop/maintain imm'n & surveillance against 7 diseases

2

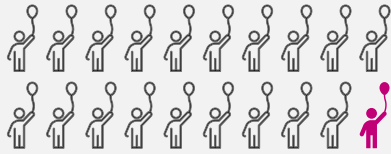
WHO to intensify: TA, quality/affordable supply, local vax production, research vax/imm'n, training/education

3

Voluntary Fund for vax/imm'n & annual WHA progress reporting

1974 - The pivotal year for immunization - 50 years ago

WHO founded the Expanded Programme of Immunization



Only about **5%** of children received DTP3 vaccine in 1st year of life



Smallpox eradication efforts in WHO African Region

1974

3.9 billion people

92.2 Infant mortality rate (deaths by 1,000 live births)

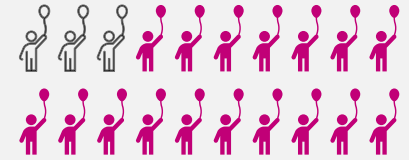
58.5 years Life-expectancy

2024

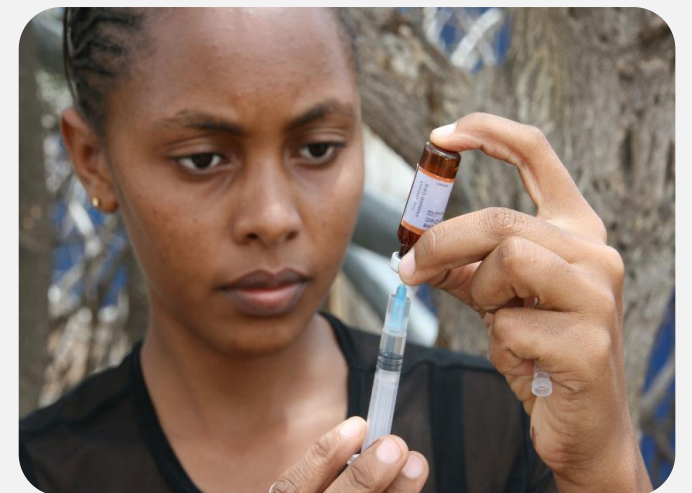
↑ 8.1 billion people

↓ 25.5 Infant mortality rate (deaths by 1,000 live births)

↑ 73.3 years Life-expectancy



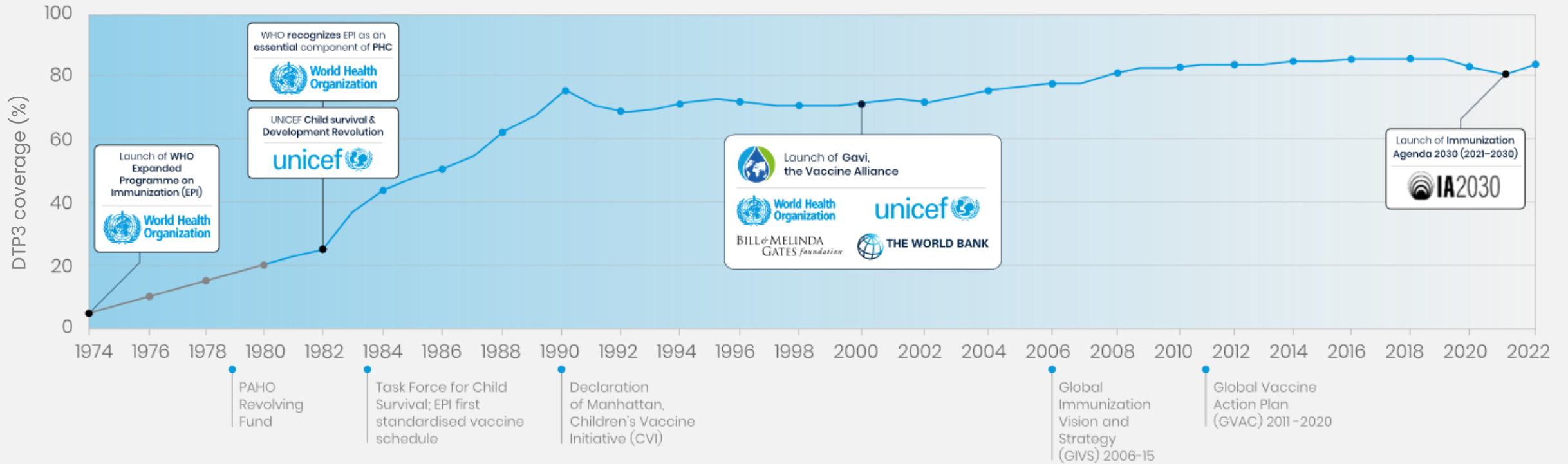
Almost **85%** of children worldwide received DTP3(c) vaccine in 1st year of life



Vaccination on Somali-Kenyan border July 2011

Over 50 years, global immunization programme has driven equity and access, serving as PHC foundation

Pivotal events since 1974



Note: DTP3 coverage in 1974 based on estimates from Keja K, Chan C, Hayden G, Henderson RH. Expanded programme on immunisation. World Health Stat Q. 1988;41(2):59-63. PMID: 3176515. DTP3 coverage from 1980 onwards based on WUENIC estimates, July 2023.

The #vaccine preventable diseases has massively expanded

From 7 VPDs in 1974 (mostly for infants)..... to >13 (through life-course) in 2024

7 Global VPDs

Expanded Programme on Immunization **Founded**

1974

- BCG
- Pertussis
- Tetanus
- Polio
- Measles
- Diphtheria
- Smallpox

20+ Context Specific VPDs*

13 Global VPDs

2024

Essential Programme on Immunization **life-course vaccines**

- acellular Pertussis, Influenza, RSV, HepE
- JE, Meningitis, YF, Malaria, Rabies
- RSV mAb, Mumps, Cholera, TBE, Varicella, Hep A
- COVID-19, Influenza, Meningitis, Cholera, Rabies
- Zoster, RSV, Dengue, Influenza, Meningitis, Mpox, Pneumococcus, Cholera, Rabies, Chikungunya, Ebola
- Tetanus, COVID-19
- BCG, Hep B
- Diphtheria, Tetanus, Pertussis, Hep B, Polio, Measles, Rubella, Hib, PCV, Rotavirus
- Diphtheria, Tetanus, HPV
- COVID-19

Note: *BCG: bacillus Calmette–Guérin; Hib: Haemophilus influenzae type b; HPV: human papillomavirus; JE: Japanese Encephalitis; PCV: pneumococcal conjugate vaccine; RSV: respiratory syncytial virus; TBE: Tick-Borne Encephalitis; TCV: typhoid conjugate vaccine; YF: yellow fever. *Not all context specific VPDs have a WHO SAGE recommendation.

Ambition has increased, as have VPD specific elimination strategies & the number of partners investing

During the last 50 years EPI has encouraged new partnerships & new sources of funding

At founding of EPI, there was 1 disease specific strategy: **smallpox**

CHAPTER 10
THE INTENSIFIED SMALLPOX ERADICATION PROGRAMME, 1967-1980

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1967

1974

2024

1974

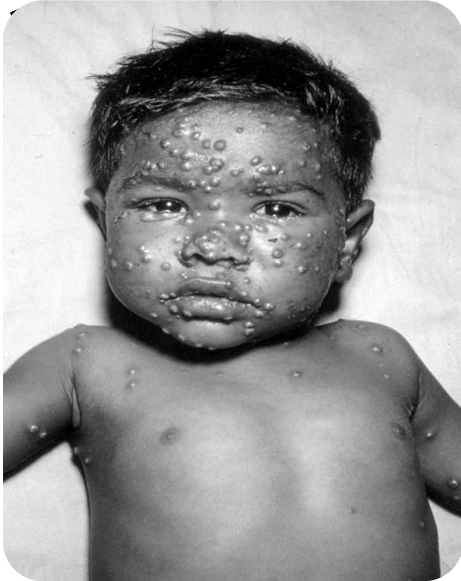
2024

Monumental triumph in the history of human health - smallpox eradication through immunization



From a disease that affected many...

A WHO smallpox recognition card from 1971, showing a patient with a relatively mild case of smallpox



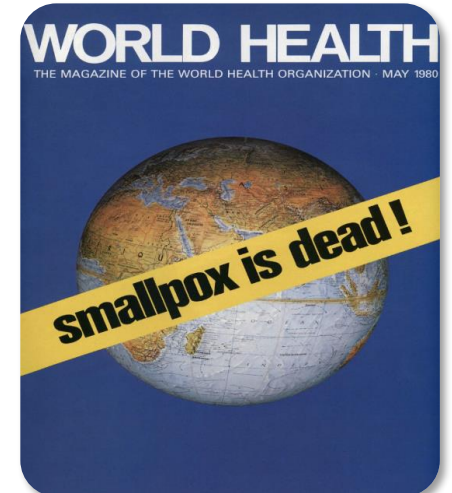
Many bore the pockmarks or like this woman were totally blind



Jet-injector can be used to vaccinate up to 1,000 persons an hour



...to an eradicated disease whose legacy continues to inform outbreak responses (eg Ebola, Mpox)



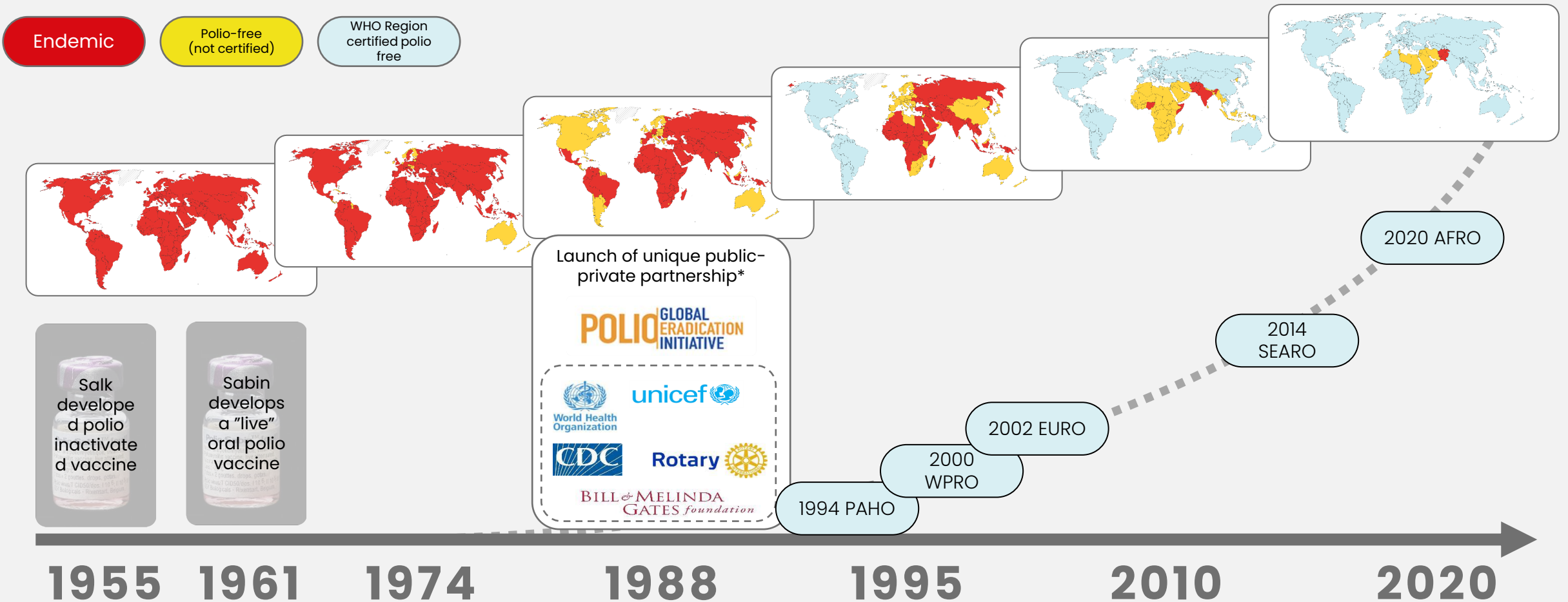
Ali Maow Malin a cook in Somalia, last case of Smallpox, 26 October 1977



