JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH | IVAC International Vaccine Access Center

CELEBRATING VACCINE VICTORIES

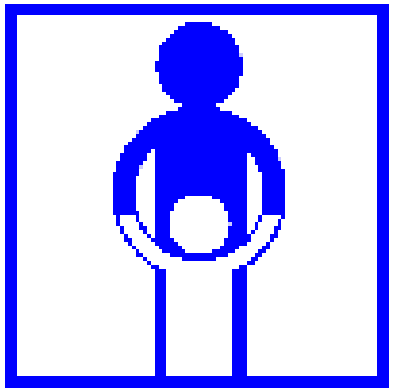
EPI AT 50

JOIN THE INTERNATIONAL VACCINE ACCESS CENTER (IVAC) FOR A WEBINAR WITH AN EXPERT PANEL DISCUSSING THE PAST, PRESENT AND FUTURE OF THE ESSENTIAL PROGRAMME ON IMMUNIZATION (EPI). A MODERATED Q&A SESSION WILL FOLLOW.

25 April 2024
11am – 12pm ET

REGISTER NOW! bit.ly/3PJMnVe

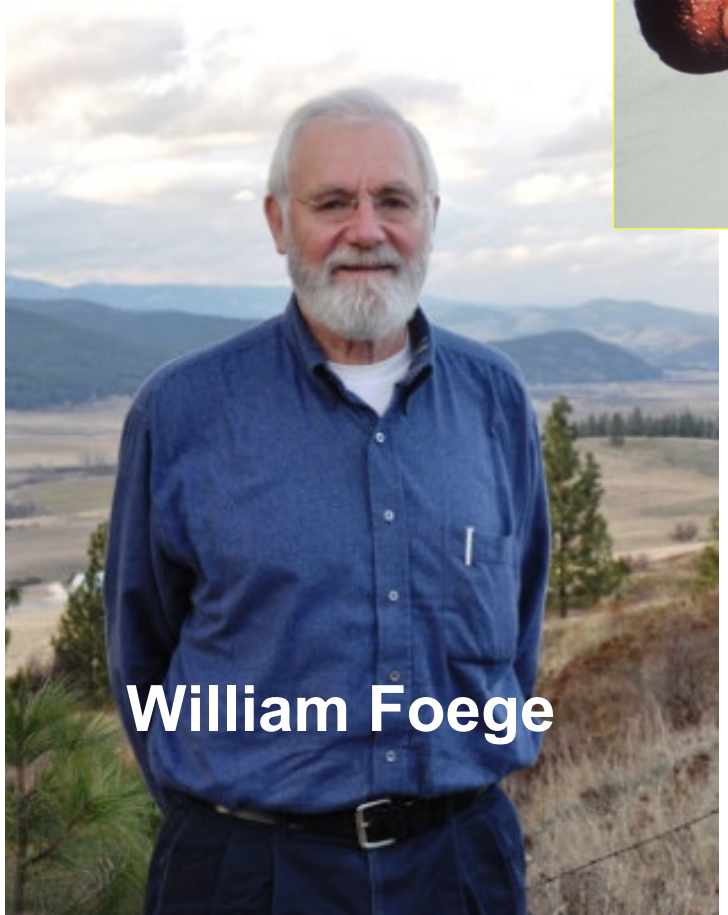
A Brief History of The Expanded Program on Immunization(EPI)*

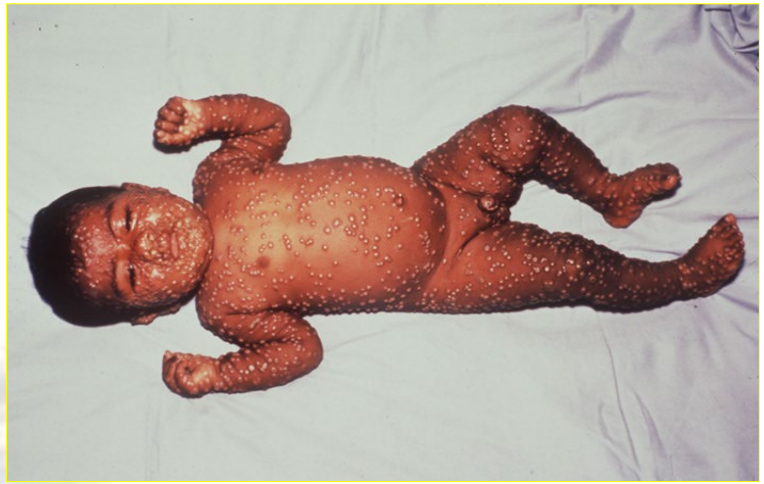


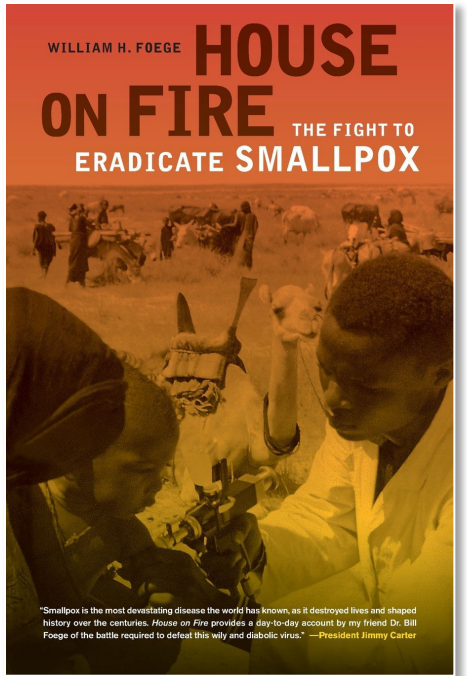
Neal A. Halsey

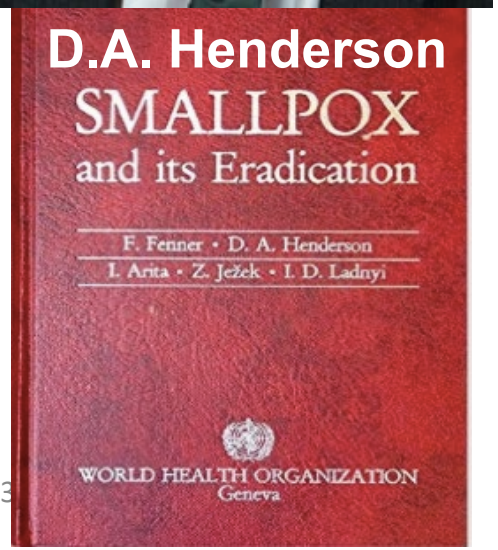
* 2024: Essential Programme on Immunization

EPI was Established Because of the Successful Smallpox Eradication Program



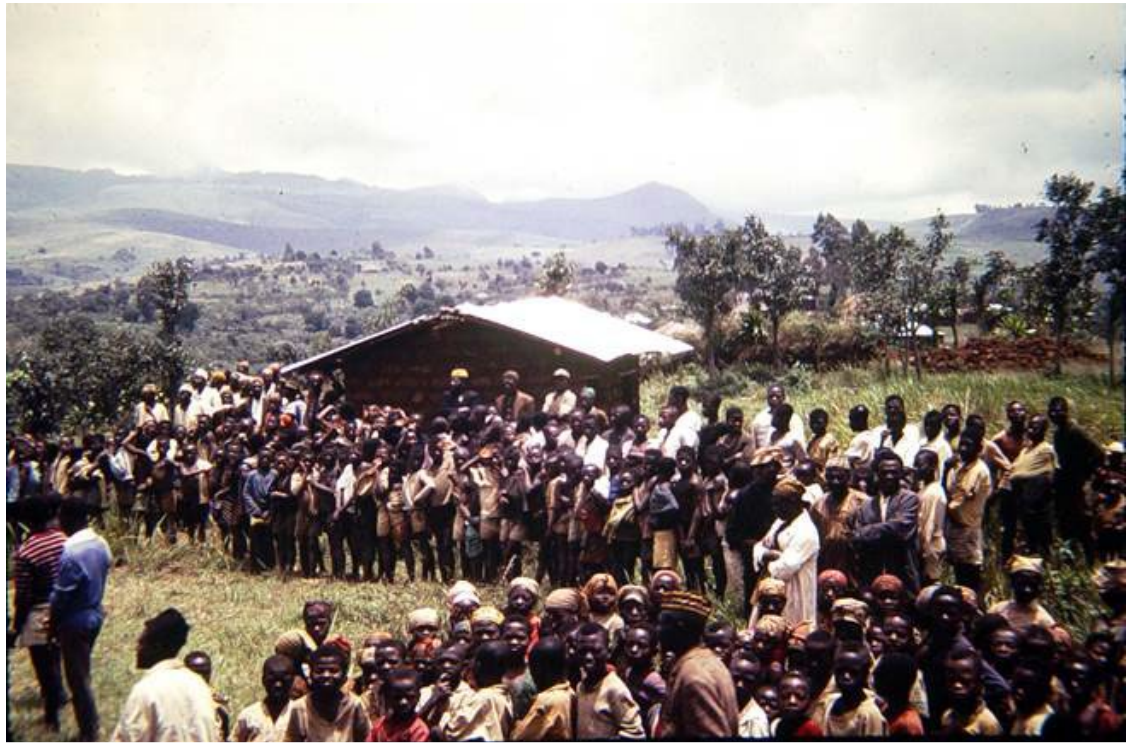






Measles and Smallpox Eradication

Ghana 1970s



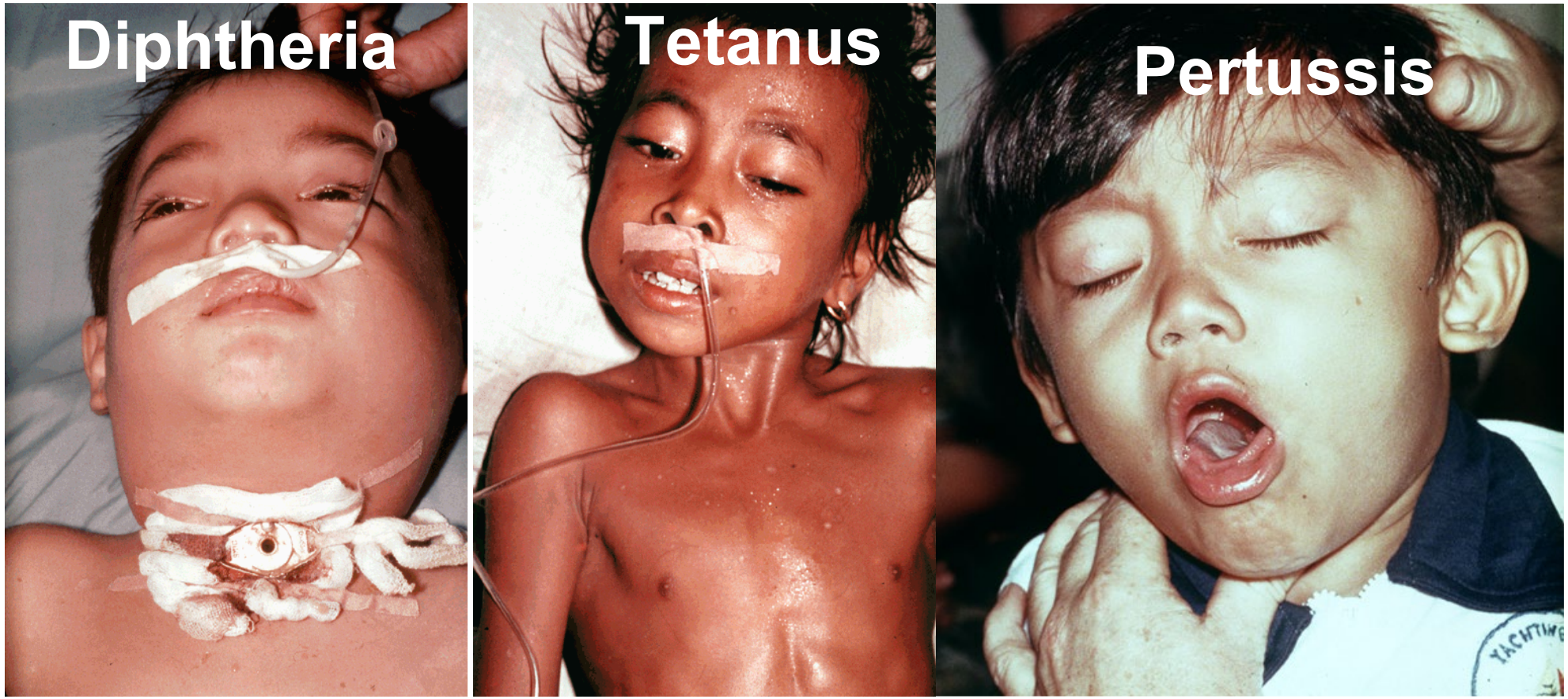
AL Rosenbloom. Used with permission.

Ralph(Rafe) Henderson
First Director of EPI

- Established:
  - Global management
  - Standardized assessments of coverage
  - Recommended schedule
  - Programs in all countries

Immunizing the children of the world: progress and prospects.
Bull World Health Organ. 1988; 66(5): 535–543.

DTP is the Backbone



EPI Founded in 1974

- WHO initially supported programs and personnel
- Estimated coverage DTP3 by 12 months
  - 1974: no good measure(~5%?)
  - 1980 ~20%
  - 1984 ~41%
  - 1989 ~75%

Henderson RH et al. Bull World Health Organ. 1988;66(5):535-43

EPI Immunization Schedule
Established 1984

Birth	BCG, OPV (Endemic countries)
6 wks	DTP, OPV
10 wks	DTP, OPV
14 wks	DTP, OPV
9 months	Measles
	(Yellow Fever)
Women of Childbearing age	Tetanus Toxoid

Halsey NA, Galazka A. The efficacy of DPT and oral poliomyelitis immunization schedules initiated from birth to 12 weeks of age. Bull Wld Hlth Org; 63:1151-69, 1985.

Logistical issues in establishing EPI Clinics

Large Scale Transportation and Storage Issues Overcome

www.msf.ca

WHO EPI

Some Areas are Hard to Reach
Himalayan Region Pakistan

Aamir Khan

Adding Vaccines to EPI Programs

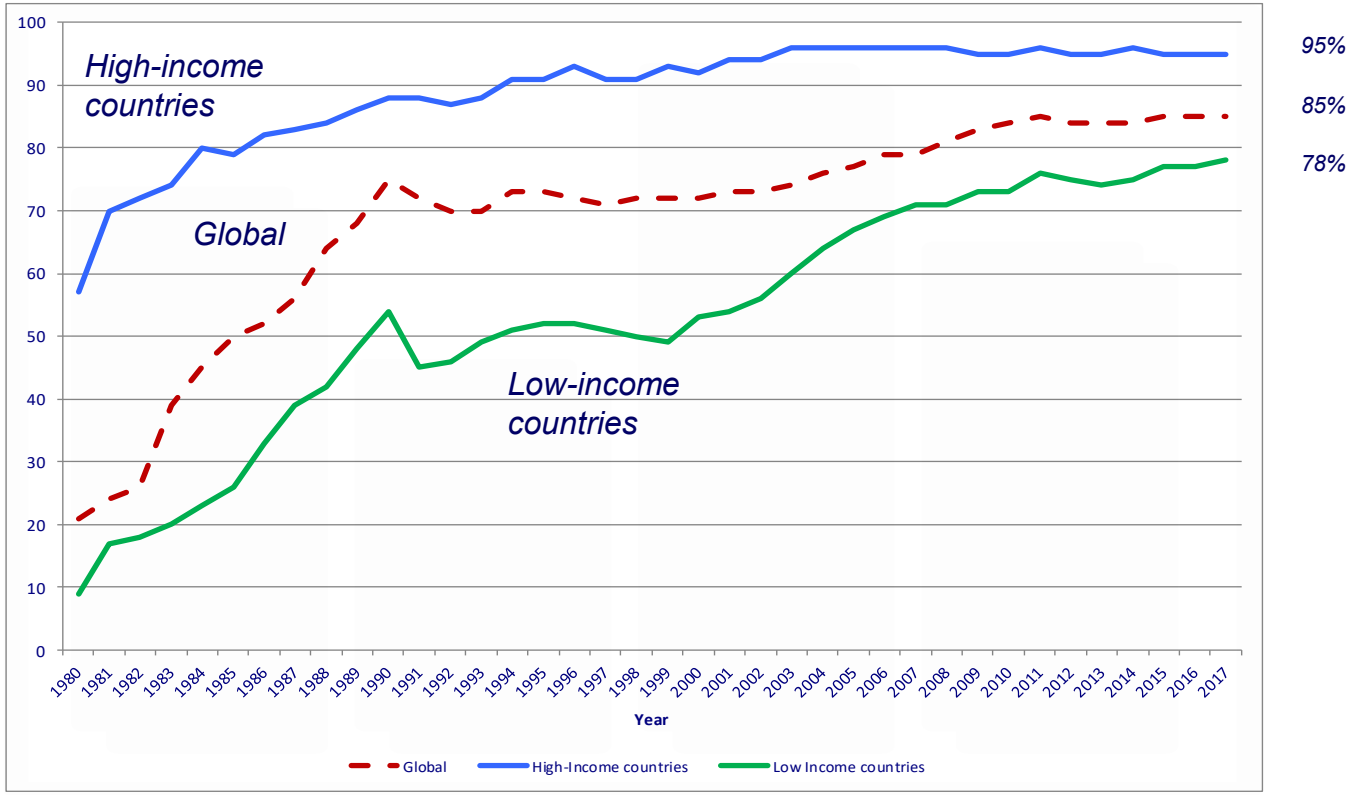
1976

1. TB (BCG)
2. Diphtheria
3. Tetanus
4. Pertussis
5. Polio - OPV
6. Measles
7. (Yellow Fever)

2024

1. Hepatitis B
2. *H. influenzae* type b(Hib)
3. Pneumococcal
4. Influenza-pregnant women
5. Polio-IPV
6. Rotavirus
7. HPV
8. Pneumcoccal
9. (Rubella,Mumps)
10. (Meningococcal)
11. COVID-19