Monumental effort to eradicate the 2nd human disease

- polio eradication progress through immunization

More than 99.9% of the world's population now lives in areas free of endemic Wild Polio Virus (WPV)



All maps from: <https://ourworldindata.org/grapher/progress-towards-polio-eradication?time>

* Gavi joined later

Important progress towards achieving and sustaining Maternal & Neonatal Tetanus Elimination (MNTE)

1988

787,000 newborns died of neonatal tetanus

1989

WHA endorsed elimination of neonatal tetanus

1999

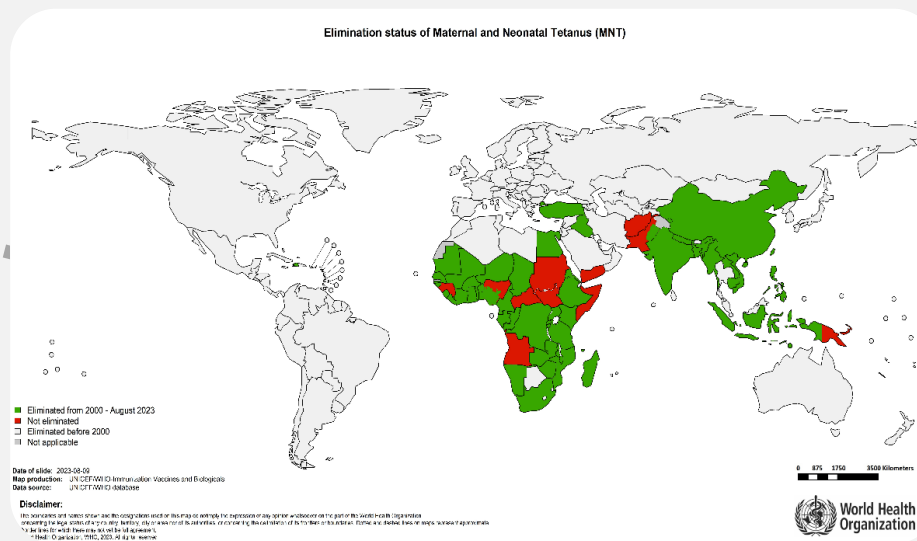
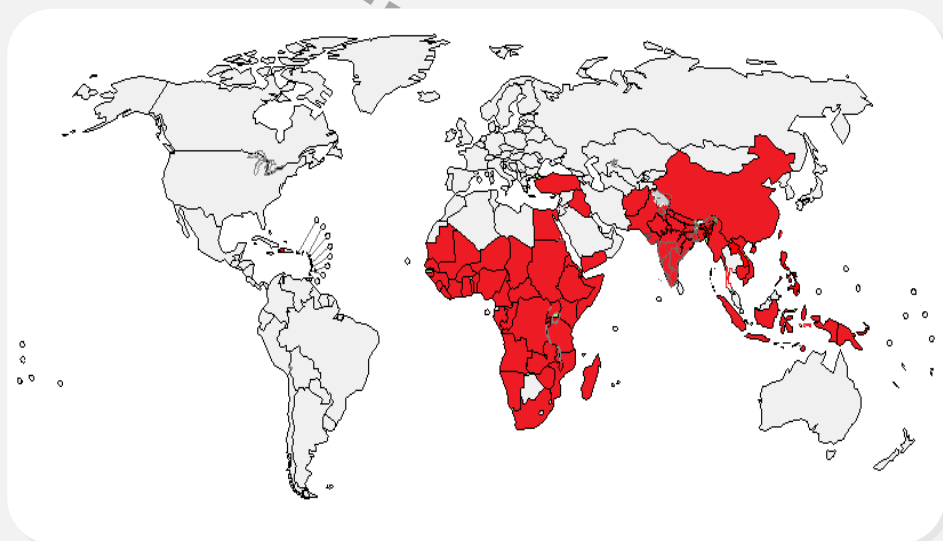
Relaunch as MNT Elimination initiative targeting 59 countries

2018

25,000 newborns died of neonatal tetanus

2024

48 of remaining 59 countries achieved MNTE; 11 remaining

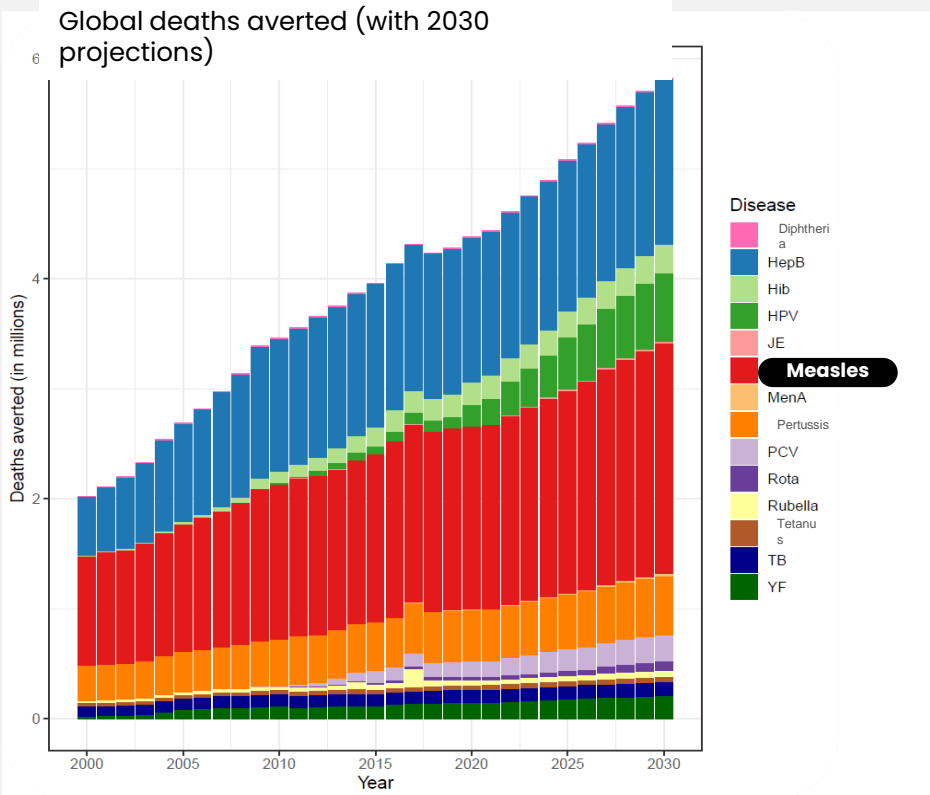


Field demonstration of the use of Open Data Kit (ODK) for data collection during the MNTE validation survey in Guinea (Nov 2023)

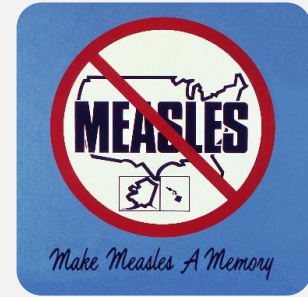
Progress towards measles elimination is IA2030 strategy tracer

2000–2022, measles vaccination prevented 57 million estimated deaths worldwide

Measles accounts for 37% of deaths averted among VPDs¹



~136,000 measles deaths estimated in 2022 compared with ~772,000 in 2000²

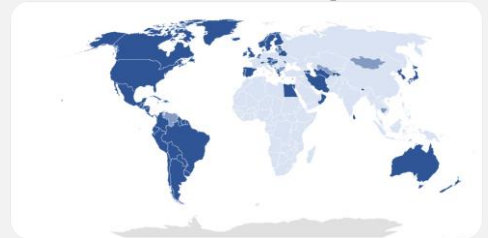


The Gambia
first country which interrupted transmission of the virus



Region of the Americas declared **free of endemic measles**

83 (43%) countries verified for measles elimination



Status lost 2 years later following a sustained outbreak

■ Verified Eliminated
■ Not Verified Eliminated
■ Re-established

1963

1967

1971

2016

To-date

Global immunization efforts have saved an estimated 154 million lives over the past 50 years

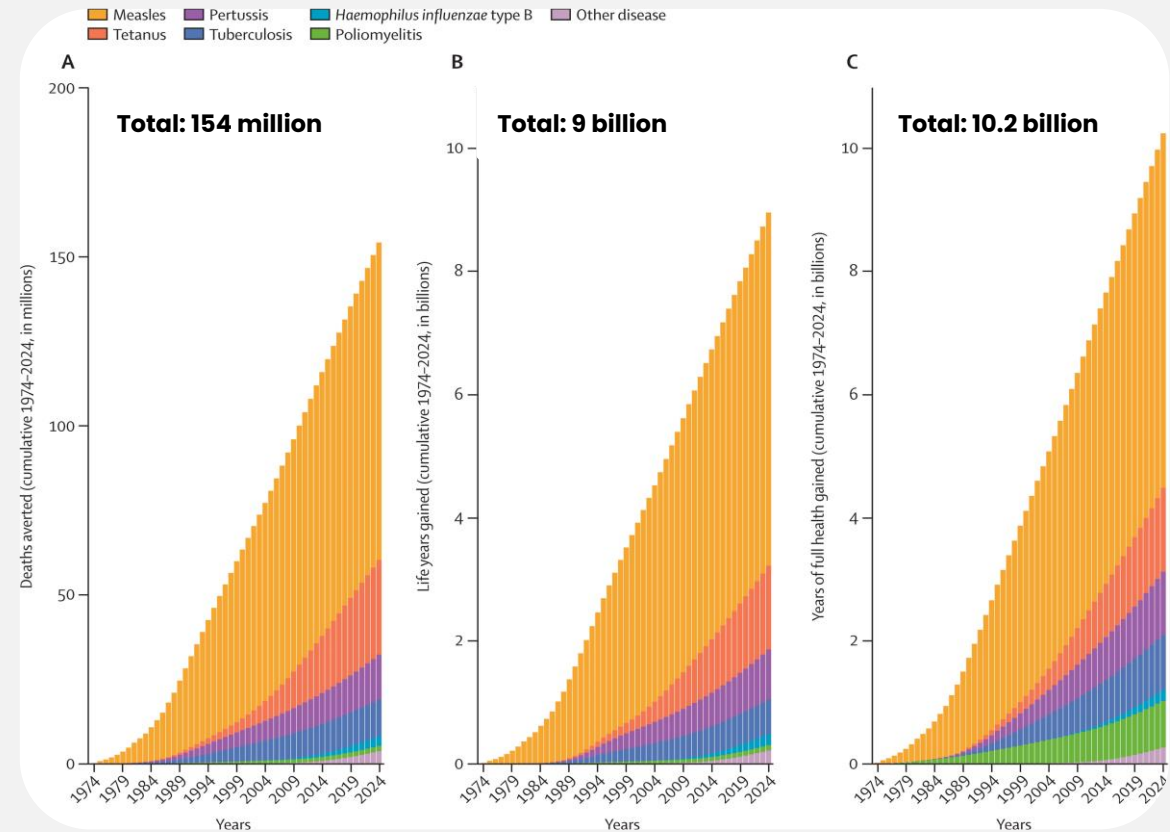
Benefits of childhood vaccination continue up to & beyond 50 years of age

Contribution of vaccination to improved survival and health: modelling 50 years of the Expanded Programme on Immunization

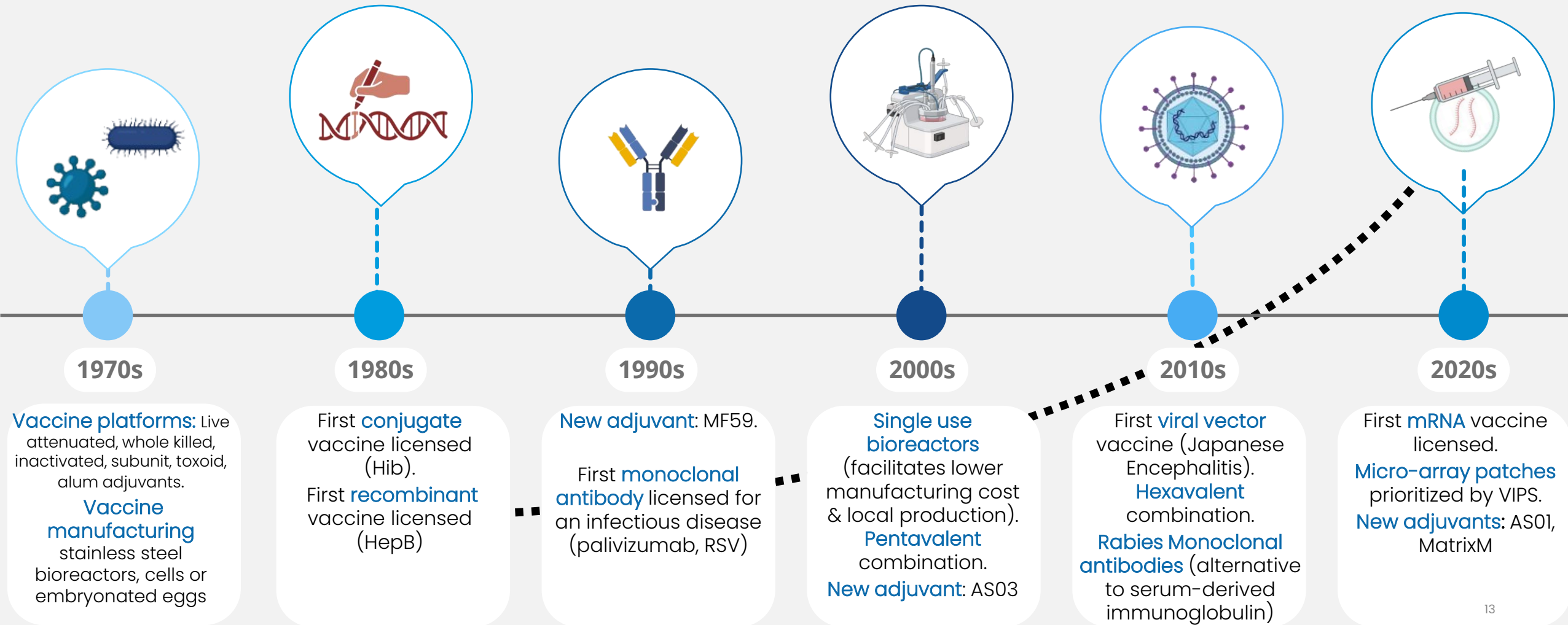
Andrew J Shattock, Helen C Johnson, So Yoon Sim, Austin Carter, Philipp Lambach, Raymond CW Hutubessy, Kimberly M Thompson, Kaman Badizadegan, Brian Lambert, Matthew J Ferrari, Mark Jit, Han Fu, Sheetal P Sila, Rachel A Hounsell, Richard G White, Jonathan F Mosser, Katy A M Gaythorpe, Caroline L Trotter, Ann Lindstrand, Katherine L O'Brien, Naor Bar-Zeev

- **Measles vaccination** accounts for **60% of the lives saved due to immunization**
- **40% of the reduction in infant deaths** globally is directly due to vaccination. **Over 50% in the African Region**
- **10.2 billion DALYs saved**

Deaths averted, years of life saved, and years of full health gained due to vaccination (Data are cumulative 1974–2024)



Last 50 years have stimulated innovation in technology: science milestones behind vaccines



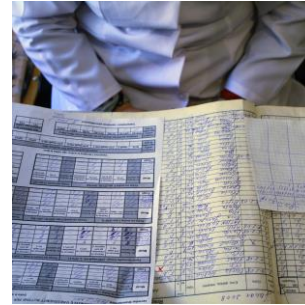
Game-changers in operational performance of EPI

Vaccines storage, transport & immunization safety



Vaccine storage

From kerosene to ice-lined & solar direct-drive refrigerators/freezers



Vaccine stock management

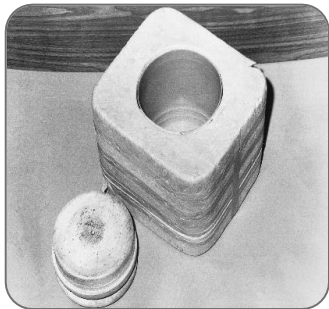
From paper-based to electronic to online systems



PERFORMANCE QUALITY SAFETY

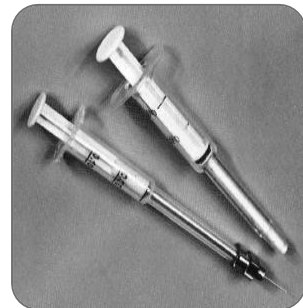


EVM
Setting a standard for the vaccine supply chain



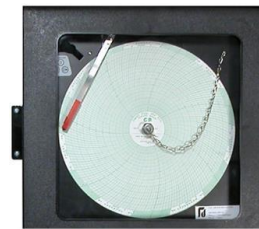
Vaccine transport

From cooler boxes to vaccine carriers/cold boxes with long holdover & freeze-prevention



Vaccine safety

From reusable syringes to auto-disable (AD) syringes



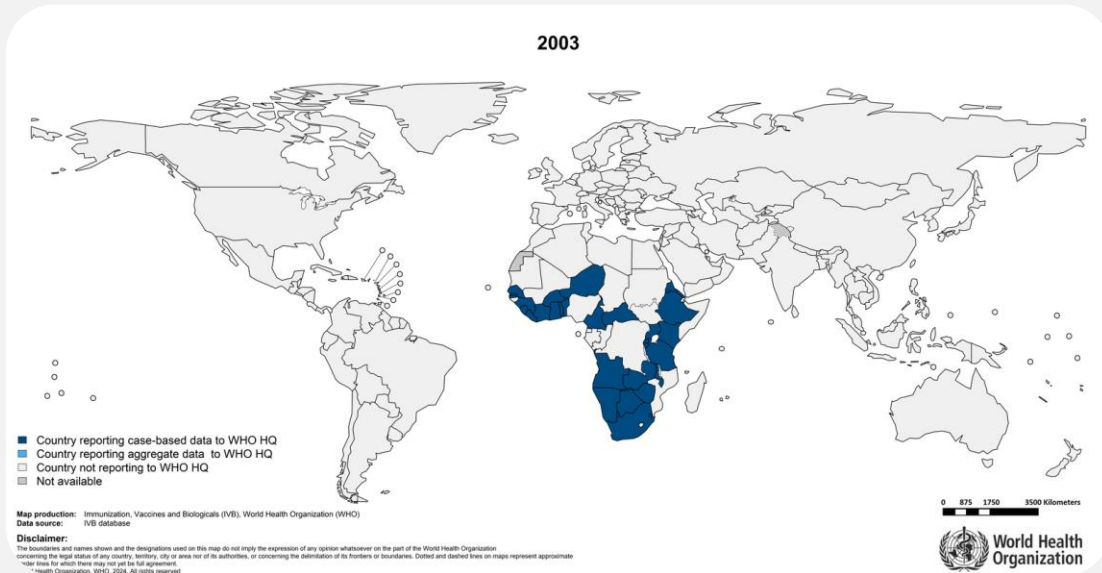
Vaccine temperature monitoring

From manual recording to Vaccine Vial Monitors (VVM), digital data-loggers, & remote systems

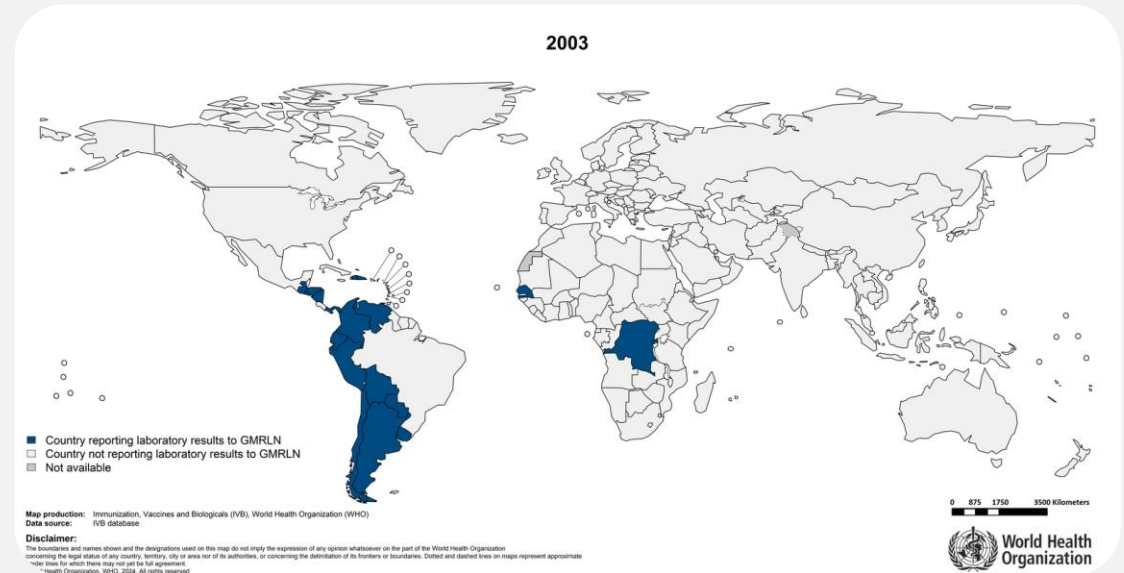
Fundamental public health capacities have been strengthened