Coverage with DTP3 containing vaccines, by country income levels, 1980-2017



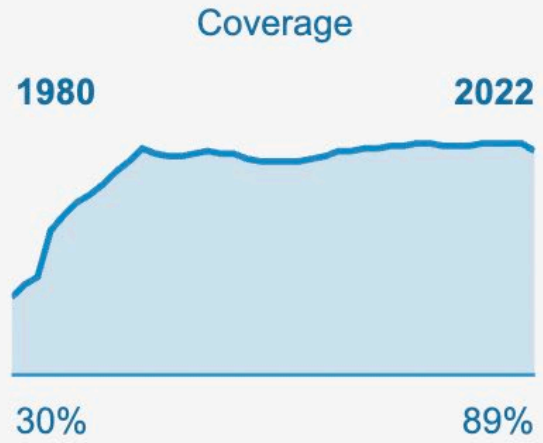
unicef World Health Organization

Gavi
The Vaccine Alliance

Global Vaccination coverage trendline

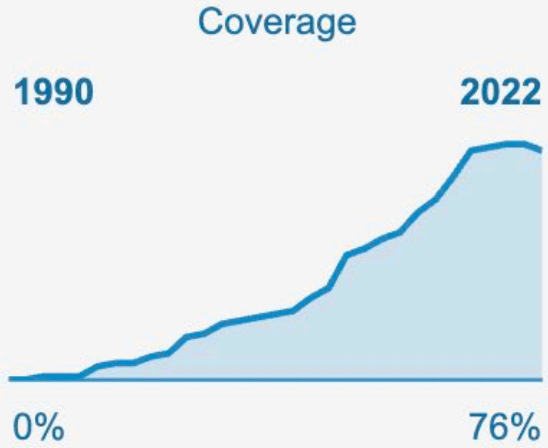
DTP-containing vaccine, 1st dose

89%



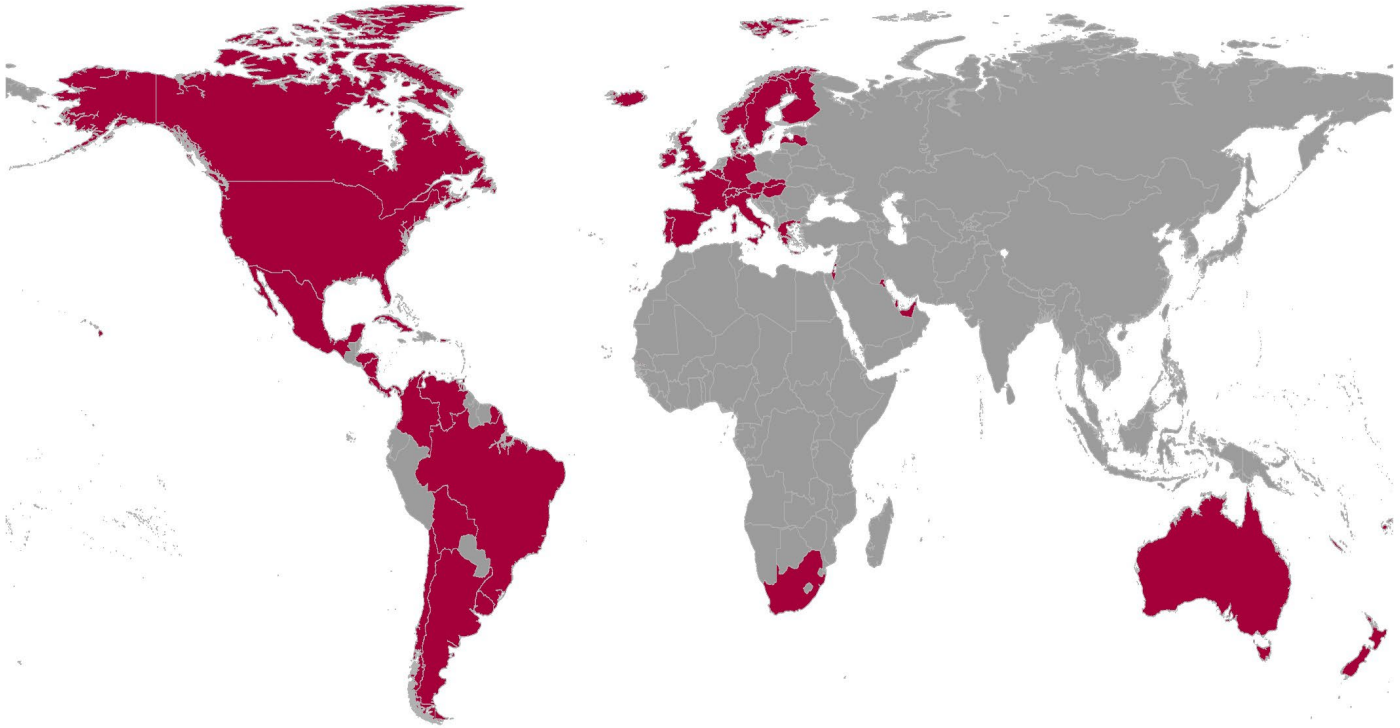
https://immunizationdata.who.int/

Adding Vaccines Creates New Challenges
H. influenzae type b(Hib)

Hib, 3rd dose	76%	

IVAC Hib Initiative

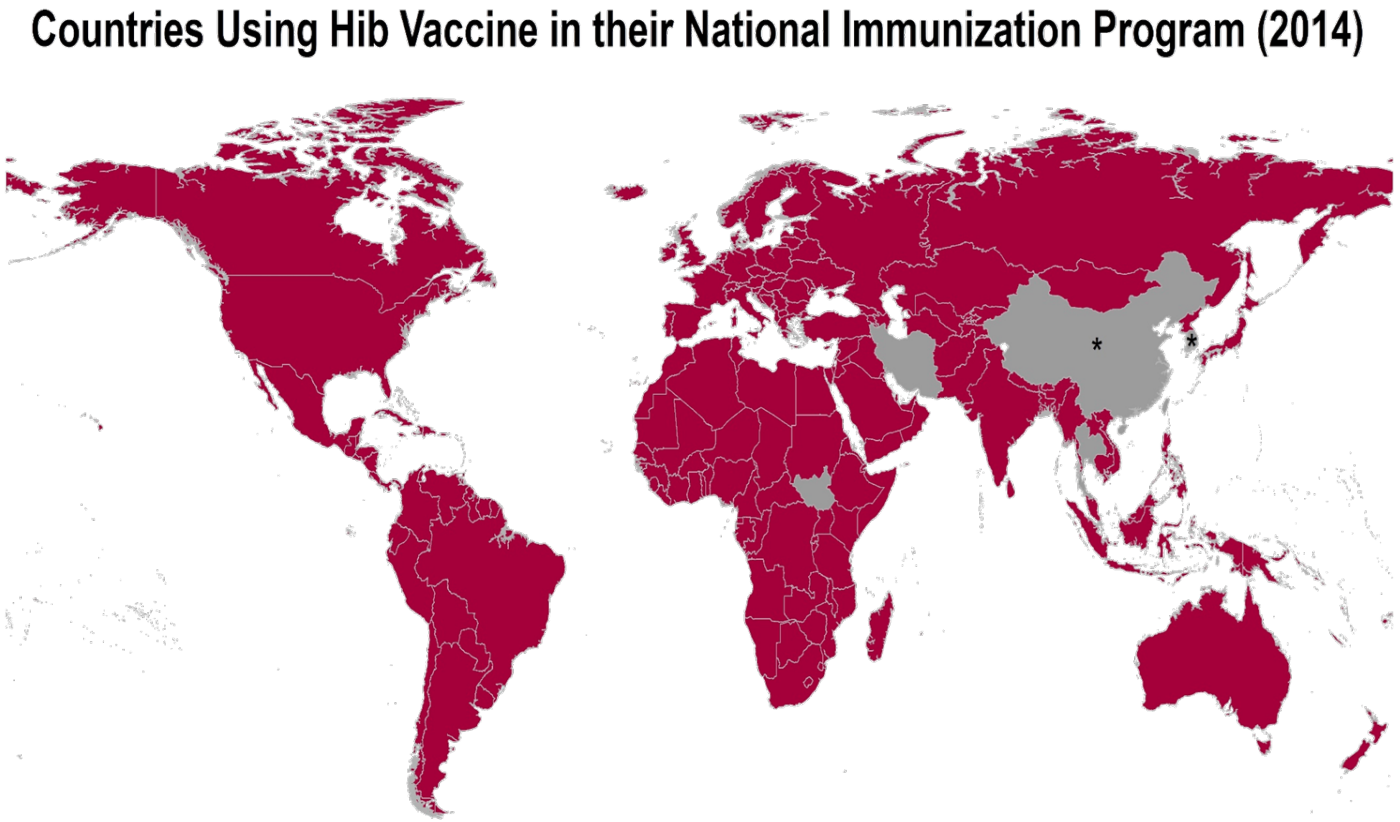
Countries Using Hib Vaccine in their National Immunization Program (2000)



Before Hib Initiative

Source: International Vaccine Access Center (IVAC), Johns Hopkins Bloomberg School of Public Health. Vaccine Information Management System (VIMS). April 2014.

IVAC Hib Initiative



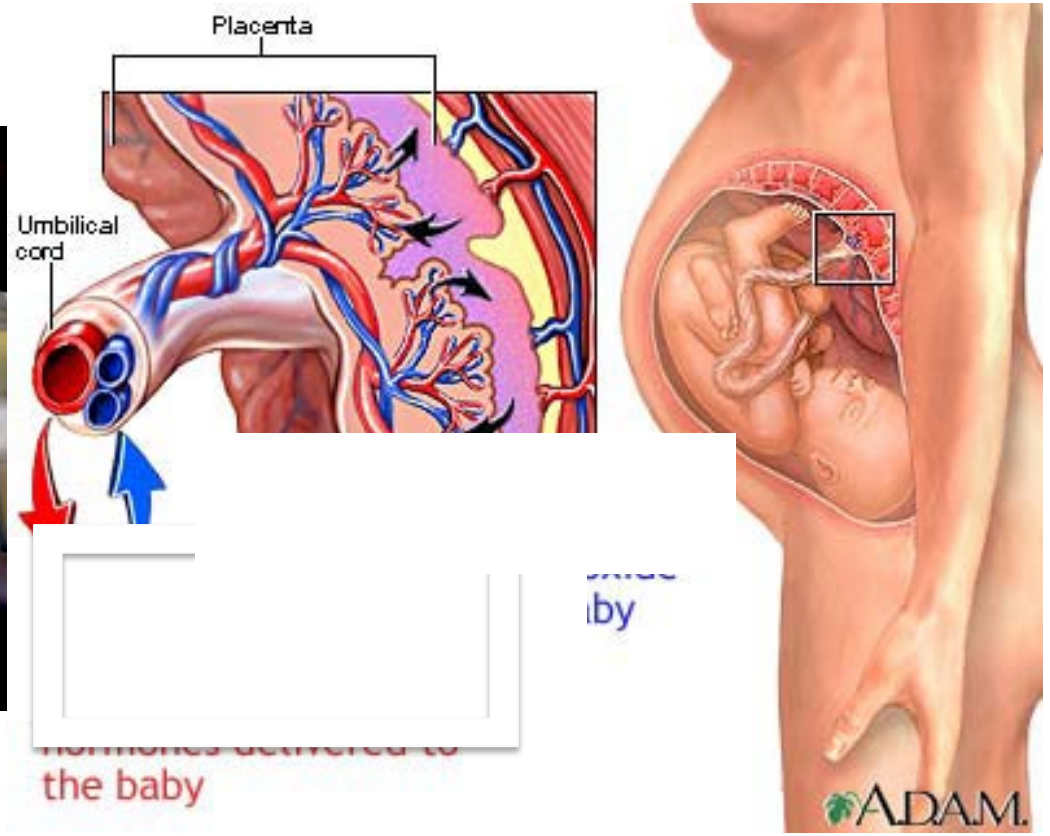
Sources:
International Vaccine Access Center (IVAC), Johns Hopkins Bloomberg School of Public Health. Vaccine Information Management System (VIMS). April 2014.
GAVI Alliance: http://www.gavialliance.org/support/nvs/pentavalent/#

Combination Vaccines Have Helped

- DTP/Hib
- DTP/Hep B/Hib
- DTP/Hib/IPV
- Measles/Rubella
- Measles/Mumps/Rubella

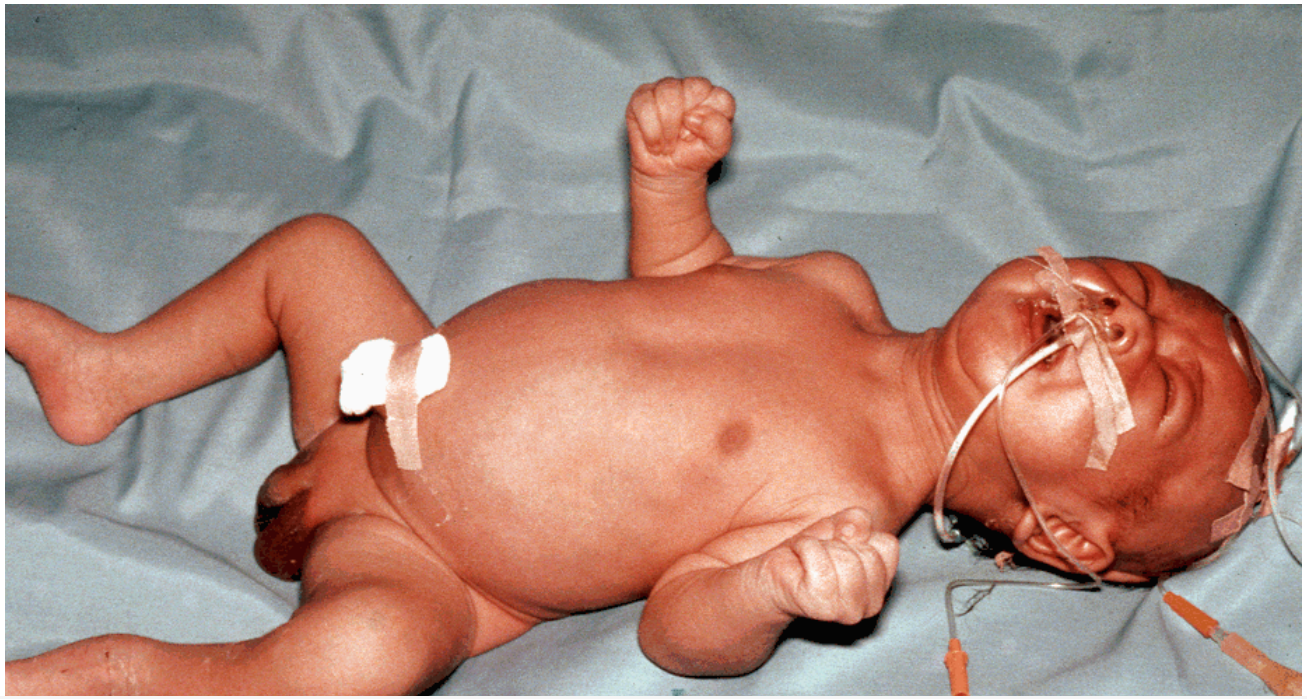
Infants are Protected by Passively Acquired Tetanus Antibodies from Immune Mothers