VPD surveillance essential component of well-functioning immunization programme & strong health systems (2003 – 2023)

Countries reporting surveillance data to WHO HQ



Countries reporting laboratory results to Global Measles & Rubella Laboratory Network (GMRLN)



There are now nearly **737 laboratories**, in **164 countries**, accredited by WHO to undertake laboratory-based surveillance for measles & other vaccine-preventable epidemic-prone diseases

2019-2020

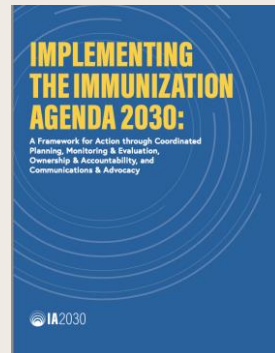
Co-development of the Strategy and Vision across partners



WHA 73 – Aug 2020
Member States endorse IA2030

2020-2021

Implementation planning, design of architecture



WHA 74 – May 2021
Member States endorse IA2030 Framework for Action

2021-2022

Activating operational levels and providing first global report



WHA 75 – May 2022
Member States receive first global report for IA2030

2022-2023

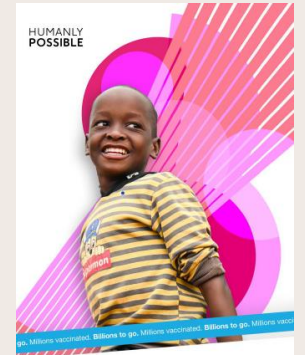
Intensification of immunization recovery: catch-up, restore and strengthen



WIW – April 2023
Launch of IA2030 “Big Catch-up”

2023-2024

Implementation of “Big Catch-up” and EPI@50 celebrations



WHA 77 – May 2024
Member States receive second global report for IA2030

Immunization Agenda 2030 (IA2030) set a unifying vision for the decade aligned with SDGs & with clear impact goals



Vision

A world where everyone, everywhere, at every age...



...fully benefits from vaccines...



...for good health and well-being



Impact Goals

Reduce mortality and morbidity from vaccine-preventable diseases for across the *life course*.

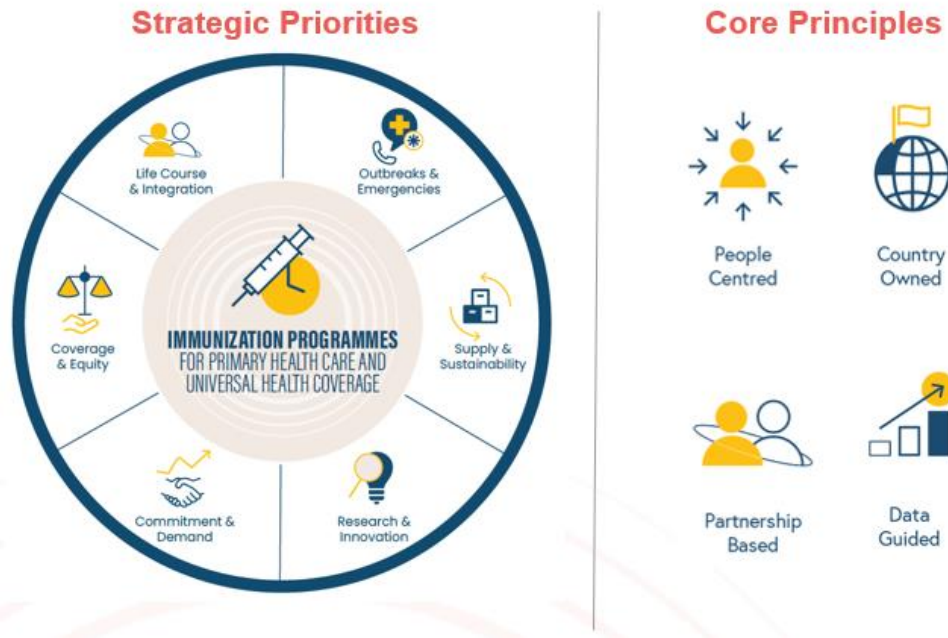
Leave no one behind, by increasing *equitable access* and use of new and existing vaccines.

Ensure good health and well-being for everyone by **strengthening immunization within primary health care** and contributing to *universal health coverage* and **sustainable development**.



IA2030 IS EPI'S GUIDING FRAMEWORK KEY TO REACHING GLOBAL HEALTH GOALS

Immunization Agenda 2030



GPW 14
2025-2028

Promote
health

Provide
health

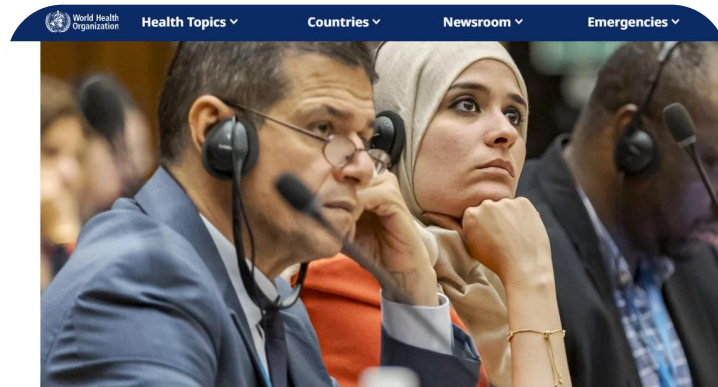
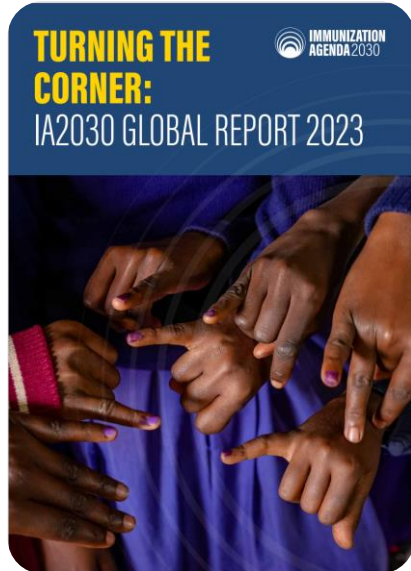
Protect
health

Sustainable
Development Goals –
Leaving no one behind



14 linked to vaccines/immunization

Member States Reaffirmed Commitment To IA3030 At WHA May 2024



Member States reaffirm commitment to immunization at seventy-seventh World Health Assembly

30 May 2024 | Departmental update | Reading time: 1 min (348 words)

[Member States reaffirm commitment to immunization at seventy-seventh World Health Assembly \(who.int\)](https://www.who.int)

More than 50 MS speakers:

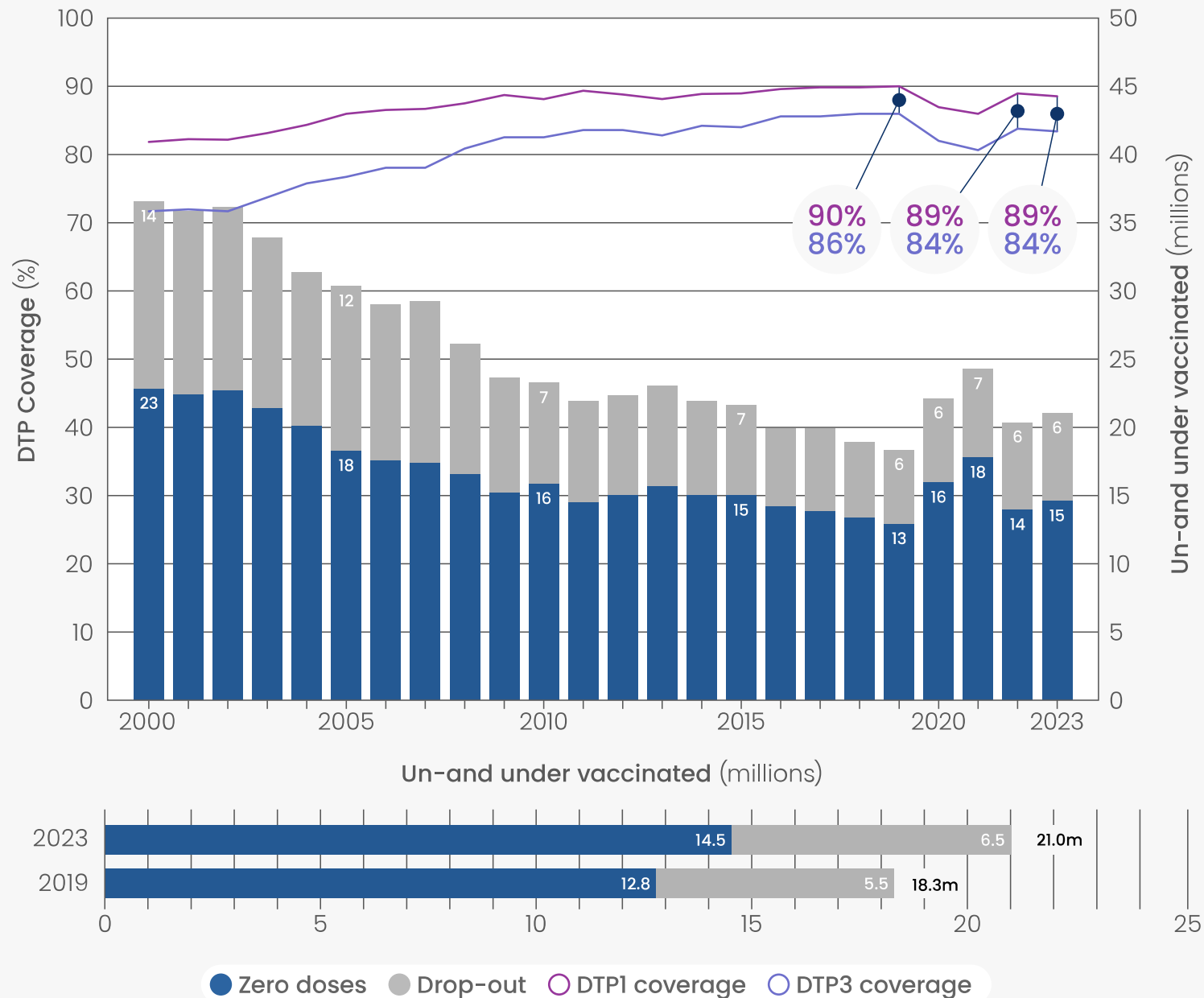
- Unwavering support for **Regional Action Plans and National Immunization Strategies**
- Concerns with **measles outbreaks** and the need to urgently close the immunity gaps.
- Highlighted the **'Big Catch-up'**, the introduction of new vaccines such as those for **malaria and HPV**.
- Called for the **integration of life-course vaccination within PHC to sustain immunization achievements**.
- Enhanced **community mobilization, political leadership, and domestic funding** aimed at strengthening surveillance and equitable delivery systems.
- Need for an **adequate health workforce**, enhanced integration of international funding, and continued investments in **local vaccine manufacturing** and harmonized **regulation for supply security**
- Urgent need to fast-track the implementation and adoption of new **tuberculosis vaccines**.