2 doses TT in pregnancy

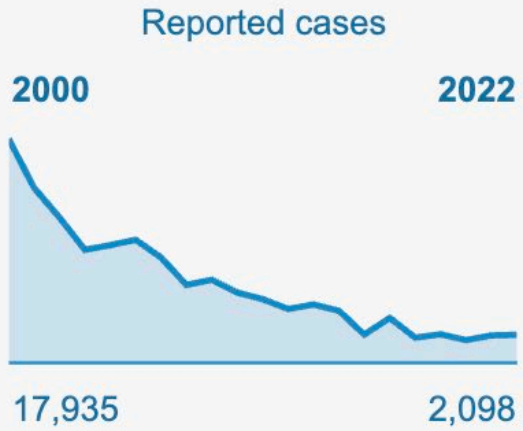


www.nlm.nih.gov

Neonatal Tetanus

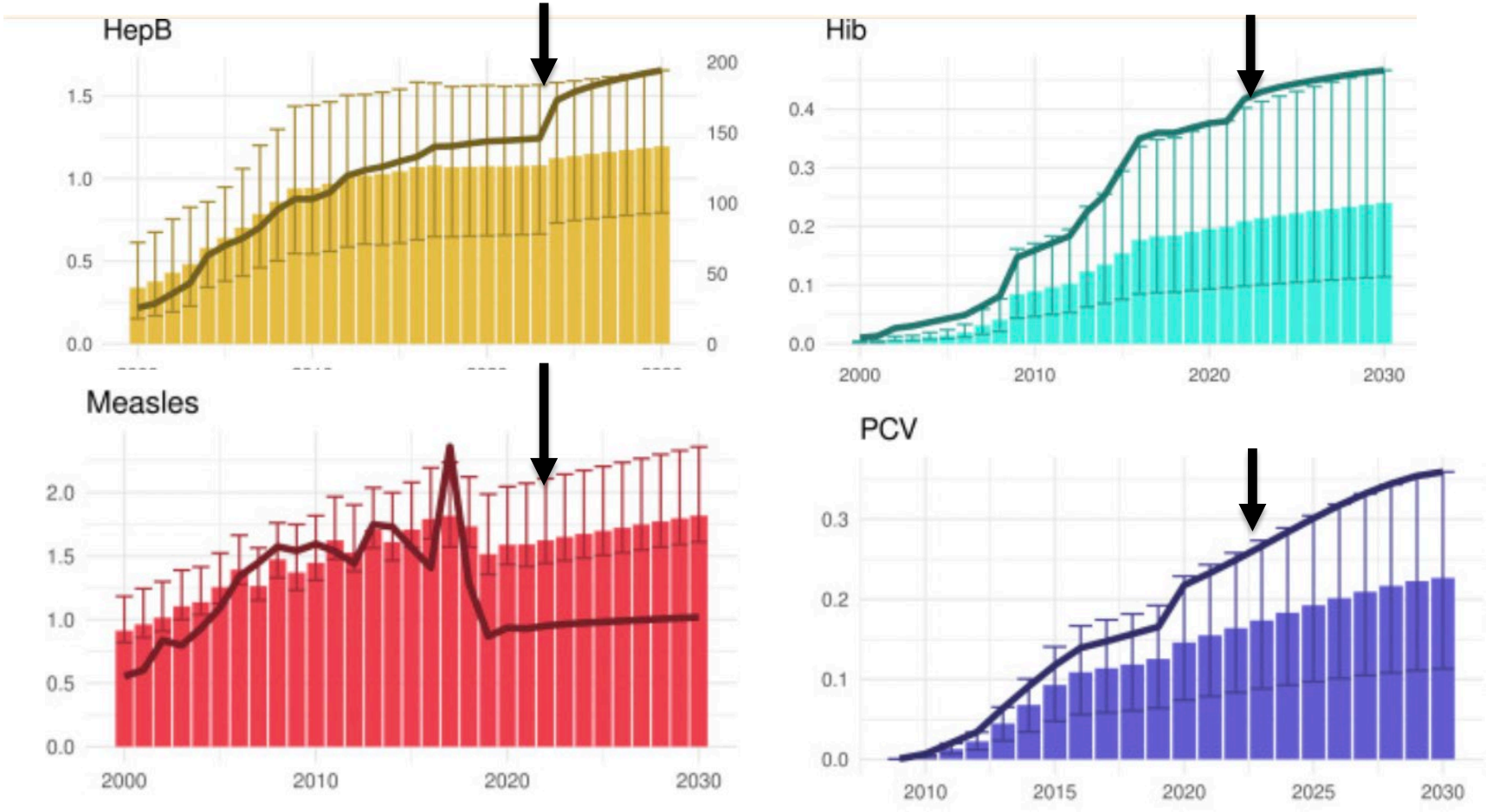


Neonatal tetanus	2,098



All EPI Vaccines Save Lives

- **Deaths averted and projected per year**



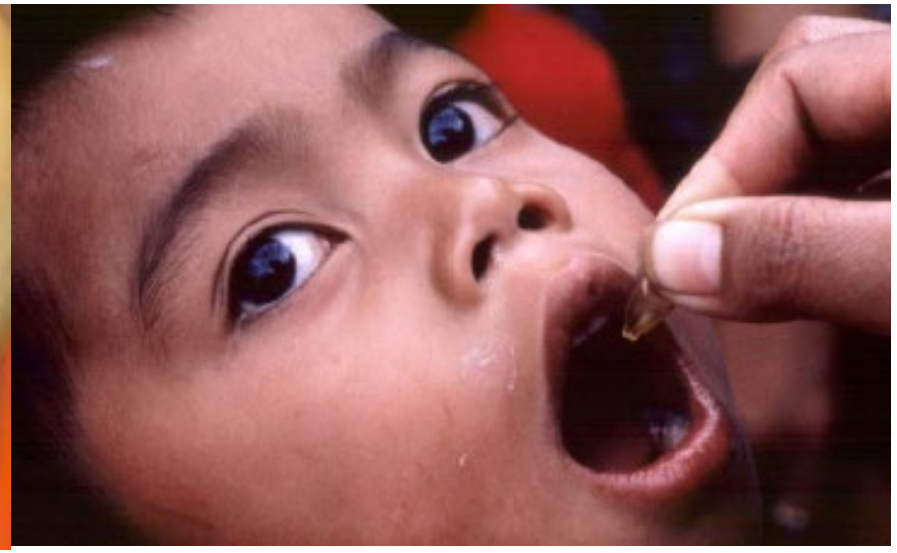
Lives saved with vaccination for 10 pathogens across 112 countries in a pre-COVID-19 world 2021; 10: e67635

Lives Saved From EPI Vaccines 2000–2030 in 112 Countries

- Estimated 50 million deaths averted between 2000 and 2019
- Projected 97 million deaths could be averted 2000–2030

Lives saved with vaccination for 10 pathogens across 112 countries in a pre-COVID-19 world 2021; 10: e67635

EPI Became a Platform for Delivering Vitamin A Supplementation



Bednets to Prevent malaria

Director of Department of Immunization, Vaccines and Biologicals at WHO

Kate O'Brien Former Executive Director IVAC

DIRECTOR, DEPARTMENT OF IMMUNIZATION, VACCINES AND BIOLOGICALS, WORLD HEALTH ORGANIZATION

Kate O'Brien is the Director of the Department of Immunization, Vaccines and Biologicals at the World Health Organization (WHO). Previously she was the Executive Director of the International Vaccine Access Center (IVAC), and Professor of International Health and Epidemiology, at the Johns Hopkins Bloomberg School of Public Health. Dr O'Brien served on the WHO Strategic Advisory Group of Experts on Immunization (SAGE) committee from 2012 to 2018. Prior to joining IVAC, she served as the Director of Infectious Disease in the Johns Hopkins Center for American Indian Health. She also served as an Epidemic Intelligence Officer, in the Respiratory Diseases Branch, at the CDC, Atlanta (USA).

Dr O'Brien earned her BSc in Chemistry from the University of Toronto (Canada), her MD (Medicinæ Doctorem) from McGill University, Montreal (Canada), and her Master of Public Health from Johns Hopkins Bloomberg School of Public Health, Baltimore (USA). She completed her paediatric and infectious disease clinical training at Johns Hopkins Medical Institutions, Baltimore (USA).

Johns Hopkins Bloomberg School of Public Health | IVAC International Vaccine Access Center

25 April 2024 | World Immunization Week

Rotavirus Vaccines

Dr. Mathuram Santosham
Professor, Departments of International Health & Pediatrics
Johns Hopkins University

Etiology of gastroenteritis, Melbourne 1970s

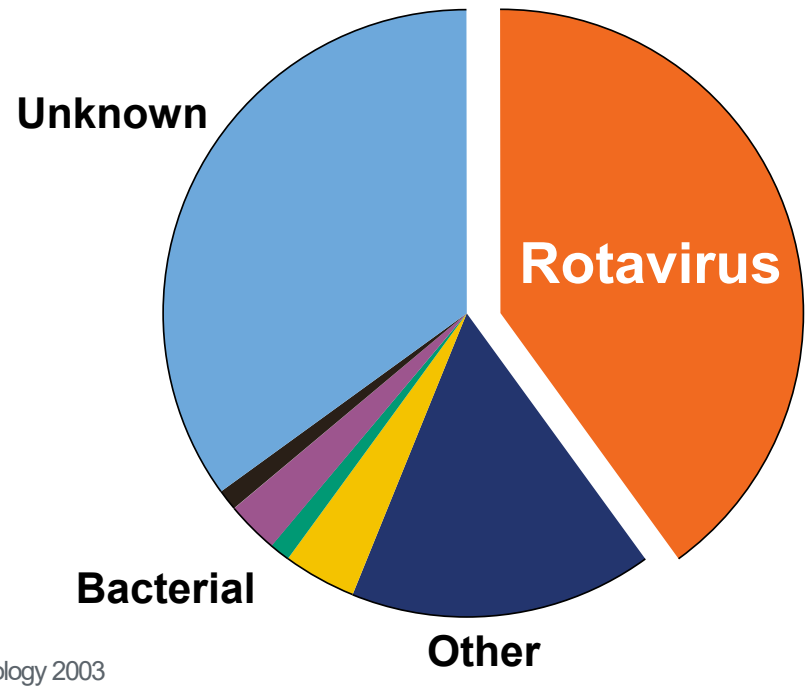
Table 1 Etiological gastroenteritis in children admitted to Royal Children's Hospital, Melbourne

	1972	1974
Total admissions	539	378
Salmonella sp.	39 (7.2%)	40 (10%)
Shigella sp.	2 (0.4%)	5 (1%)
Pathogenic *E. coli*	23 (4.3%)	7 (2%)
Unknown	475 (88%)	102 (29%)
Rotavirus	not tested	197 (52%)
Enteric adenovirus	not tested	27 (7%)

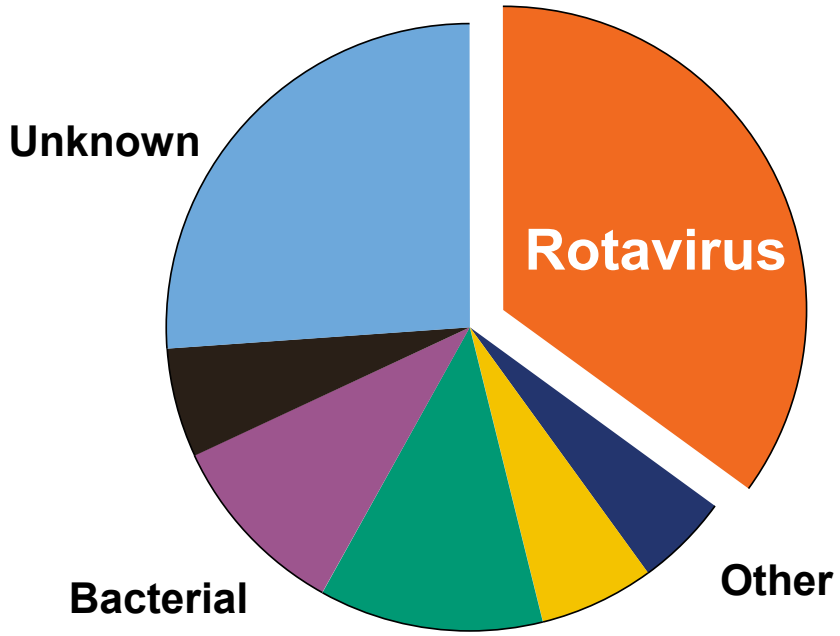
Bishop R. Discovery of rotavirus: Implications for child health. J Gastroenterol Hepatol. 2009 Oct;24 Suppl 3:S81-5.

Causes of severe acute gastroenteritis among children <5 years before rotavirus vaccines

Developed Countries



Developing Countries



A. Kapikian, Fields Virology 2003

Timeline of rotavirus vaccine development

Table 2 Development of rotavirus vaccines

1983	RIT	Single bovine strain
1986	RRV	Single simian strain
1991	TRRV	Simian/human reassortant G_1 G_2 G_3 G_4
1999		Withdrawn
1999	Rotarix	Single human strain G_1 P(8)
2000	RotaTeq	Bovine/human reassortants G_1 G_2 G_3 G_4 P(8)

Bishop R. Discovery of rotavirus: Implications for child health. J Gastroenterol Hepatol. 2009 Oct;24 Suppl 3:S81-5.

Health burden of rotavirus

Rotavirus is a leading cause of death due to diarrhea in young children, and the leading cause among infants.

In the absence of vaccination, nearly every child is infected—rotavirus kills ~200,000 children and hospitalizes hundreds of thousands more each year

>500 Number of children dying from rotavirus every day

~37% Percent of under-5 diarrhea hospitalizations due to rotavirus, globally (2013)

>90% Percent of under-5 rotavirus deaths occurring in Gavi-eligible low-income countries (2013)

Tate, CID, 2016. Slide courtesy of Molly Sauer.

Economic burden of rotavirus

Treating rotavirus diarrhea is expensive for families and countries

Inpatient admission for one episode of severe rotavirus diarrhea costs **10%** of the average family's monthly income

Treating one episode of rotavirus diarrhea can amount to **85%** of the average family's monthly income

Rotavirus hospitalization costs more than **25%** of the average family's monthly income

Slide courtesy of ROTA Council. Images courtesy of Photoshare: © 2009 Jessica Alderman, © 2014 SPRING Project, © 2014 Aji Styawan
Sigei C, et al., Vaccine. 2015;33 Suppl 1:A109-18; icddr,b. Preliminary analysis, Protocol# 14009; Chai PL, WS. Vaccine. 2009;27(5):F112-F115

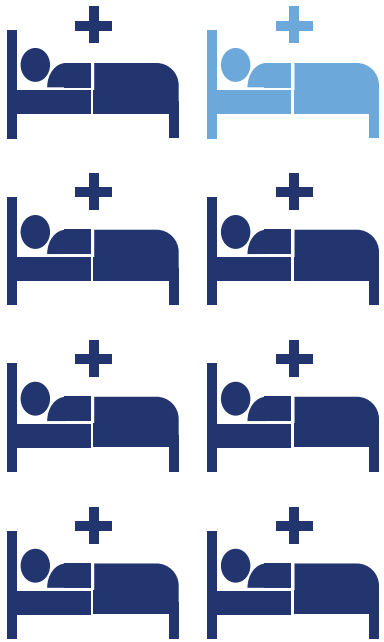
Health system burden of rotavirus

Rotavirus hospitalizations can overwhelm health systems and facilities

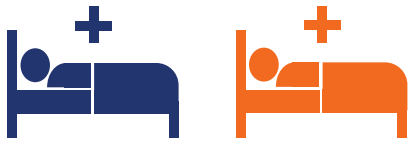
Largest pediatric hospital in Bangladesh

Nov 2015 – Oct 2016

1 in 8 admissions was due to AGE



54% of AGE admissions were due to rotavirus



1 in 4 cases requiring hospitalization was refused because of bed shortages

Saha S, et al. Rotavirus Vaccine will Improve Child Survival by More than Just Preventing Diarrhea: Evidence from Bangladesh. Am J Trop Med Hyg. 2018 Feb;98(2):360-363. Slide courtesy of Molly Sauer.

Rotavirus vaccines

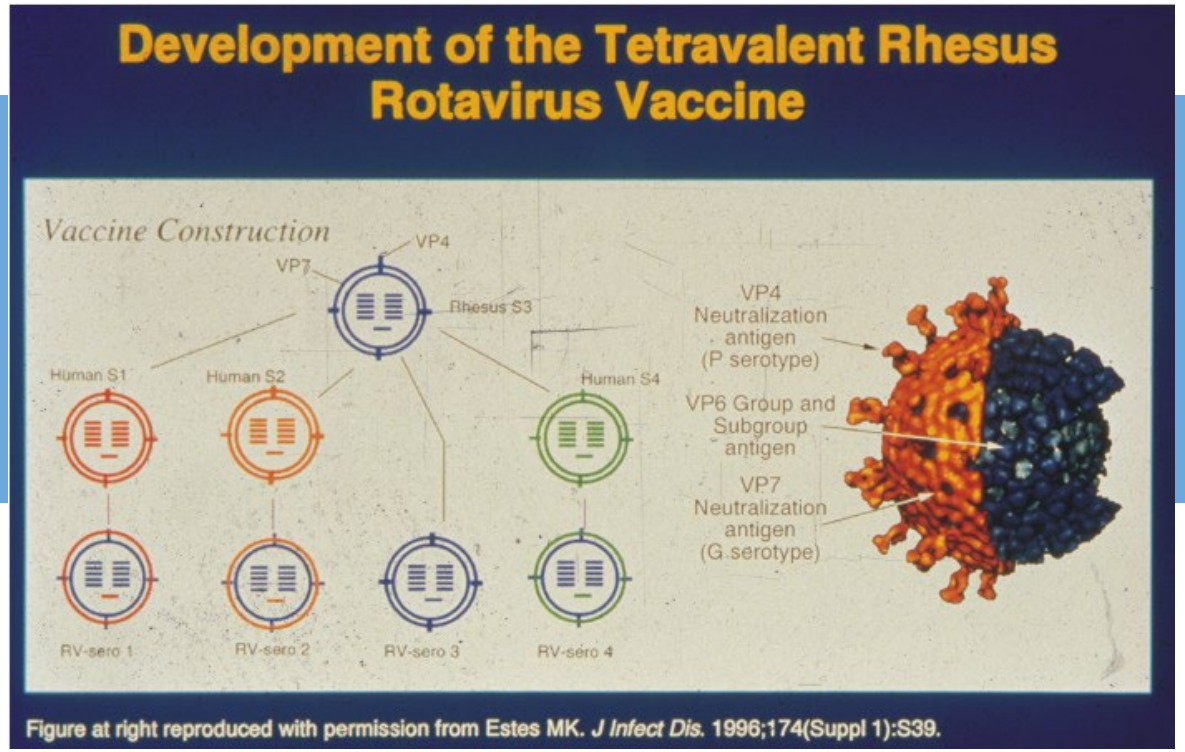


Figure at right reproduced with permission from Estes MK. *J Infect Dis.* 1996;174(Suppl 1):S39.