DTP immunization coverage is flat compared to 2022, and the number of “zero-dose” children is still higher than in 2019, before the pandemic

There was no meaningful change in coverage compared to 2022. Performance was not yet restored to 2019 levels – the baseline value for the Immunization Agenda 2030.

The number of completely unvaccinated children (“zero-dose”) is slightly up from last year (by 600 thousand from 13.9m to 14.5m) and is still 1.7 m higher than in 2019.

Some children also “drop out”, i.e. receive a first but not a third protective dose of DTP. The total number of un- and under-immunised children stands at 21m in 2023, 2.7m above the baseline value.



Zero-dose children and Zero/missed communities

Zero-dose children

- Children that have not received any routine vaccines
- Indicator for monitoring at global/national level: lack of DTPI

Zero-dose communities

- Communities with high proportion of zero-dose children
- Can be based on geographical or socio-economic attributes
- Similar to missed communities, marginalized communities, or neglected populations



Equity

Zero-dose children in most marginalized communities in different settings:
Urban, Remote Rural, Conflict



Primary Healthcare

Zero-dose communities often have no regular health services

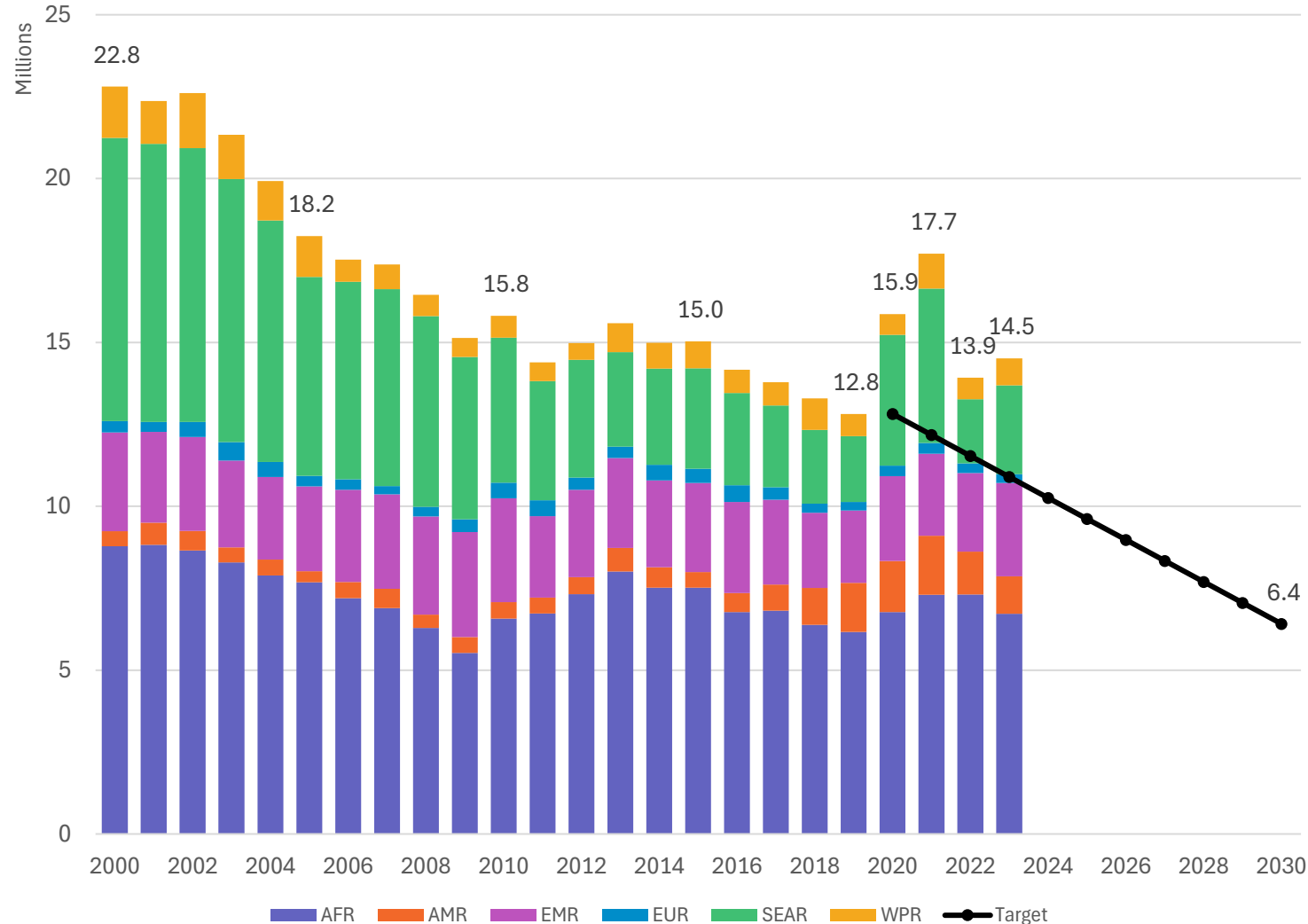


Health Security

Zero-dose children live in communities most vulnerable to outbreaks

IG2.1: Zero Dose Children (infants <12mth no DTPI)

- Globally, number of ZDC has not returned to baseline and is off track to achieve the 2030 target. 14.5M ZD in 2023
 - Baseline was 12.8M
 - Pandemic peak in 2021 was 17.7M
 - 2022 was 13.9M
- Regions
 - AFR and AMR improving but not fully recovered.
 - EMR worse, particularly in countries affected by conflict
 - SEAR increase in ZDC cw 2022, though this may be artefact of catch-up activity.
- Different approaches will be needed to address the heterogeneous challenges faced by countries to reach 2030 targets.



10 countries account for 59% of "zero dose children*". 4 of these are also in the list of 10 countries with lowest DTP1 coverage.

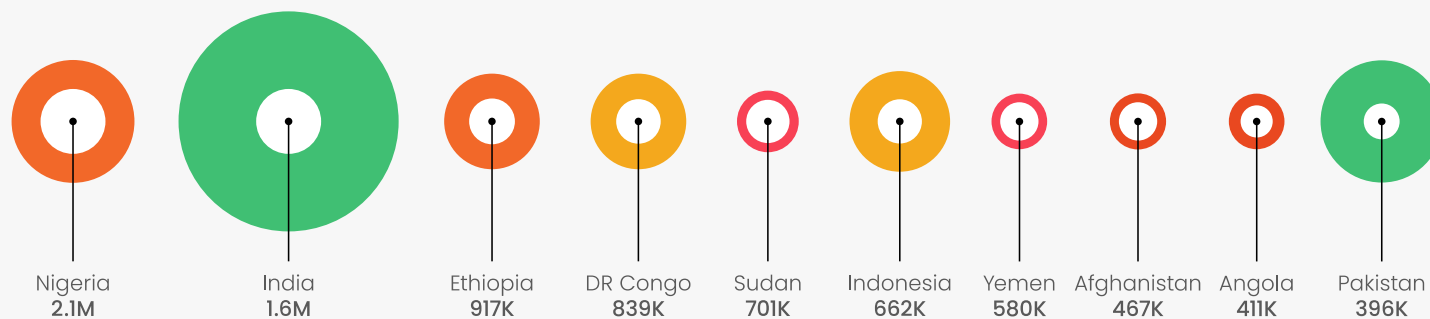
The countries with most zero dose children is a mix of those with large birth cohorts, weak health systems, or both. New in this list in 2023 are countries afflicted by conflict, like Sudan, Yemen, and Afghanistan.

Additionally, some smaller countries have even lower coverage.

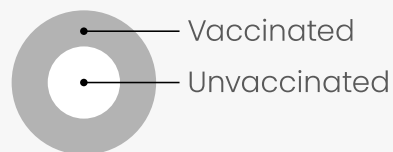
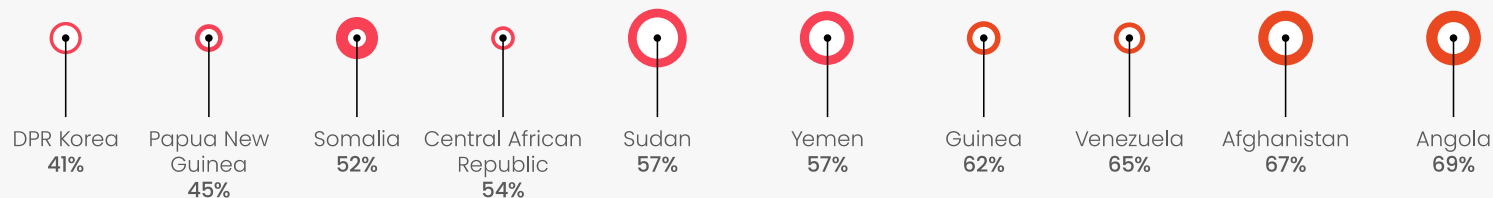
** Zero dose Children are those that were consistently missed and did not receive any vaccine in 2023. Operationally, their number is estimated through the number of children who missed DTP1*



No DTP1 (zero dose)



Countries with lowest DTP1 coverage



Coverage according to legend, circles sized to numbers of vaccinated and unvaccinated children.

55% of unvaccinated children live in 31 countries with fragile, conflict, and vulnerable (FCV) settings, while these countries only account for 28% of the global birth cohort. **Conflict settings are increasing, with severe consequences for essential health programmes**



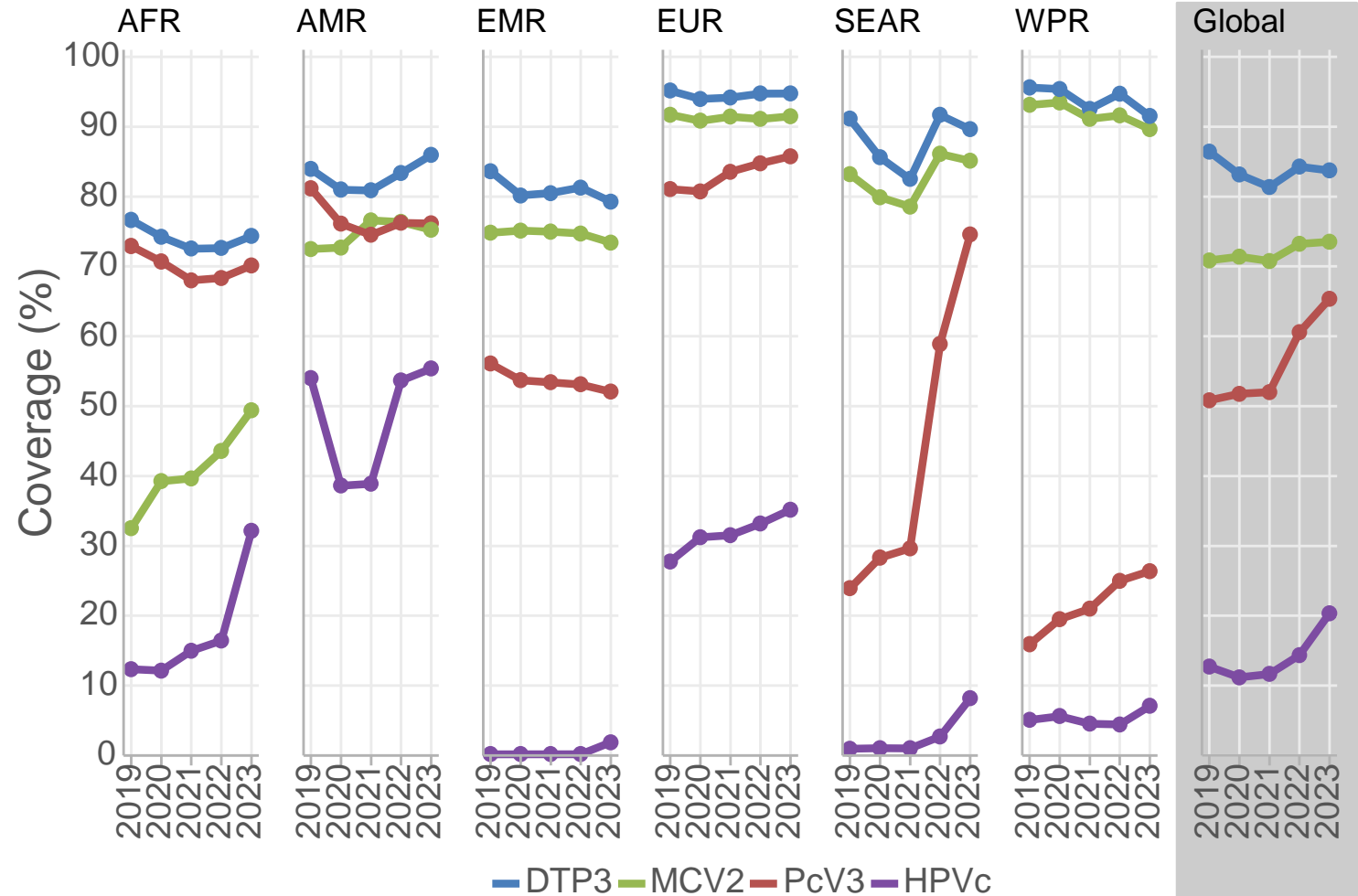
Darfur Region, Sudan (May 2023)