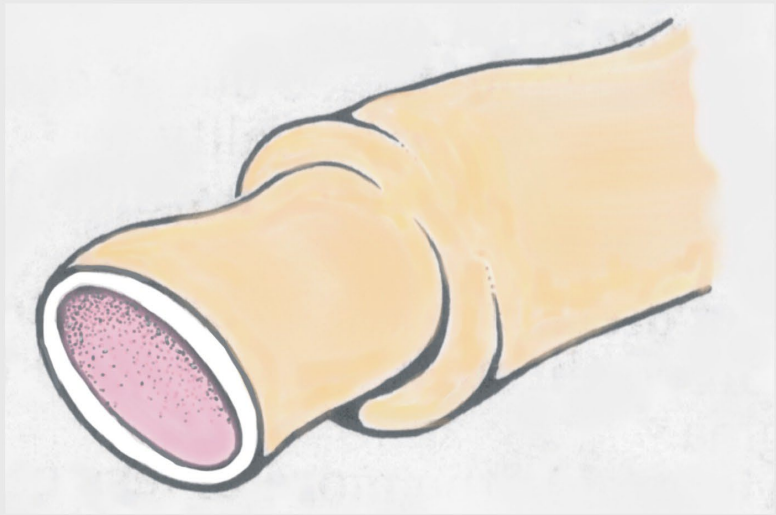
First generation vaccines

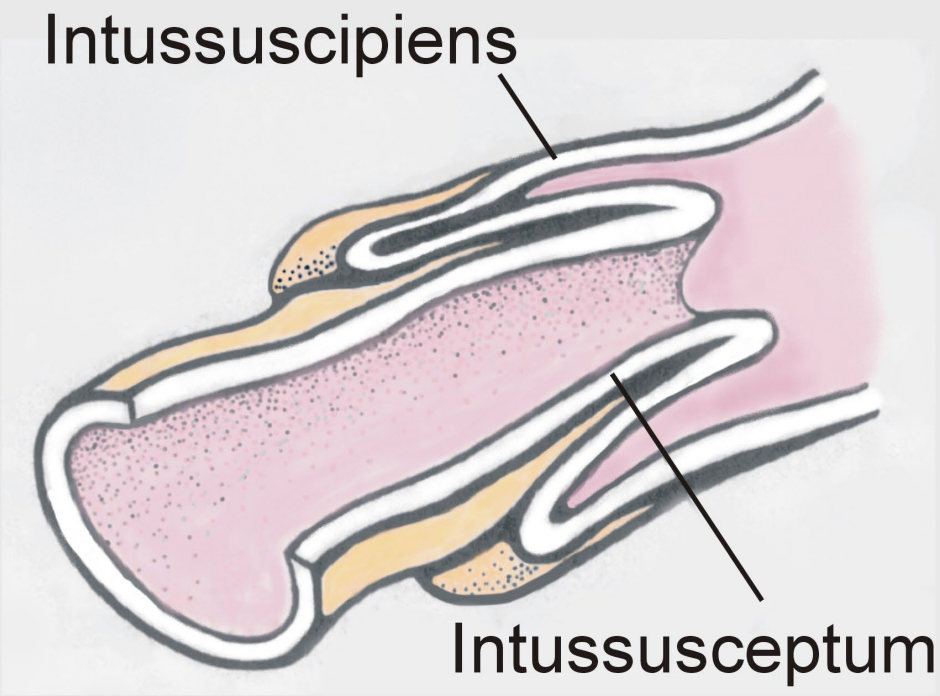
- "Jennerian" approach
  - Naturally attenuated animal strains (bovine, rhesus)
- Variable performance
  - 80% efficacy in Finland but 0-30% efficacy in developing countries
- Best efficacy of rhesus vaccine (serotype G3) seen in Venezuela during G3 outbreak

Second generation vaccines

- "Modified Jennerian" approach
- Naturally attenuated animal strain as backbone
- Insertion of genes coding human G types by reassortment in cell culture

Intussusception (IS)





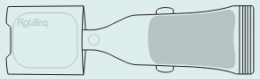
Intussusception

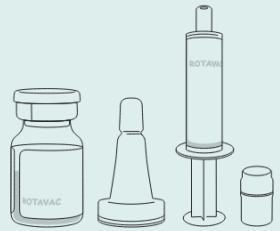
The telescoping of the intestine onto itself usually at the ileal-cecal junction, leading to reversible repair or entrapment with edema, necrosis and perforation

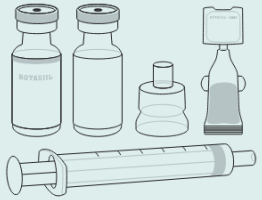
Final chapter for Rotashield ®

- US Withdrew recommendation
- Without efficacy data from Asia and Africa, clinical trials needed
- Trials considered ethical, but political challenges of testing tainted vaccine
- Vaccine manufacture stopped
- Abrupt demise of first vaccine licensed after 20 years of research

Today's WHO-prequalified rotavirus vaccines



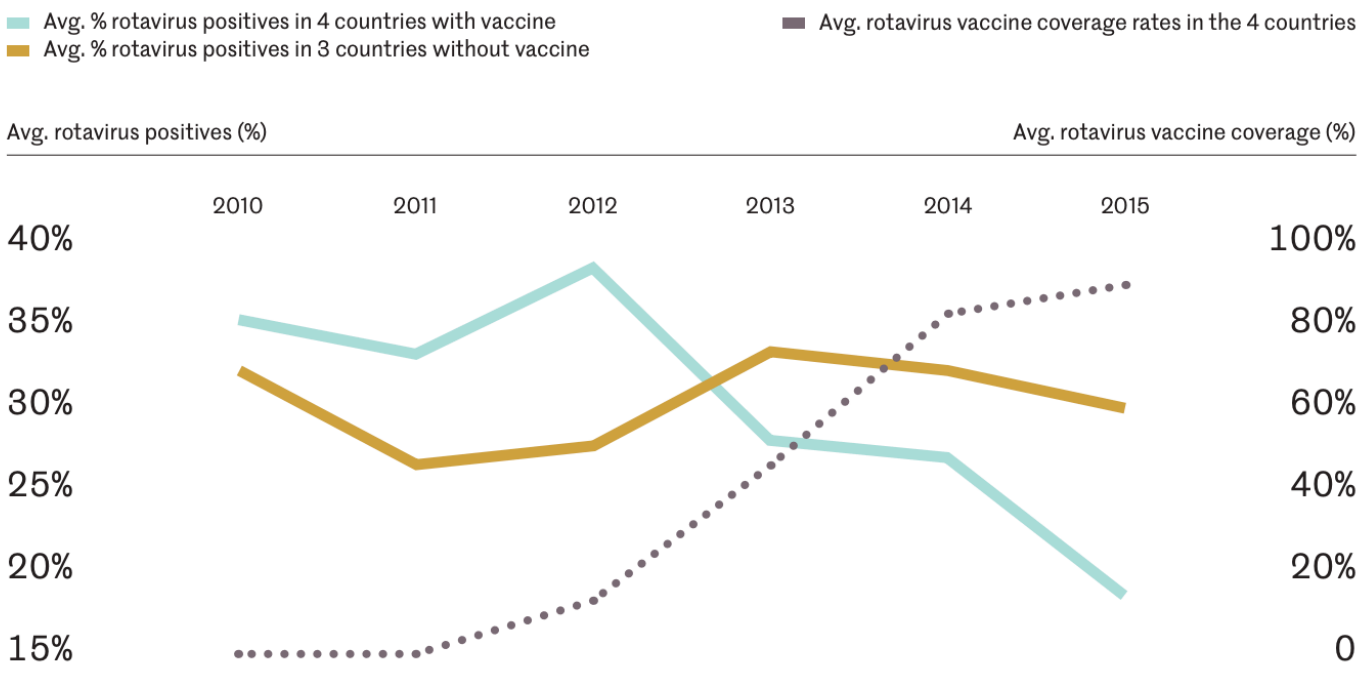




		RotaTeq® *Merck & Co.*	**ROTARIX®** *GSK*	**ROTAVAC® / ROTAVAC5D®** *Bharat Biotech*	**ROTASIIL®** *Serum Institute of India*
Vaccine name *Manufacturer*					
Dosing schedule		3 doses (same as DTP/penta 1, DTP/penta 2, DTP/penta 3)	2 doses (same as DTP/penta 1, DTP/penta 2)	3 doses (same as DTP/penta 1, DTP/penta 2, DTP/penta 3)	3 doses (same as DTP/penta 1, DTP/penta 2, DTP/penta 3)
Formulation options		Liquid ready-to-use	Liquid ready-to-use	(1) Frozen (2) Liquid ready-to-use	(1) Lyophilized (2) Liquid ready-to-use
Efficacy against severe rotavirus gastroenteritis in:	**HIC / UMIC**	98-100%[1,2]	85-96%[5,6]	No data	No data
	LMIC / LIC	43-64%[3,4]	49-77%[7]	56% *(in India)*[8,9]	36% *(in India)*[10] 67% *(in Niger)*[11]

Impact of rotavirus vaccines

Rotavirus diarrhea hospitalizations declined with routine rotavirus vaccine use



Country income level	Percent efficacious	Case prevented per 100 vaccinated infants
Low	50%	
Middle	75%	

Vaccines prevent more hospitalizations and deaths per population in low-income countries than they do in middle- and high-income countries

Weldegebriel, G., et al., Impact of rotavirus vaccine on rotavirus diarrhoea in countries of East and Southern Africa. 2017.
Zaman, K., et al., Efficacy of pentavalent rotavirus vaccine against severe rotavirus gastroenteritis in infants in developing countries in Asia: a randomised, double- blind, placebo-controlled trial. The Lancet, 2010. 376(9741): p. 615–623.

Brazil and Mexico: Vaccination benefit versus risk

	Admissions per year	Deaths per year
Rotavirus events averted by vaccination	- 81,123	- 1,303
Intussusception events caused by vaccination*	+ 118	+ 5
Benefit to risk comparison	**687 to 1**	**261 to 1**

** Source of background IS rates: Patel et al. Exp Rev Vacc; 2009; 8(11); assumes Rotarix coverage at current DTP3 rates; risk estimates from current study for week 1 after vaccination; with assumption of 5% case-fatality*

WHO recommendations (2021)

"**Rotavirus vaccines should be included in all national immunization programmes and considered a priority**, particularly in countries with high rotavirus gastroenteritis-associated fatality rates, such as in South and South-eastern Asia and sub-Saharan Africa. …

The use of rotavirus vaccines should be part of a comprehensive strategy to control diarrhoeal diseases with the scaling up of both prevention (promotion of early and exclusive breastfeeding, handwashing, improved water supply and sanitation) and treatment packages packages (low osmolarity ORS and zinc)."

WHO., Rotavirus vaccines WHO position paper: July 2021, in Weekly epidemiological record. 2021. p. 301–320.

Rotavirus Organization of Technical Allies (ROTA Council)

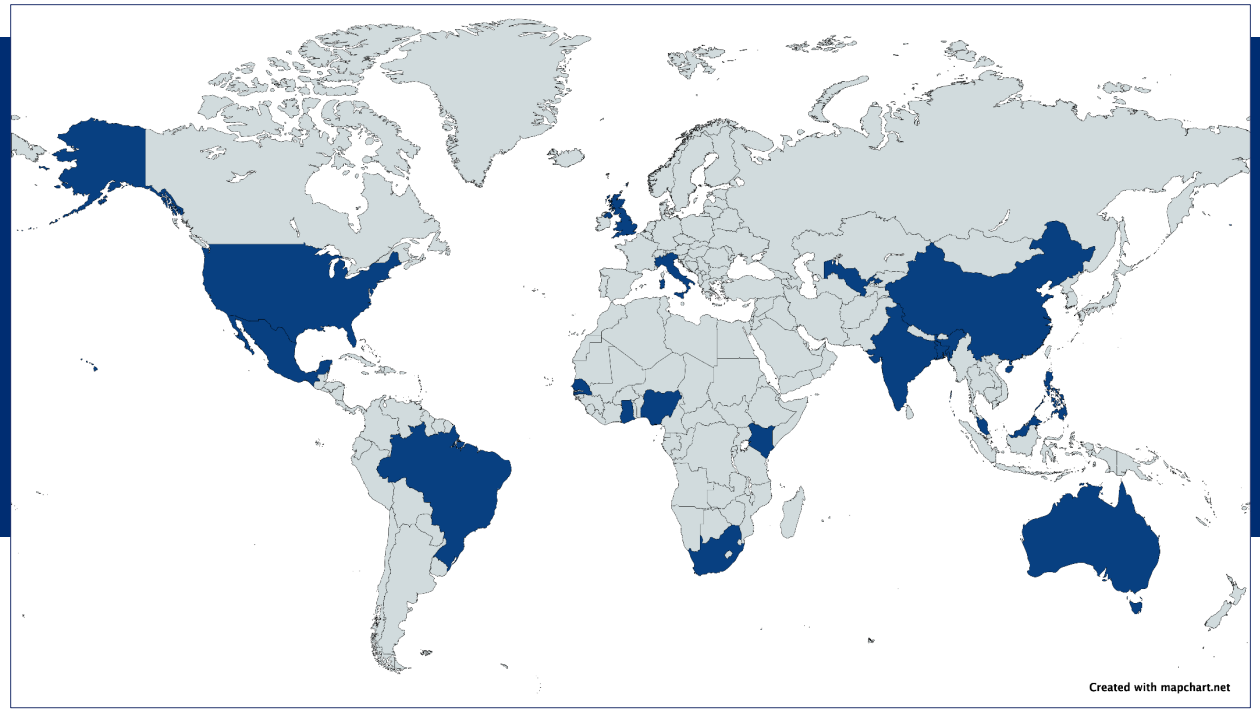
MISSION

To accelerate the introduction of rotavirus vaccines through the use of evidence and strategic communications targeting policymakers and other key decision makers

Expert members and advisors

ROTA
Rotavirus Organization of Technical Allies

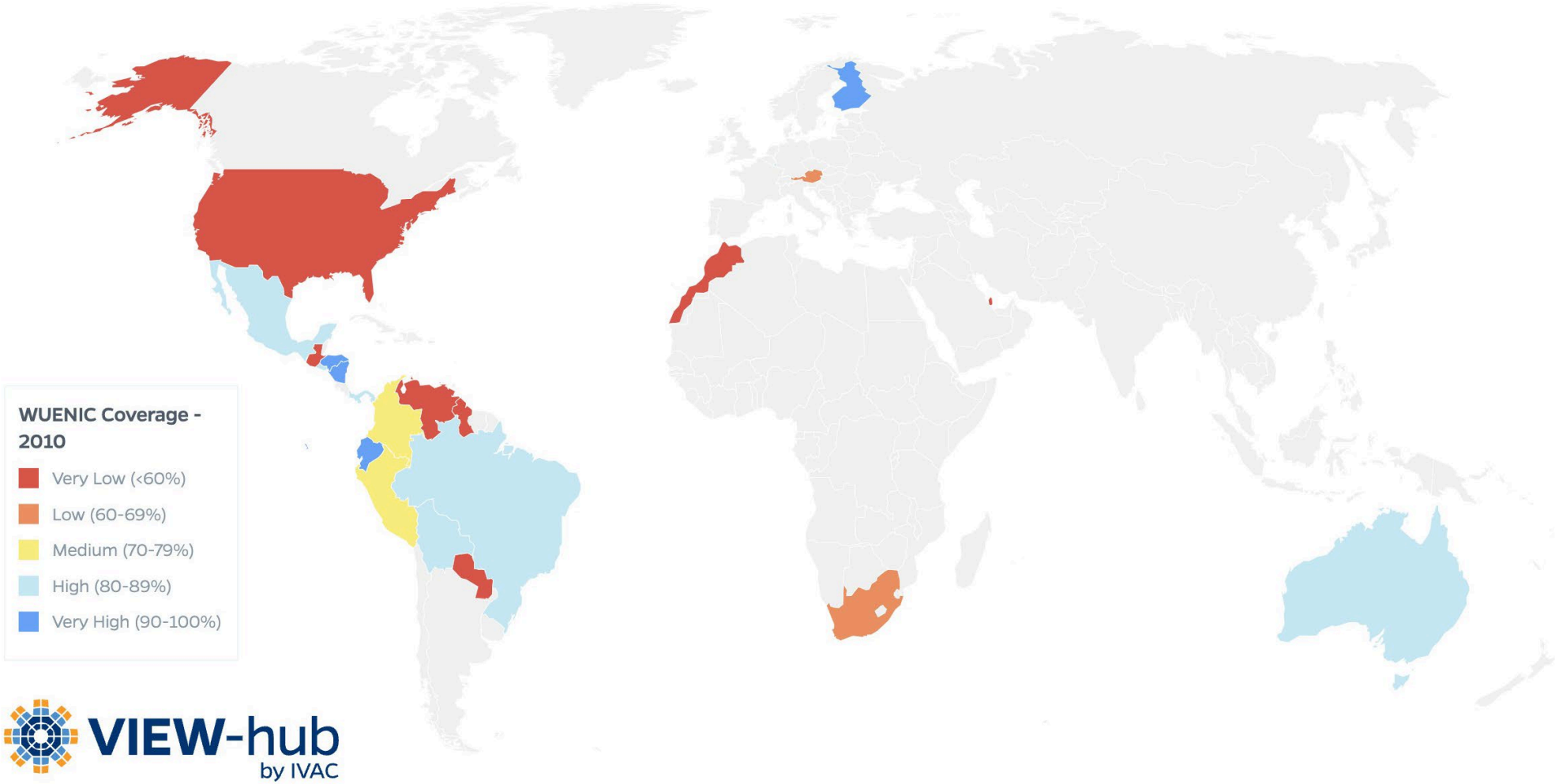
24 members from 16+ countries



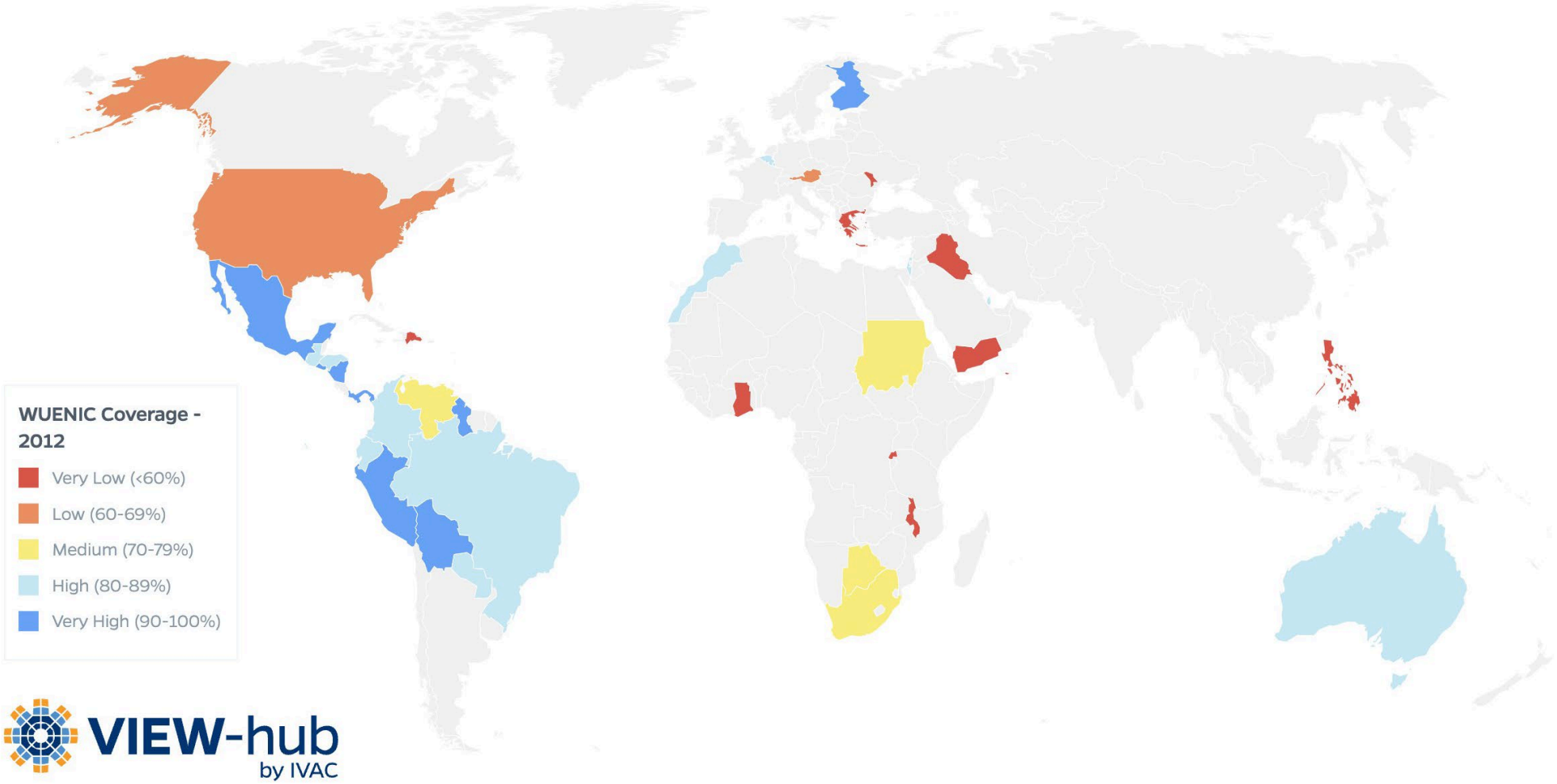
The role of ROTA Council

- **Communicating** the burden of rotavirus and need for prevention
- **Delivering** accurate information on vaccine safety and efficacy, underscoring the availability, affordability and life-saving, health-improving potential of vaccines
- **Serving** as an independent body for the latest evidence on rotavirus vaccines
- **Working** to ensure that vaccines are seen as part of a comprehensive approach to addressing all of diarrhea's causes