- Destruction, looting of health facilities including EPI assets (cold chain, vehicles, vaccination room)
- Refrigerators looted and vaccines destroyed/thrown away
- Vaccine stock out (MCV, Penta etc.) at health facility level and state level



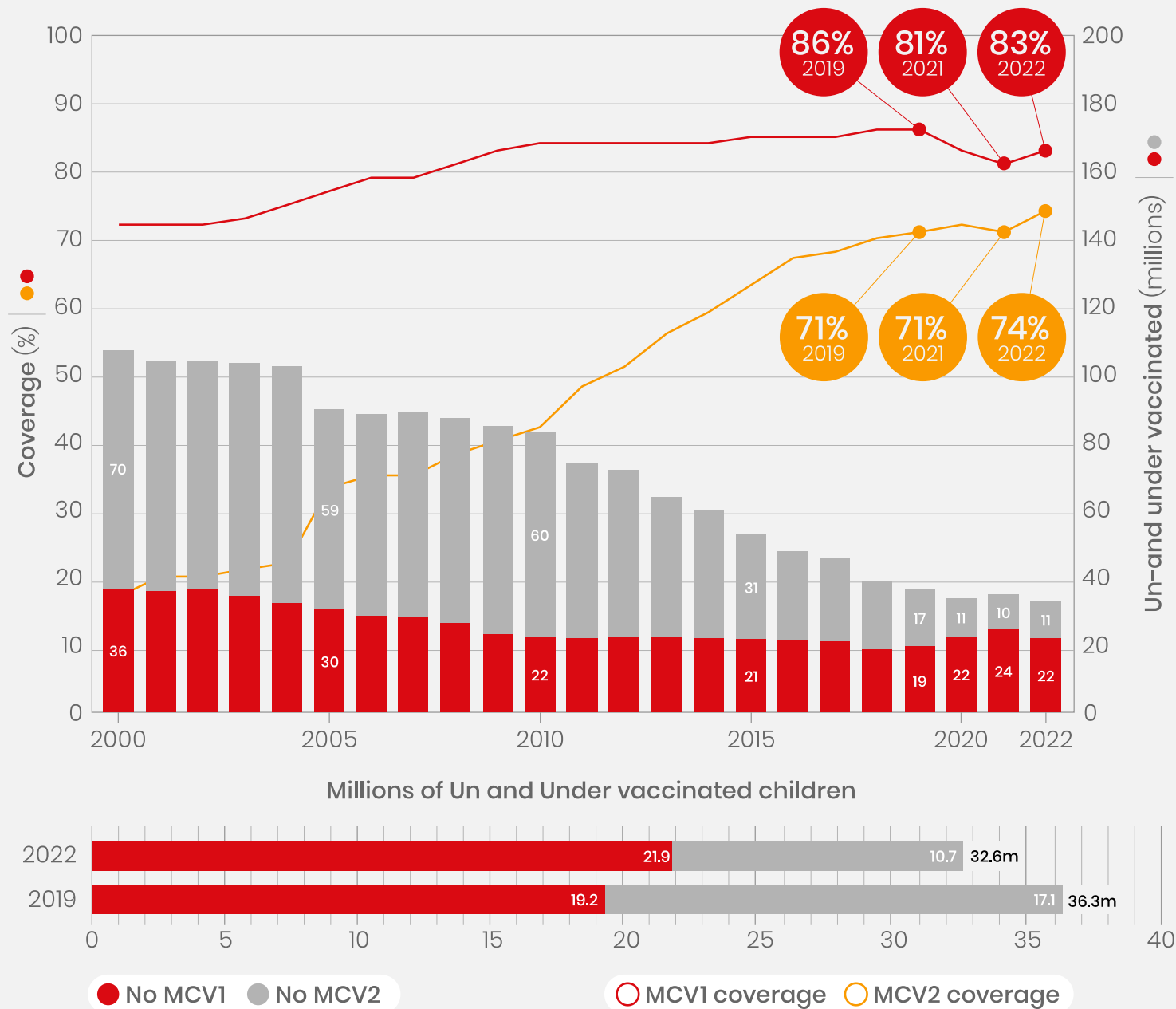
IG3.1: Lifecourse

- **DTP3 is stagnating below 2019 levels**
- **PCV, MCV2 and HPVc** increasing because of new introductions and programmatic improvement
- **HPV** impressive improvements in AFR and EUR, and solid recovery in AMR. EMR, SEAR and WPR remain very low.
- **PCV** roll-out in India and Indonesia.



Measles containing vaccine (MCV) coverage shows less recovery than DTP vaccination

Measles, because of its high transmissibility, acts as a “canary in the coalmine”, quickly exposing any immunity gaps in the population. The coverage of measles containing vaccine is thus often used as a leading tracer for protection.



Source: WUENIC 2022

Unprecedented VPD outbreaks: Resilient, far-reaching, community trusted immunization programmes are key for global health security



Measles

- Fill immunity gaps urgently
- Faster outbreak response

Polio

- IPV1 coverage
- Shut down outbreaks of WPV and cVDPV

Cholera

- Managing doses as manufacturers increase supply

Diphtheria

- Fill immunity gaps urgently
- Enhance partner coordination

Yellow fever

- Rapid lab identification
- Finish RI vaccine intros

Three key pillars of the "Big Catch-Up (BCU)" aim to help get back on-track towards IA2030 targets



1 Catch-up missed children (past)

An accumulated ~85.7 M children who missed vaccination (zero-dose and under vaccinated), some of which was due to the pandemic

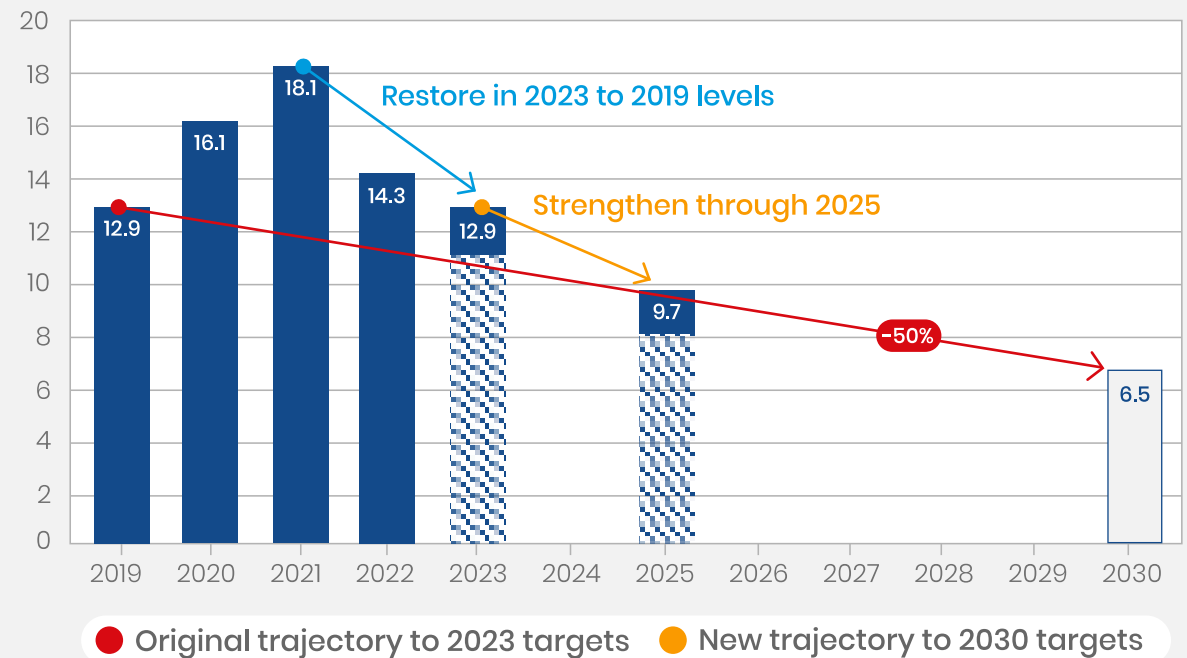
2 Restore immunization programmes (current)

Reach 14.3 M zero-dose children (ZDC)

3 Strengthen immunization programmes

Strengthen immunization systems within PHC, to improve programme resilience & resume the trajectory of the IA2030 goals

Trajectory to IA2030 ZDC target (number of ZDC in millions)

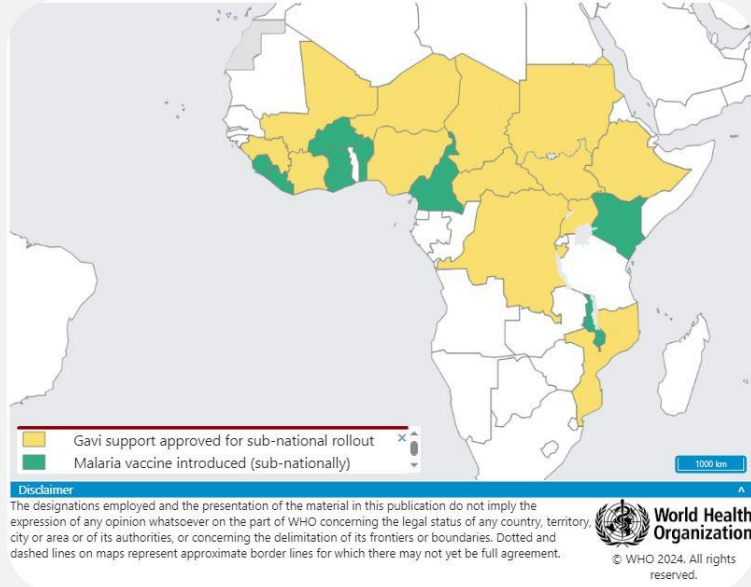


Gavi time-limited additional resources (2024-25) for BCU (\$290Mn)
Need for Regional and Country advocacy, planning, implementation, & monitoring support

Unfinished high-priority agendas where big-gains still on table

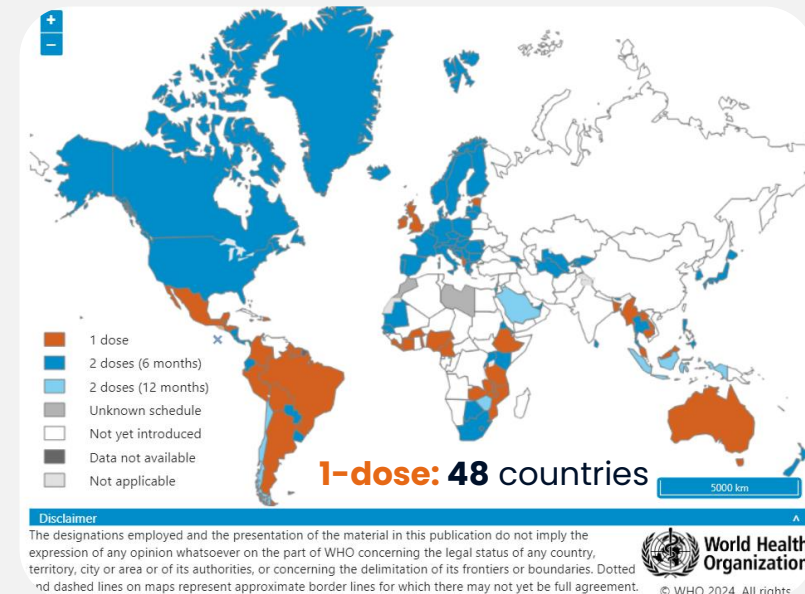
Malaria: 8 countries introduced & 14+ additional introductions expected in 2024 & 2025

8 countries (Malawi, Ghana, Kenya, Cameroon, Burkina Faso, Sierra Leone, Benin and Liberia) introduced malaria vaccine sub-nationally



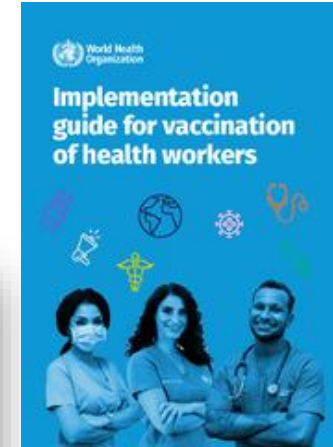
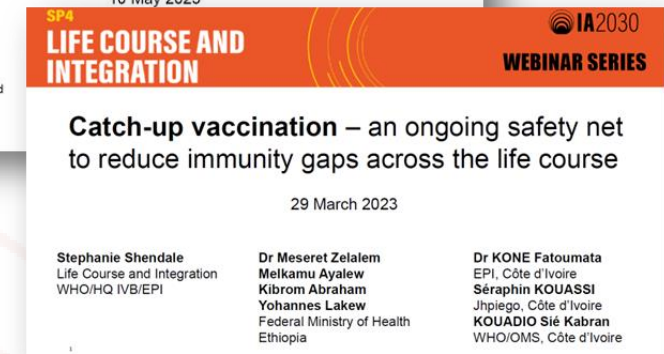
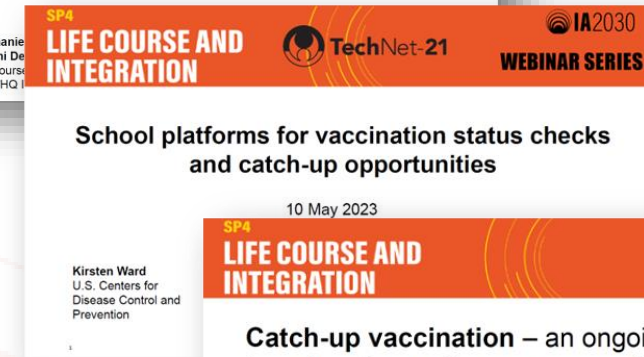
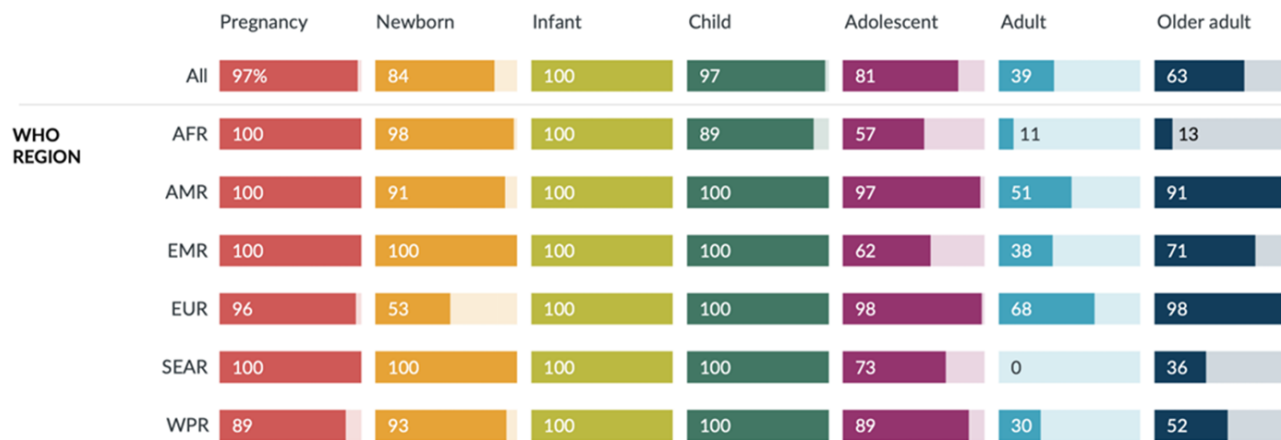
HPV: 27 % of adolescent girls are vaccinated

142 countries introduced HPV vaccine

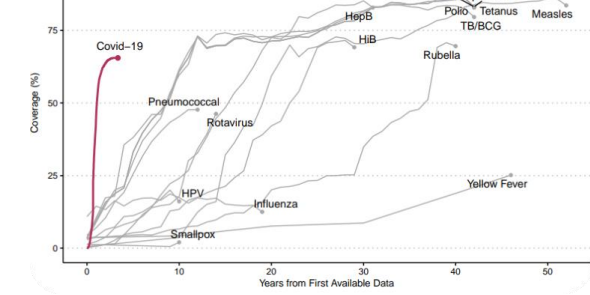


IA2030: Increasing awareness on life course and integration

In 2022, more than 80% of countries reported universal vaccination recommendations for pregnancy and the first three life course stages, **but less than 50% for adults**



COVID-19 pandemic has changed adult vaccination landscape, possibly permanently



- ~99% of countries worldwide introduced in 1 year
- 13.6 billion doses administered globally¹: 67% pop coverage, 89% of HCW and 84% of older persons received a complete primary series!
- At least 19.8 million deaths prevented by vaccination during 1st year alone (mainly adults)²



Changes in policies, attitudes & systems

(scoping review of 21 articles on effects of COVID-19 on adult vaccination programmes³):



New vaccination points for adults



Expanded trained health workforce



Social media platforms













































































Real-time coverage & safety information



Technological innovation

Life course immunization is linked to integration

Immunization as a pathway to provide other health services to all age groups

Noncommunicable disease screening								
Health promotion Health counselling								
WASH Hygiene kit distribution								
HIV Services								
Reproductive & Maternal health services Family planning services								
Neglected tropical diseases Deworming								
Malaria Distribution LLINs / IPTi/ SMC								
Nutrition Growing monitoring / nutrition counselling / Vita A								
Immunization								
	 Pregnant women	 Newborn (<24 hours)	 Infant (<1 year)	 2 nd year of life	 Child 2-9 yrs	 Adolescent 9-19 yrs	 Adult 20-64 yrs	 Older person (+65 yrs)

Immunization And PHC: Why Does This Matter?



Immunization: a critical component of PHC, offering clear entry points for **multisectoral** efforts & community involvement
Given the strengths of immunization programs, opportunities have to be seized to **benefit other programs within PHC**



Strong PHC programs are necessary to ensure uptake of vaccines across the life-course. This is particularly relevant for vaccines administered outside of childhood, such as HPV vaccine.

Opportunities:

- **Global move towards integration of vertical programs** (and their funding e.g. from Gavi) with **PHC** → recognition that only with strong PHC systems targets on immunization outcomes can be reached & sustained
- EPI managers are **champions for PHC**, leveraging synergies between immunization system strengthening & PHC; examples:
 - Use the **Zero Dose Child** as proxi-marker for children and communities that are deprived of other PHC services
 - Supporting multidisciplinary teams at facility level through **health worker** performance improvement approaches e.g. quality improvement collaboratives, mentoring, peer-to-peer learning
 - Establishing e-**HRH** HIS (observatory) to identify underserved areas, deploy and retain health workers including vaccinators
 - Integrate other than vaccination into 'PHC-services' **microplanning holistically**
 - Use vaccination **outreach activities** to deliver other than vaccination services, e.g. family planning, antenatal care, screening for nutritional status & NCD key risk factors (hypertension and diabetes)
 - **Use of solarized** health facilities beyond cold chain
 - Extend multisectoral efforts to ensure availability of **water and sanitation facilities** at health center level

For more details: <https://extranet.who.int/uhcpartnership/featured/primary-health-care-global-health-initiatives-toolbox>

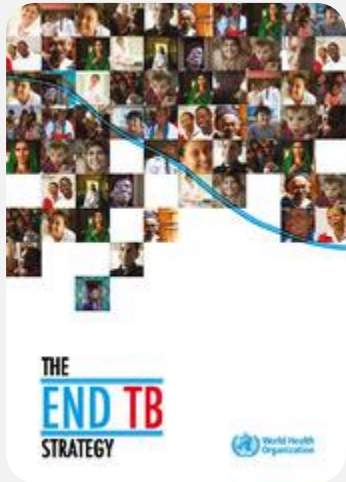
The state of immunization

1. From 1974 to now
- 2. Looking forward**



Vaccines in the pipeline require strong adolescent/ adult immunization platforms

New tuberculosis vaccines likely essential to end the global TB epidemic

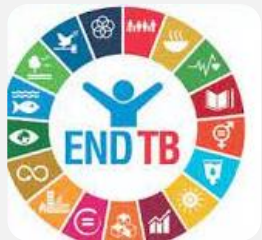


Adults and adolescents, in whom 90% of disease occurs, **are a major focus** in reducing transmission to all ages

TB vaccine pipeline has **several candidates in late-stage clinical trials**; some may be licensed in **the next 4 years**