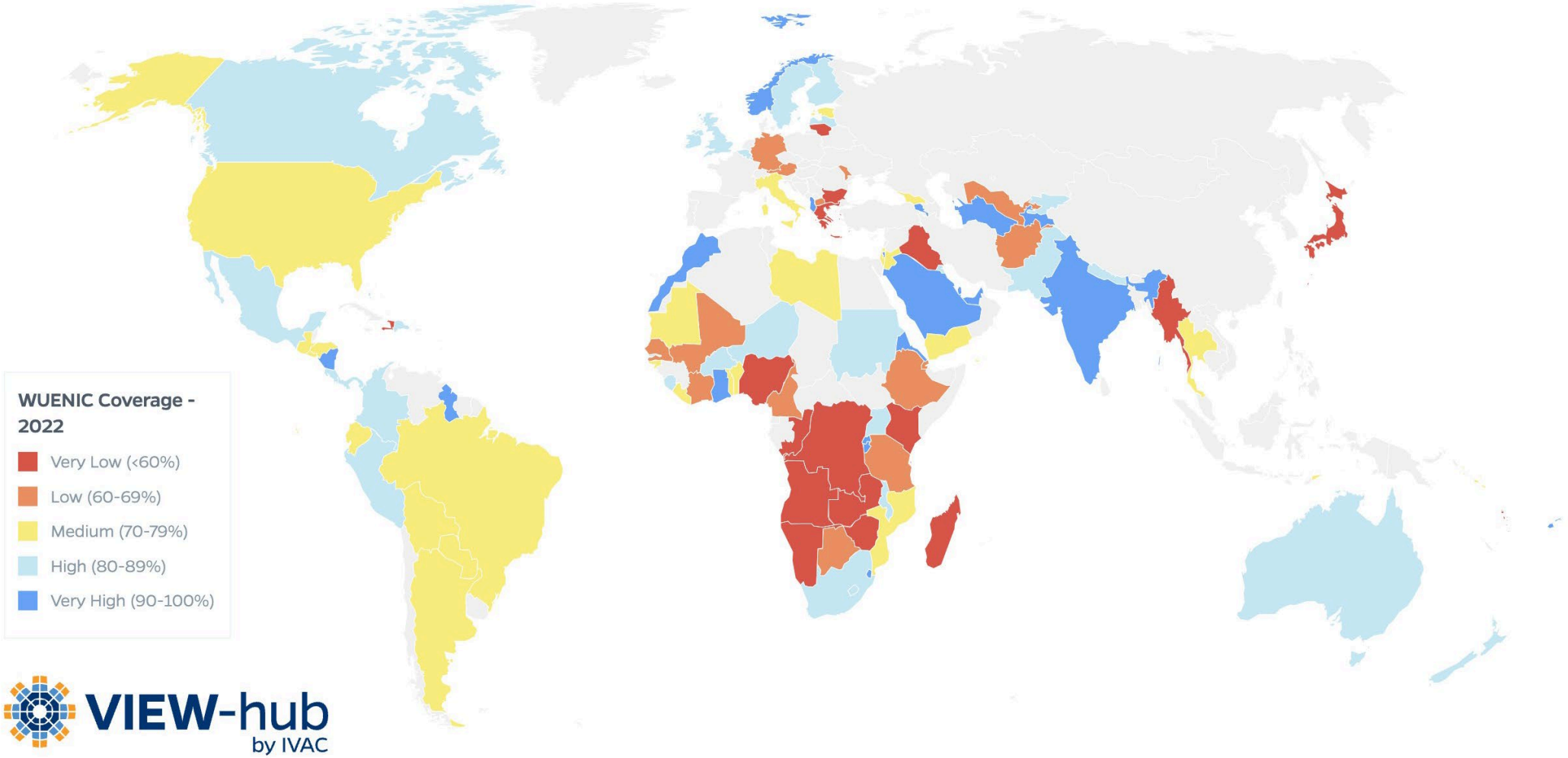
Rotavirus vaccine coverage (2010)



Rotavirus vaccine coverage (2012)

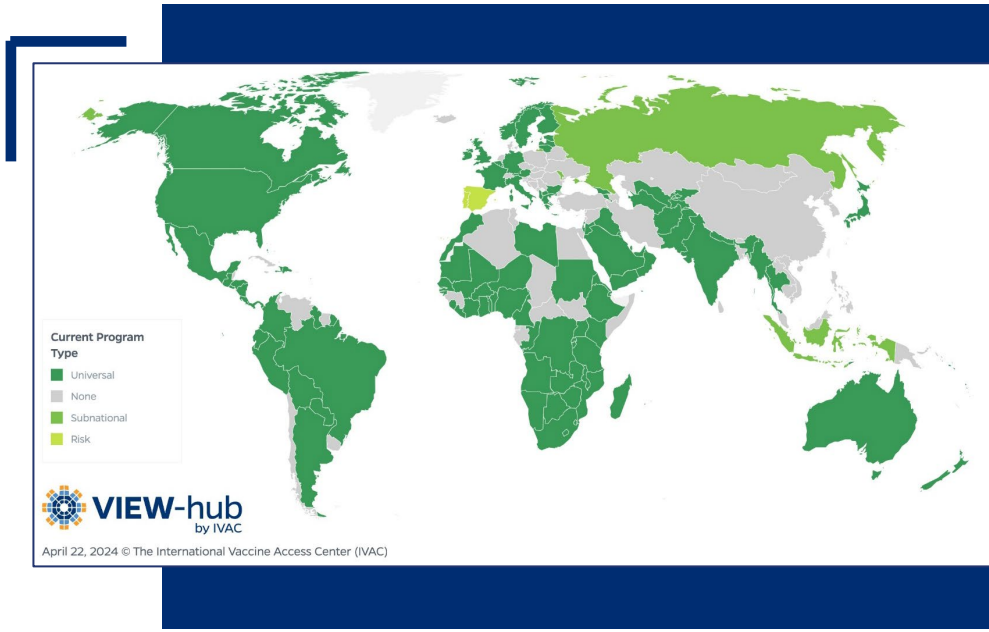


Rotavirus vaccine coverage (2022)



Progress, challenges, and opportunities

- RVV landscape has drastically expanded from just 7 years ago when just two vaccines were available to countries
- Interchangeability and vaccine switches
  - Elective switches may improve suitability for a specific context and reduce costs
  - Compulsory switches can interrupt RVV programs, strain resources, and may not necessarily be best-suited options for the specific setting
- 120+ countries use RVV in their national immunization programs yet 36.2 million children still lack access to RVV
- 140,000 deaths prevented from 2006 to 2019
- Global supply challenges and withdrawals lead to stockouts, missed doses, and coverage gaps disproportionately affecting Gavi-eligible countries
- Prioritizing rotavirus vaccines in the remaining countries — and sustaining existing programs — remains critical



Rota team over the years

Tyler Best, Amelia Gerste, Kelly Healy, Kirthini Muralidharan, Nicole Obe, Debora Sandiford, Molly Sauer, Rose Weeks

April 25, 2024

Success Story: Pneumococcal Conjugate Vaccines

Maria Deloria Knoll, PhD
Research Professor

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

IVAC
International Vaccine
Access Center

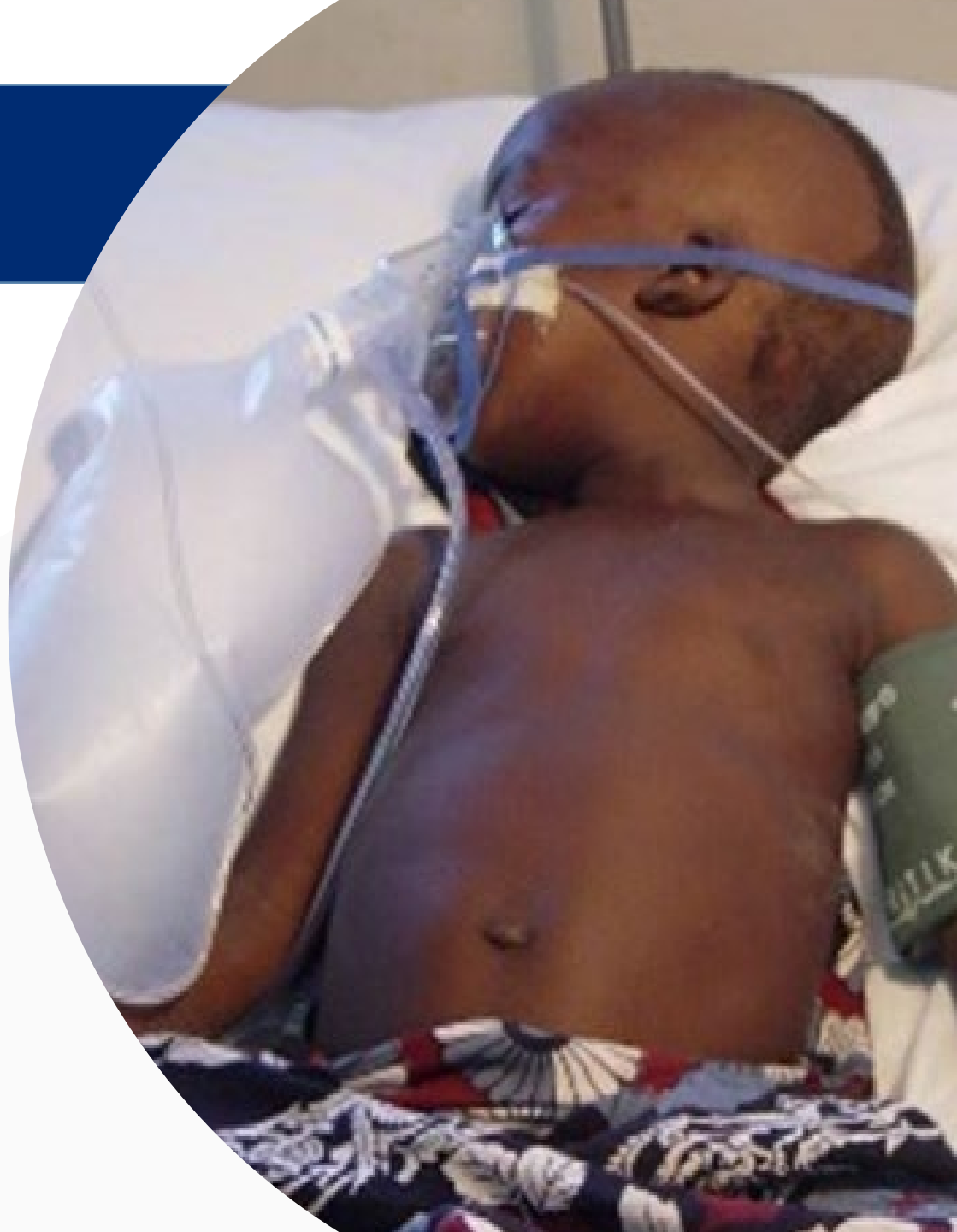
Pneumococcal Disease

Pneumococcus causes severe pneumonia, meningitis and sepsis

Responsible for 37% of child pneumonia deaths (pre-vaccine era)

Annually >600,000 deaths and >5 million cases in children <5 years of age globally (pre-vaccine)

100+ different strains (serotypes) but most (~80%) severe disease is caused by <20 serotypes



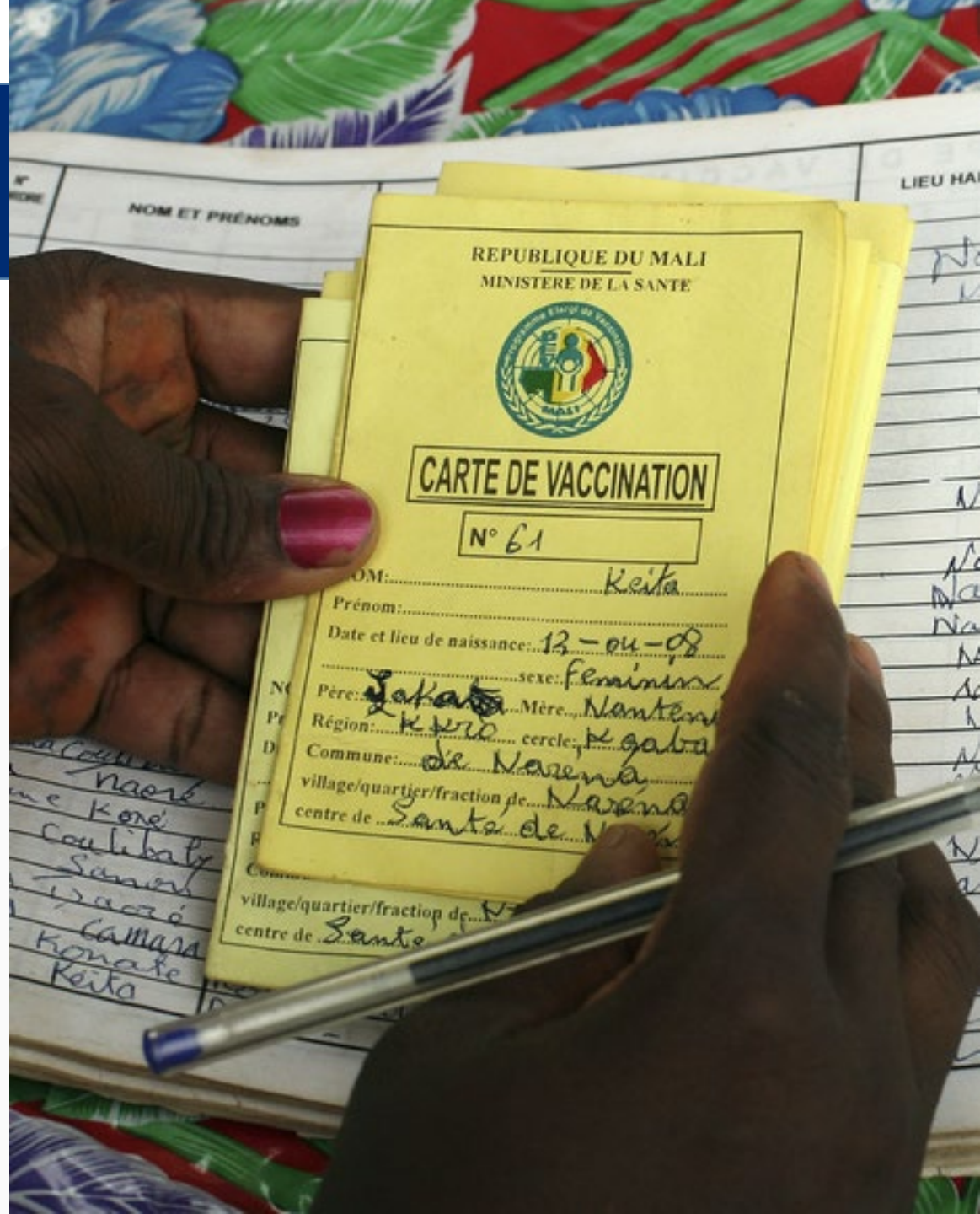
Pneumococcal Conjugate Vaccine (PCV)

First PCVs licensed in high-income country in 2000 - highly effective & very safe

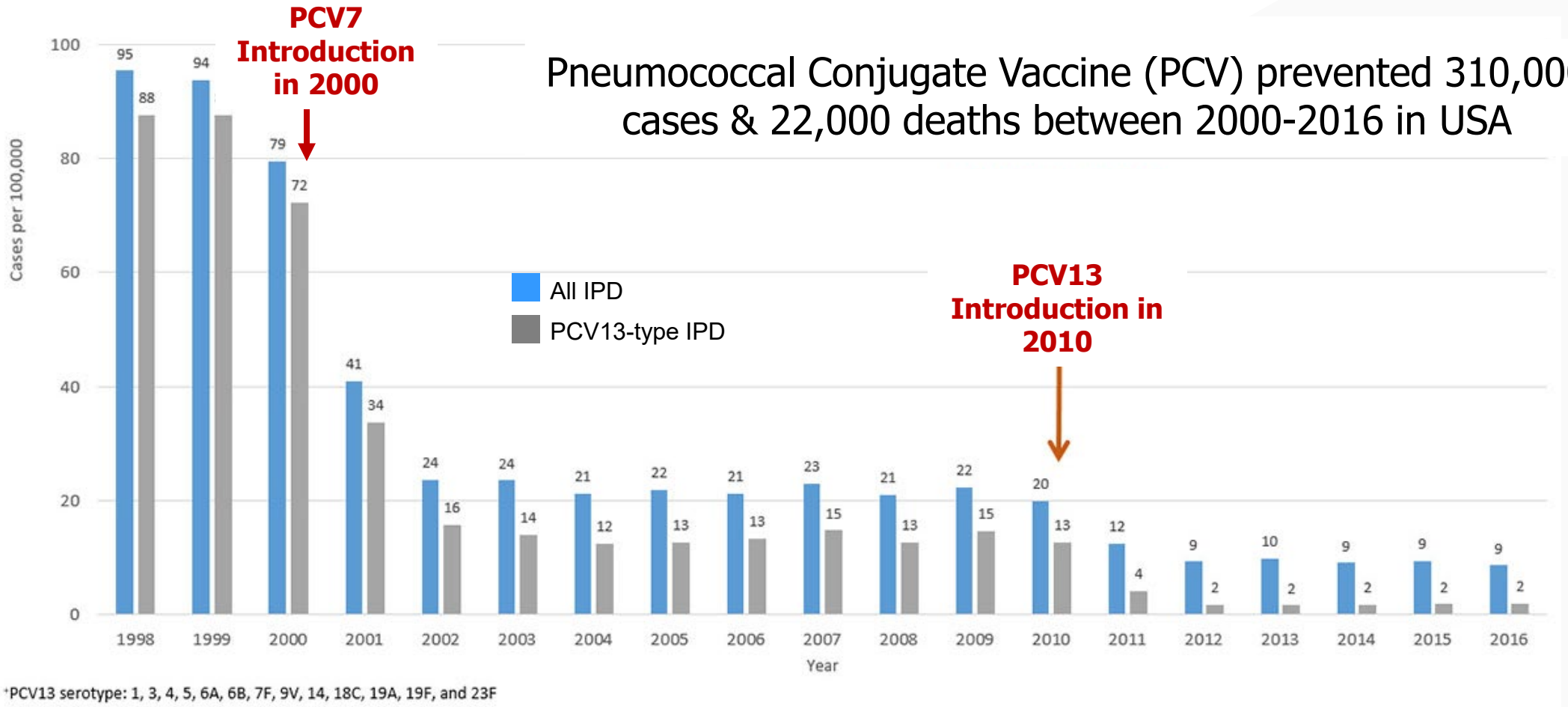
Protected against 7 of 100+ serotypes responsible for 50-80% of severe disease

10- and 13-valent PCVs licensed in 2009/10 (protect against 70-90% of disease)

15- and 20-valent PCVs licensed in 2023/24



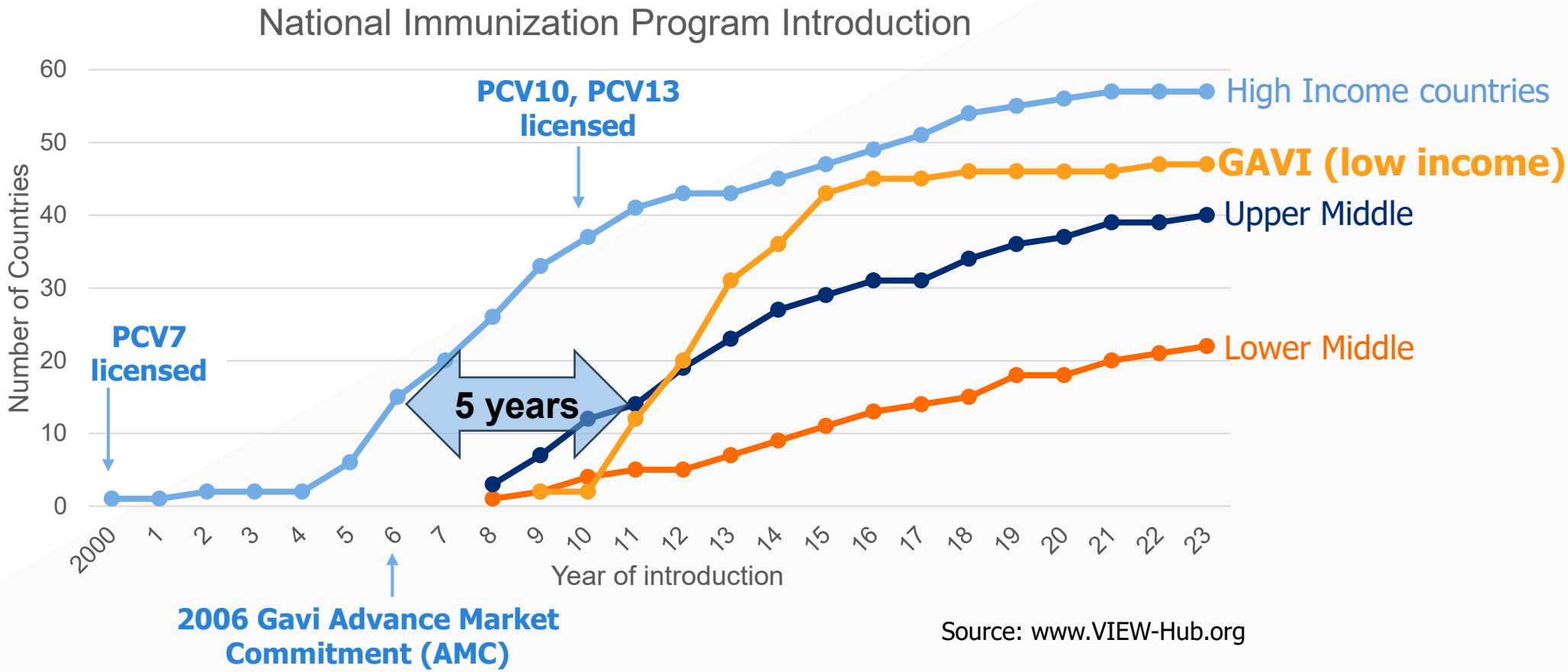
PCVs prevented 90% of invasive pneumococcal disease (IPD) in children <5 years old, USA



Source: CDC, Emerging Infections Program, Active Bacterial Core surveillance, https://www.cdc.gov/pneumococcal/surveillance.html

Low-income countries had access to PCV decades sooner

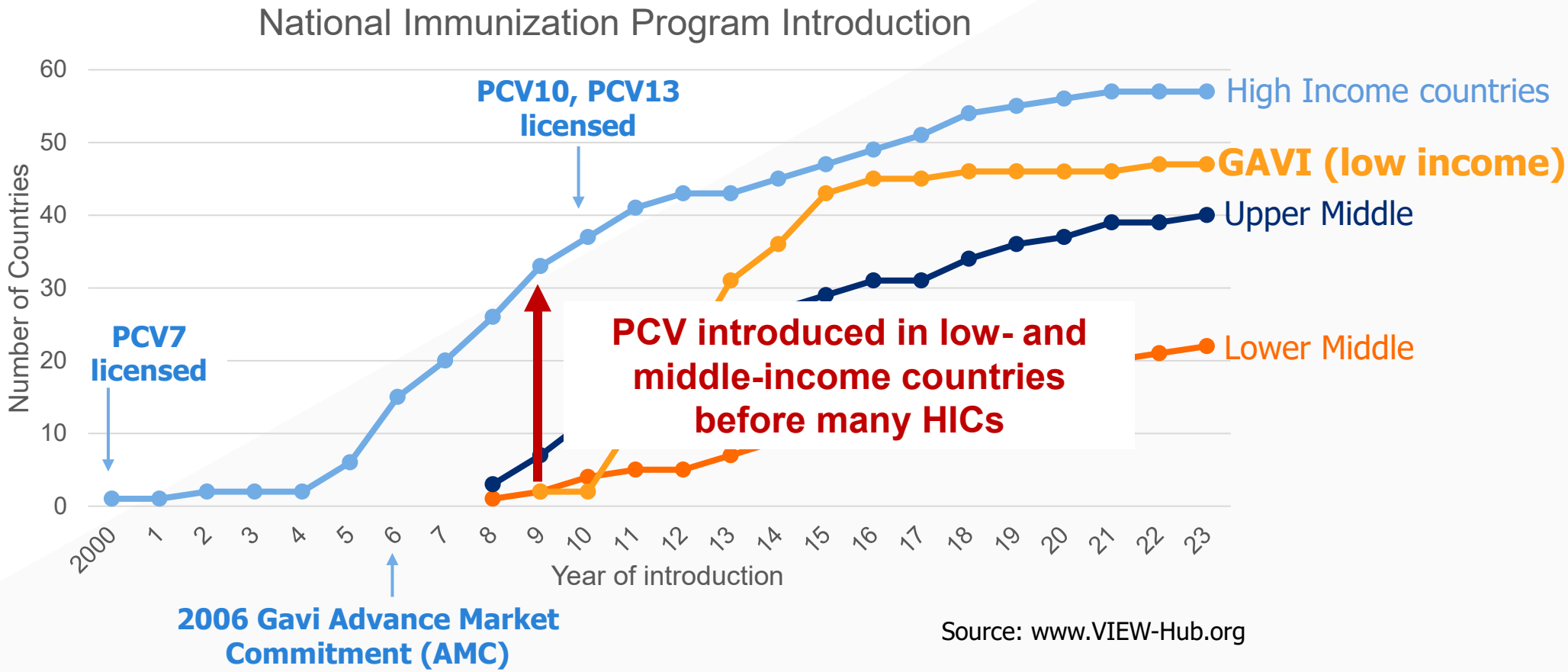
IVAC's PneumoADIP project (funded by Gavi) accelerated access to PCV in low-income countries



Source: www.VIEW-Hub.org

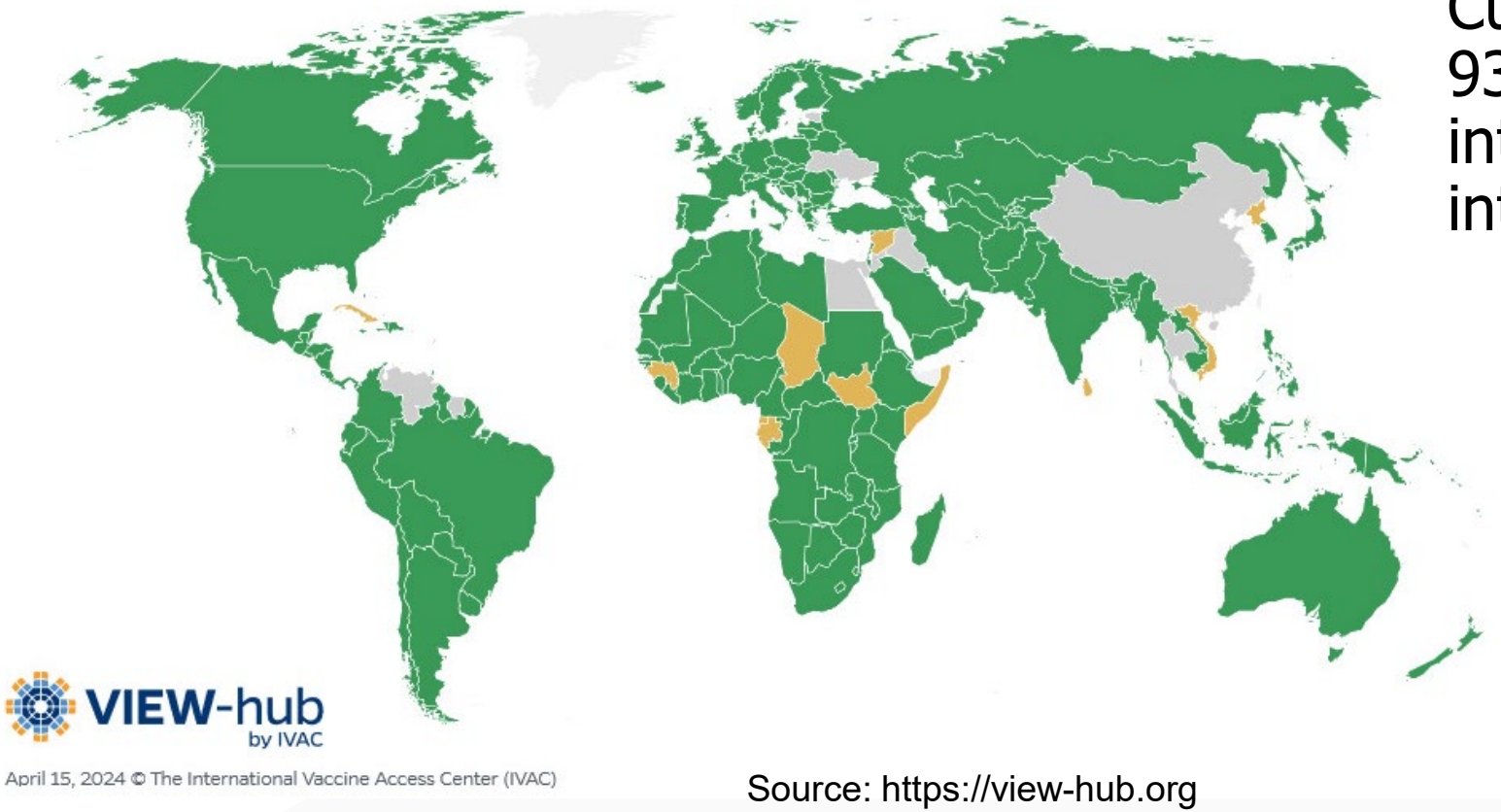
Low-income countries had access to PCV before some high-income countries

IVAC's PneumoADIP project (funded by Gavi) accelerated access to PCV in low-income countries



Source: www.VIEW-Hub.org

Global Introduction Status of PCV, April 2024



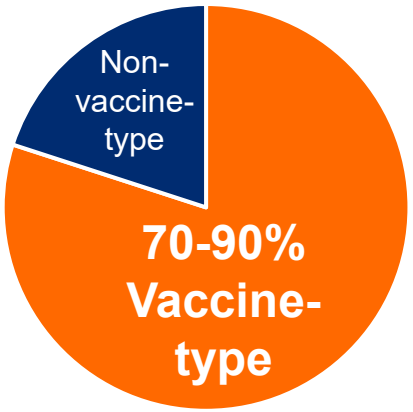
Source: https://view-hub.org

Currently all Gavi countries and 93% of countries worldwide have introduced PCV or are planning introduction

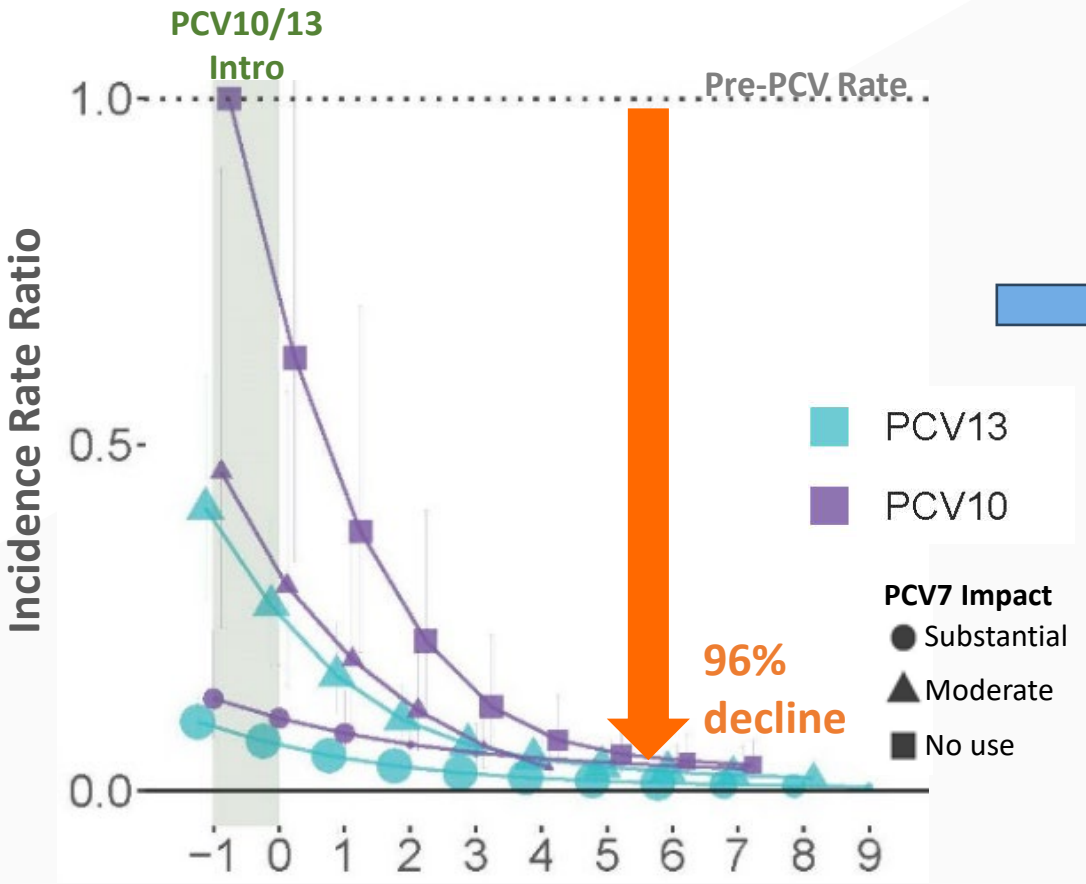
	Global	Gavi
Introduced	**166**	47
Planning	**14**	7
Not Introduced	**10**	0
Program Suspended	**4**	0

Global impact of PCV on invasive pneumococcal disease (IPD)