TB vaccines for adults & adolescents are likely to be included in **Gavi's Vaccine Investment Strategy under 6.0**

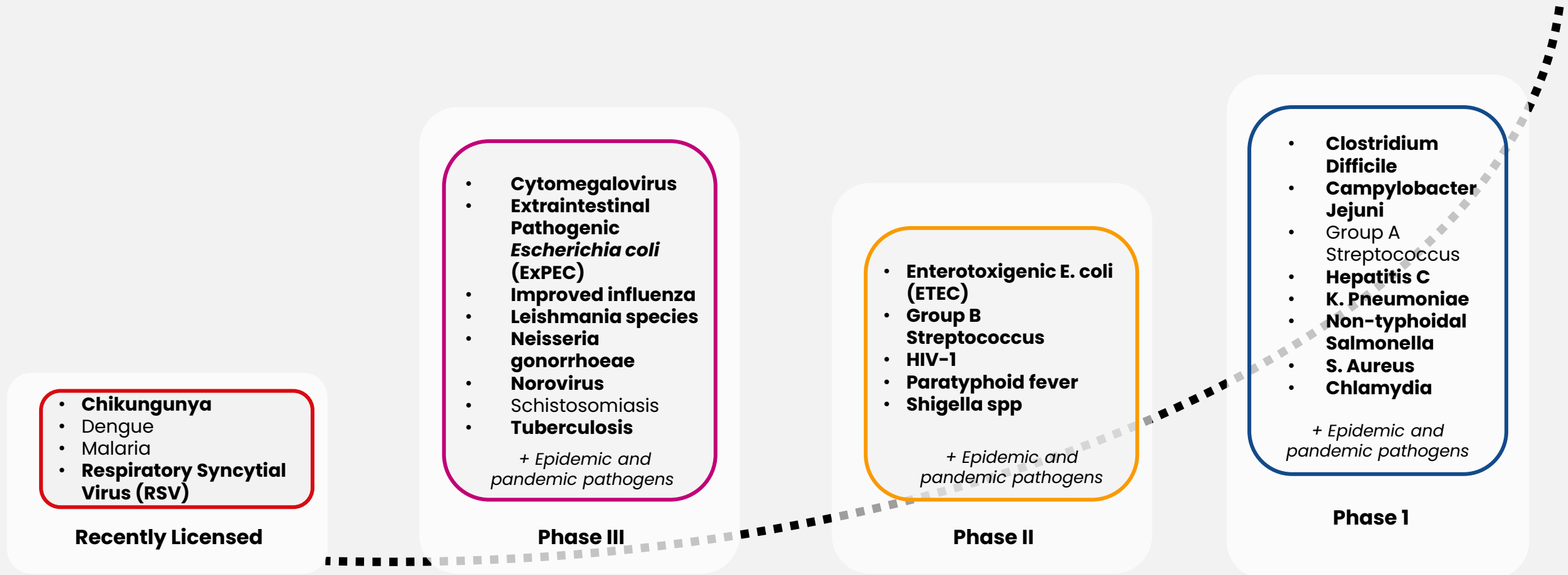
Planning for success requires building awareness, demand, acceptability & service delivery platforms for **adolescents & adults**



Established in September 2023

IVB, GTB & Science Division

.... and the adult vaccine portfolio is likely to expand in the short and medium term



Near term: New vaccine & immunization related innovations



Respiratory Syncytial Virus & Group B strep vaccine for pregnant women



New, improved TB vaccines against disease



New combination vaccines, particularly for enteric & diarrheal disease. And slow release vaccines,



Microarray patches to deliver vaccines esp. for hard to reach populations



New Intranasal vaccines for self administration & emergency response

Context | accelerating SDGs in an even more **complex environment**



Climate change & environ. degradation



Human migration & displacement



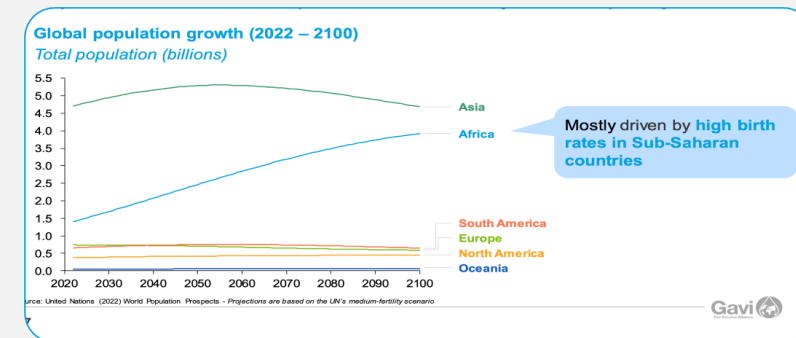
Zoonotic spillover events



Geopolitical change



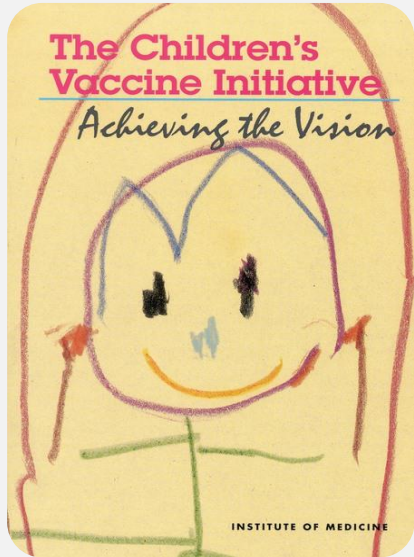
Evolving science & technology



Demographic shifts

Blue sky vaccine-immunization innovations next 50 yrs

Aspiration
single dose, administered near birth, combined in novel ways, heat stable, effective against additional diseases, & affordable



- Reduce mortality & morbidity from vaccine-preventable diseases for all across the life course
- Leave no one behind, by increasing equitable access & use of new & existing vaccines
- Ensure good health & well-being for everyone by strengthening immunization within primary health care & contributing to universal health coverage & sustainable development.

Vaccine products developments

- Needle-free/self administered vaccines
- Thermostable
- AI to customize messages & tackle vaccine hesitancy
- Personalized (highly targeted vaccines)
- Curative vaccines
- Single dose
- AI to predict population risk, impact on AMR & need for vaccination
- Combination vaccines
- Sustained release combination vaccines

System developments

- Rapid diagnostics at point of use
- Decentralised/localized vaccine manufacturing
- Normalize life-course
- AI to speed up vaccine development to predict pathogen evolution & optimize vaccine design for rapid epidemic/pandemic response
- Develop new manufacturing platforms & adjuvants & acceptability to ensure demand
- Digital health records/universal health records
- People-centred approach
- Lower waste management footprint



1990

2030

"Must do" to increase acceptability & reach

Aspirational

System change

Future



vaccines

an Open Access Journal by MDPI



Special Issue on 50 Years of Immunization—Steps Forward

Academic Editor

Dr. Imran Raza Mirza
UNICEF, New York, USA

Dr. Ephrem Tekle Lemango
UNICEF, New York, USA

Dr. Ann Lindstrand
WHO, Geneva, Switzerland

SI information: The Expanded Program on Immunization (EPI) was launched to ensure that all children worldwide could access vaccines. The program aimed to provide vaccines for six diseases—diphtheria, pertussis, tetanus, poliomyelitis, measles, and tuberculosis—to every child globally by 1990. Today, every country has a national immunization program.

In 2024, it will be 50 years since the inception of EPI; therefore, we invite you to submit your original manuscripts, reviews, position papers, and case studies on vaccine-related topics such as **program implementation, research, and vaccination-related policies**. We also welcome submissions exploring **vaccination in diverse and marginalized communities and communities in humanitarian crises**. We also welcome submissions on **lessons learned from past and present health crises and their implications for pandemic preparedness in the future**. We look forward to receiving your contributions.

Submission Deadline: 31 October 2024



Vaccines Editorial Office
St. Alban-Anlage 66
4052, Basel, Switzerland

✉ vaccines@mdpi.com
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HUMANLY POSSIBLE

*to protect the adult in every child
and the future in every adult*



Humanly Possible toolkit: Logo, visuals, videos, [social media assets](#) for use





International
Vaccine
Institute



World Health
Organization



Thank you!



EXTRA SLIDES

Life course, catch-up, BeSD and quality immunization services resources



WHO, 2018. [Working together: An integration resource guide for planning and strengthening immunization services](#)



WHO, 2022. [Considerations for integrating COVID-19 vaccination into immunization programmes and primary health care for 2022 and beyond](#)



PAHO, 2023. [Building better immunity: a life course approach to healthy longevity \(technical guidance\)](#)



WHO, 2022, [Human-centred design for tailoring immunization programmes](#)



WHO, 2024. [Immunization decision-making resource catalogue](#)



WHO, 2021. [Leave no one behind: guidance for planning and implementing catch-up vaccination](#)



WHO, 2022 [Behavioural & Social drivers of vaccination: tools & practical guidance for achieving high uptake](#)



WHO, 2022. [Quality immunization services. A planning guide](#)

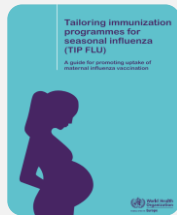


WHO, 2017 [Reducing Missed Opportunities for Vaccination \(MOV\)](#)

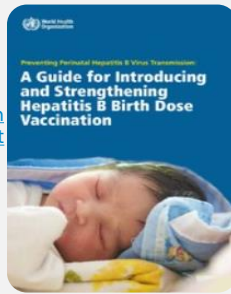
WHO guidance beyond infancy vaccination for life course immunization



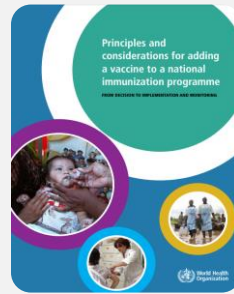
[How to implement seasonal influenza vaccination of pregnant women](#)



[Tailoring immunization programmes for seasonal influenza \(TIP-FLU\)](#)



[Preventing Perinatal Hepatitis B Virus Transmission: A Guide for Introducing Hepatitis B Birth Dose Vaccination](#)



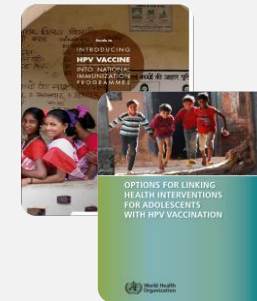
[WHO Guidance on New Vaccine Introduction](#)



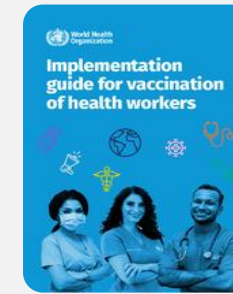
[Establishing and strengthening immunization in the second year of life: practices for vaccination beyond infancy](#)



[Protecting all against tetanus](#)



[Guide to introducing HPV vaccine](#)
[Options for linking health interventions for adolescents with HPV vaccination](#)



[Implementation guide for vaccination of health workers](#)



[Vaccinating older adults against COVID-19](#)



Pregnant women



Newborn (<24 hours)



Infant (<1 year)



2nd year of life



Child 2-9 years



Adolescent 9-19 years



Adult 20-64 years



Older person (+65 years)