Pre-PCV IPD

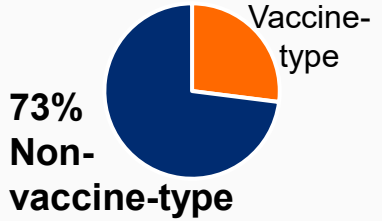


PCV10-type IPD in Children <5 years



All IPD declined 58-74%

Post-PCV10/13 IPD

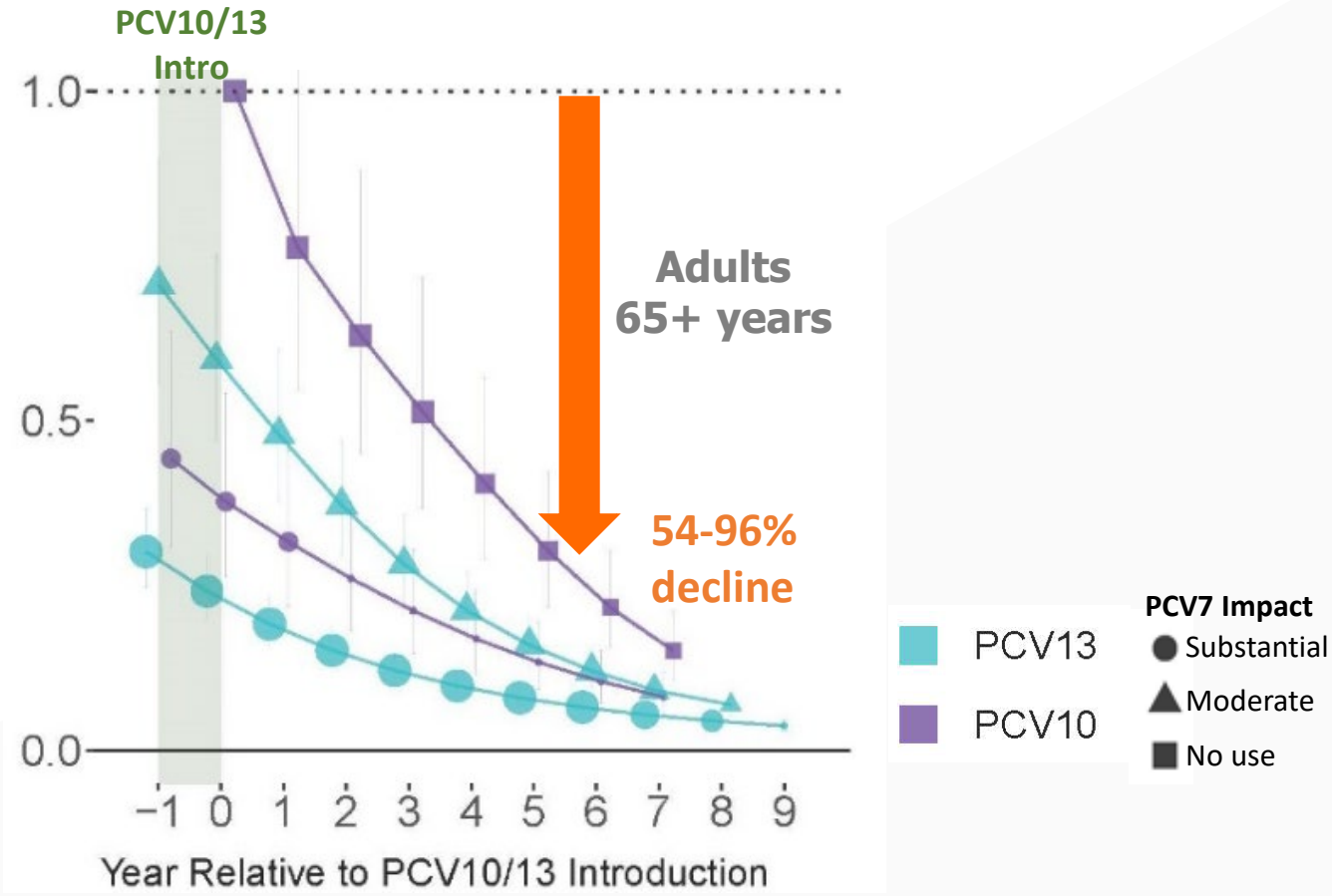


Source: PSERENADE 40 country study

Bennett & Deloria Knoll, et al. *Lancet PREPRINT* 2024

Infant PCV program reduced invasive pneumococcal disease (IPD) in all ages

PCV10-type IPD in Adults 65+ Years

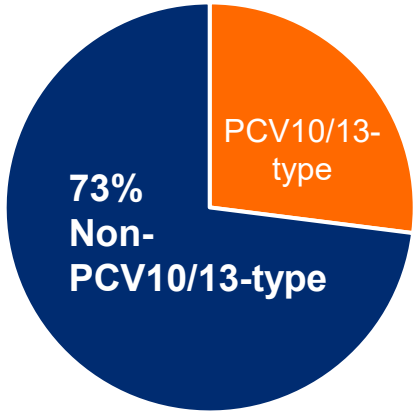


Source: PSERENADE
40 country study

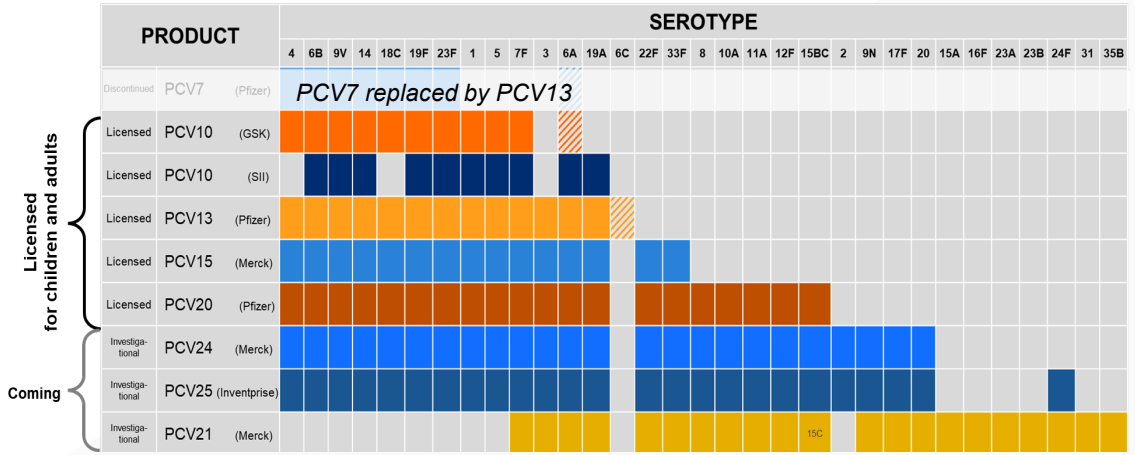
Bennett & Deloria Knoll, et al. *Lancet PREPRINT* 2024

New PCVs coming to address much remaining pneumococcal disease

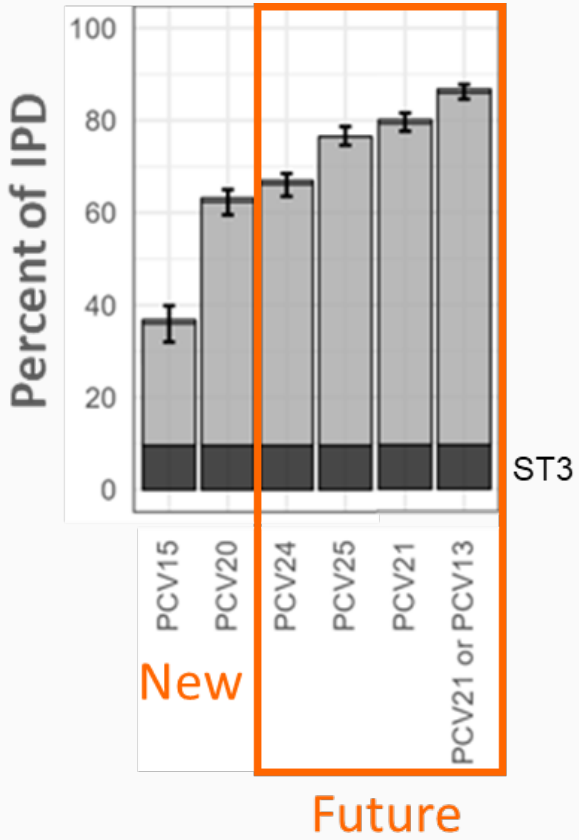
Post-PCV10/13 IPD



Serotypes covered by current and anticipated new PCVs



Remaining IPD covered by current and anticipated new PCVs in children <5 years

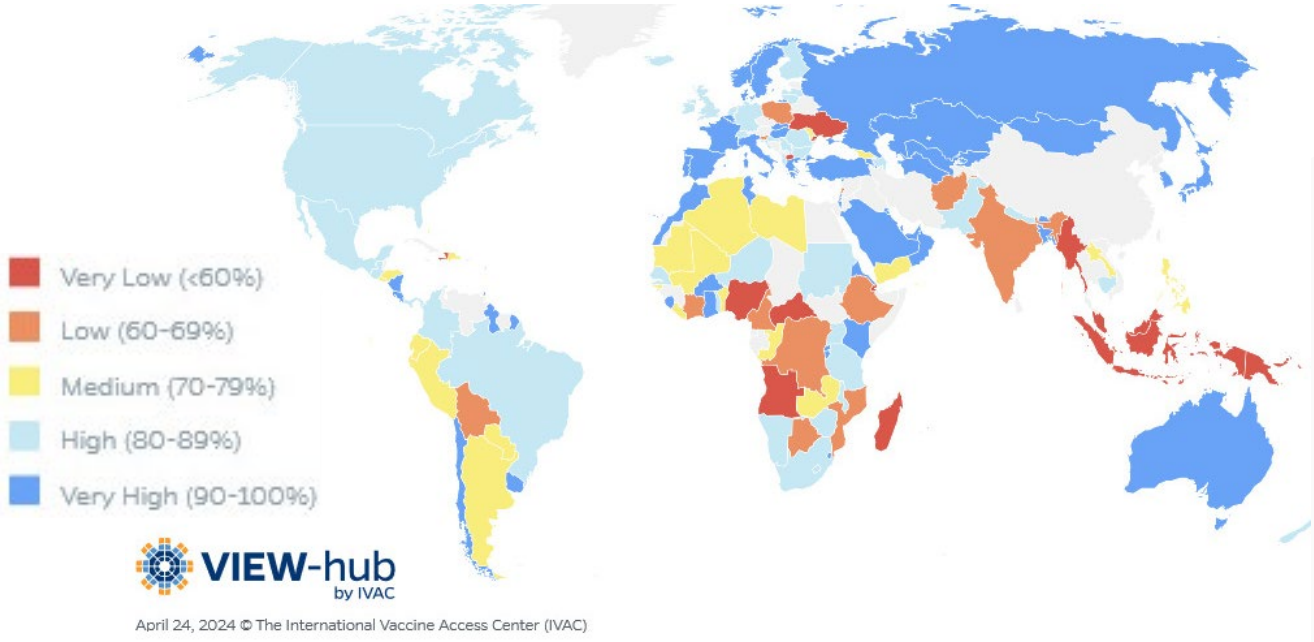


Source: PSERENADE 40 country study

Garcia Quesada, et al. *Lancet PREPRINT* 2024

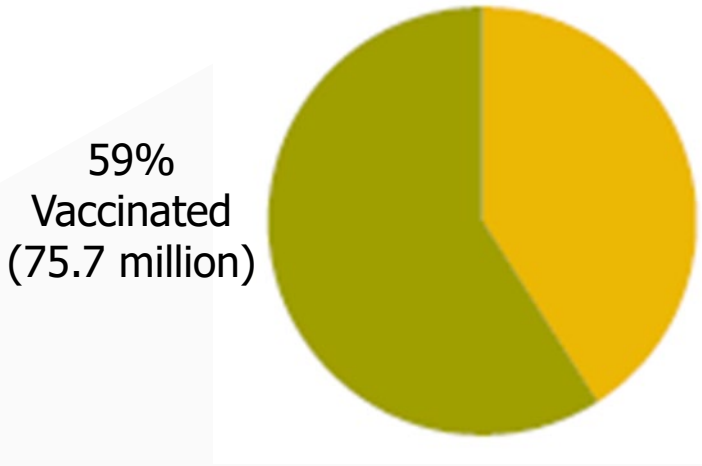
Remaining challenges

Global WUENIC coverage 2022



https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/immunization-coverage/who-unicef-estimates-of-national-immunization-coverage Update of 18 Jul 2023

Global coverage



Other challenges:

- 20% of children in countries without access
- Remaining non-vaccine type IPD, which increased (“replacement disease”)
- Limited suppliers for low-income markets
- Some higher valency PCVs not affordable for LMICs

Summary

Most countries have introduced PCVs → disease declining

PCVs reduce transmission → prevent disease in unvaccinated children & adults

Multiple vaccine manufacturers, including DCVM → good supply

New PCVs could prevent even more disease, but increasing coverage more impactful

LMICs need access to higher valency PCVs

HPV vaccines and impact (introduction into the EPI schedule, and IVAC's role)

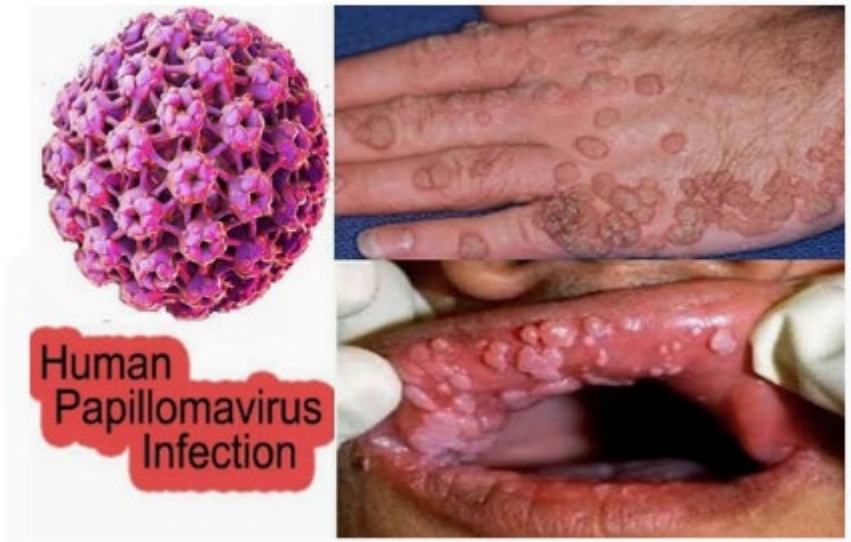
JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH | IVAC International Vaccine Access Center

Presented by Dr. Chizoba Wonodi, MBBS, MPH, DrPH,

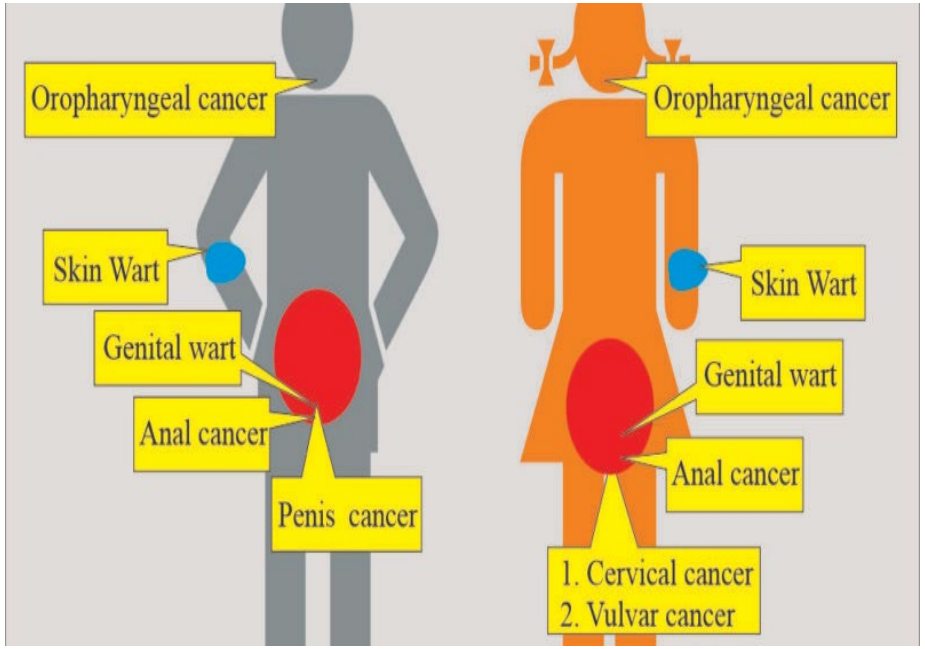
April 25, 2024

The Human Papillomavirus (HPV)

- HPV infection is a common sexually transmitted infection in men and women
- There are over 100 types of HPV, 12 of these are high risk (cancer causing)
- HPV infection resolves spontaneously in most people
- However, in some people, persistent infection can lead to skin and oral warts and oro-genital cancers in both men and women
- HPV causes nearly all cervical cancers

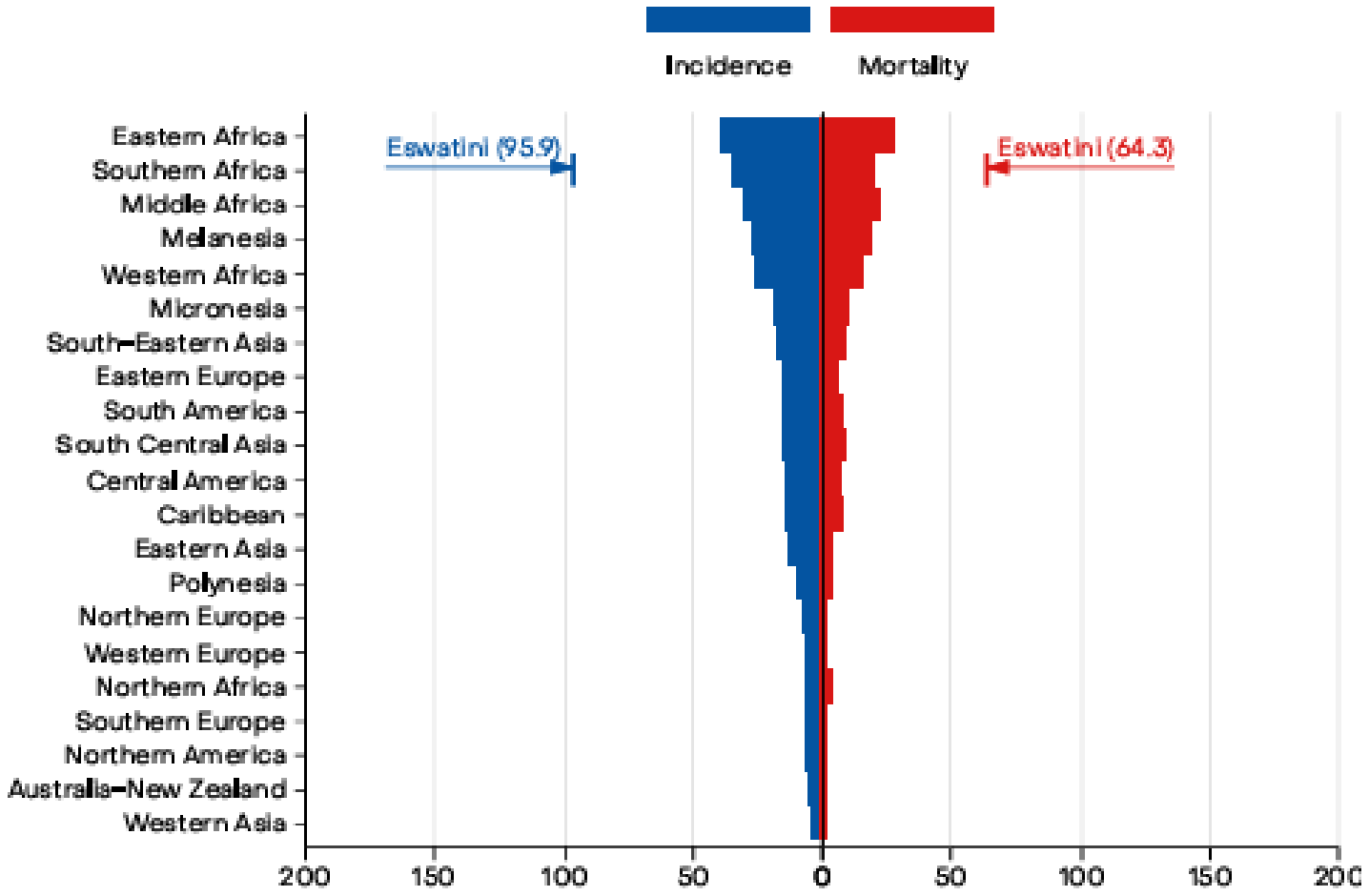


Skin and oral warts



Cervical cancers is a major public health and equity challenge

Age-standardized (World) incidence and mortality rates of cervical cancer, both sexes, per region



https://gco.iarc.who.int/media/globocan/factsheets/cancers/23-cervix-uteri-fact-sheet.pdf

- Huge regional disparity in burden
  - (>40 per 100,000)
    Vrs
  - (<3 per 100,000)

About 4.5% of all cancers worldwide (630,000 new cancer cases per year) are attributable to HPV: 8.6% in women and 0.8% in men

- About 90% of deaths from cervical cancer occurred in low- and middle-income countries [1].

*He, W.Q. and Li, C., 2021. Recent global burden of cervical cancer incidence and mortality, predictors, and temporal trends. *Gynecologic oncology*, *163*(3), pp.583-592.

The WHO Strategy for cervical cancer elimination

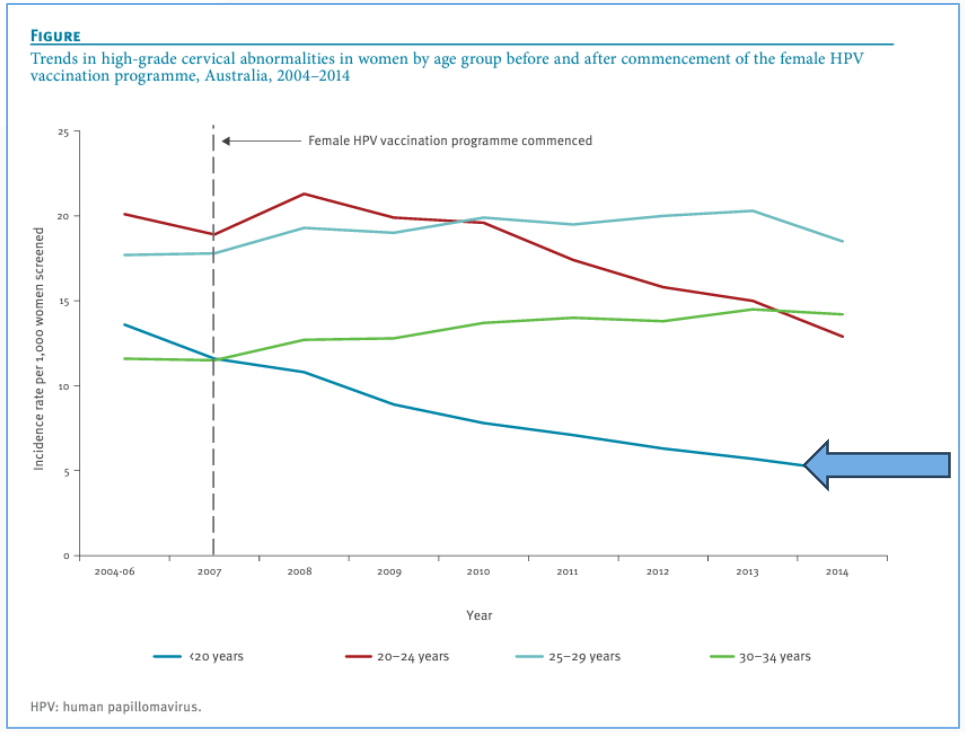
By 2030, 90% of girls should be fully vaccinated with HPV vaccine at 15 years of age

70% of women should be screened using a high-performance test by age 35, and again by age 45

90% of those identified with cervical disease should receive appropriate treatment.

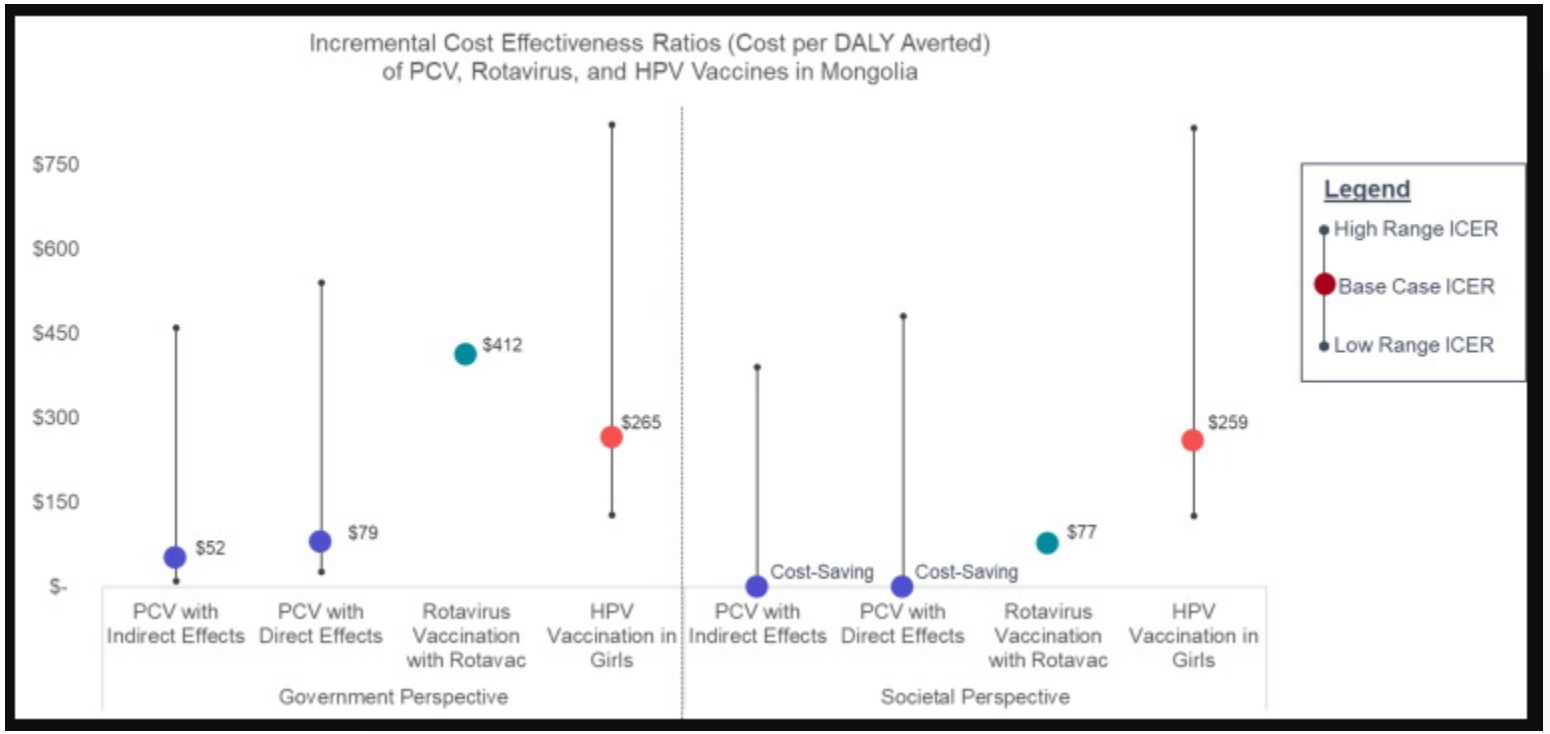
WHO position paper on HPV vaccinations

- Six licensed HPV vaccines: three bivalent, two quadrivalent, and one nonavalent vaccine.
- All vaccines are highly efficacious in preventing infection with virus types 16 and 18, which are together responsible for approximately 70% of cervical cancer cases globally.
- Highly efficacious in preventing precancerous cervical lesions caused by these virus types.
- The quadrivalent vaccine is also highly efficacious in preventing anogenital warts, a common genital disease which is virtually always caused by infection with HPV types 6 and 11.
- The nonavalent provides additional protection against HPV types 31, 33, 45, 52 and 58.
- Data from clinical trials and initial post-marketing surveillance conducted in several continents show HPV vaccines to be safe.
- The primary target group in most of the countries recommending HPV vaccination is young adolescent girls, aged 9-14. For all vaccines, the vaccination schedule depends on the age of the vaccine recipient.

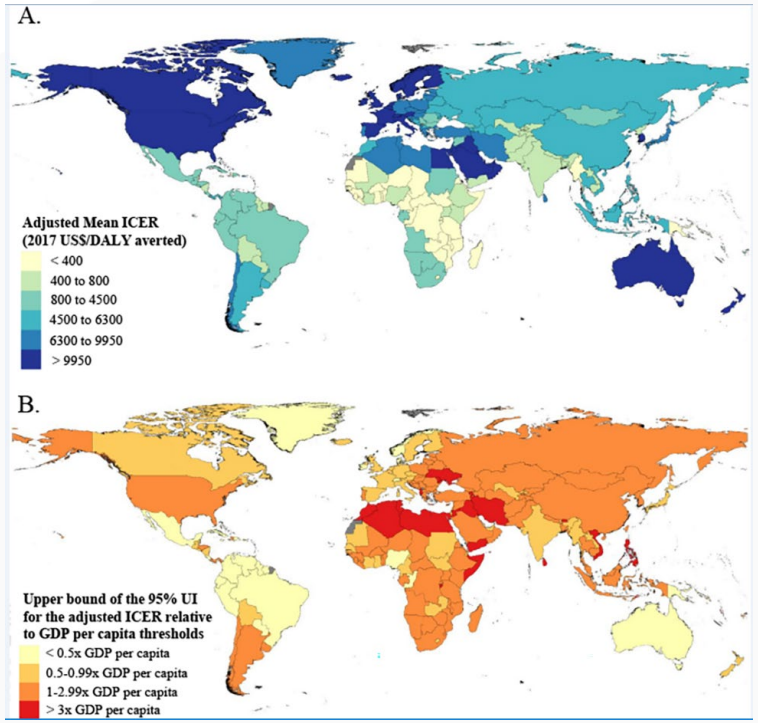


Patel Cyra et al. The impact of 10 years of human papillomavirus (HPV) vaccination in Australia: what additional disease burden will a nonavalent vaccine prevent?. Euro Surveill. 2018;23(41):pii=1700737. https:// doi.org/10.2807/1560-7917.ES.2018.23.41.1700737

HPV vaccines is one of the most cost-effective vaccines

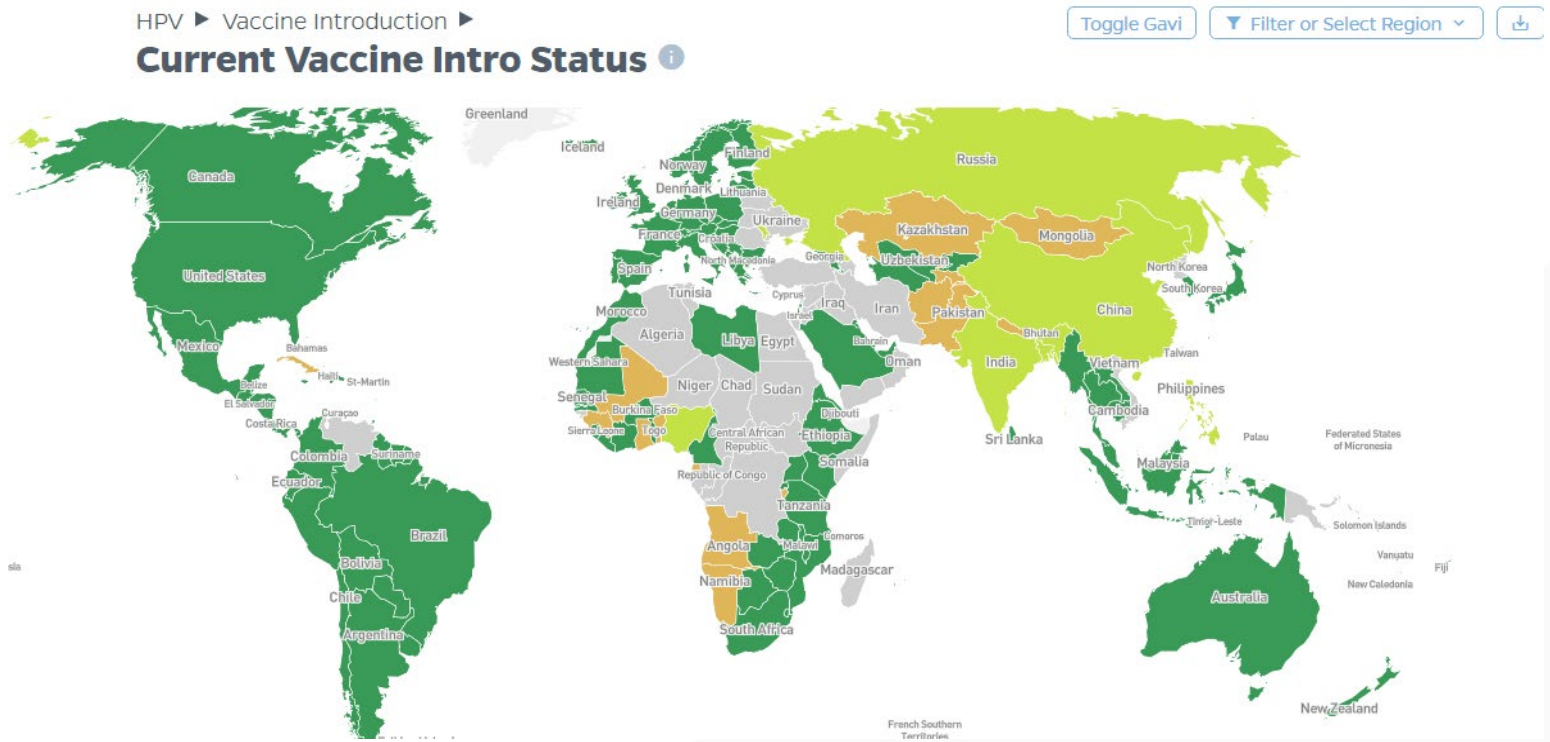


Munkh-Erdene Luvsan, et al The potential cost-effectiveness of HPV vaccination among girls in Mongolia, Vaccine: X,Volume 11, 2022, 100161, ISSN 2590-1362, https://doi.org/10.1016/j.jvacx.2022.100161. (https://www.sciencedirect.com/science/article/pii/S2590136222000213)



Rosettie KL, et al. Cost-effectiveness of HPV vaccination in 195 countries: A meta-regression analysis. PLoS One. 2021 Dec 20;16(12):e0260808. doi: 10.1371/journal.pone.0260808. PMID: 34928971; PMCID: PMC8687557.

Global introduction map



Overview

	Global	Gavi
Introduced	**137**	26
Planning	**18**	10
Not Introduced	**32**	16
Introduced Subnationally	**7**	2

WHO recommended schedule

Girls 9-14 years	Girls 15-20 years	Women older than 21 years
• One or two dose schedule	• One or two dose schedule	• Two doses with a 6-month interval

A minimum of 2 doses and when feasible 3-doses remain necessary for those known to be immunocompromised and/or HIV-infected.

https://view-hub.org/vaccine/hpv

HPV Revitalization Programs- Global focus

- Gavi alongside other stakeholders are working to

  *accelerate quality HPV vaccine introductions; (2)

  *rapidly improve global and national coverage; and

  *generate long-term programmatic sustainability through integration and optimizing whole-of-family services.

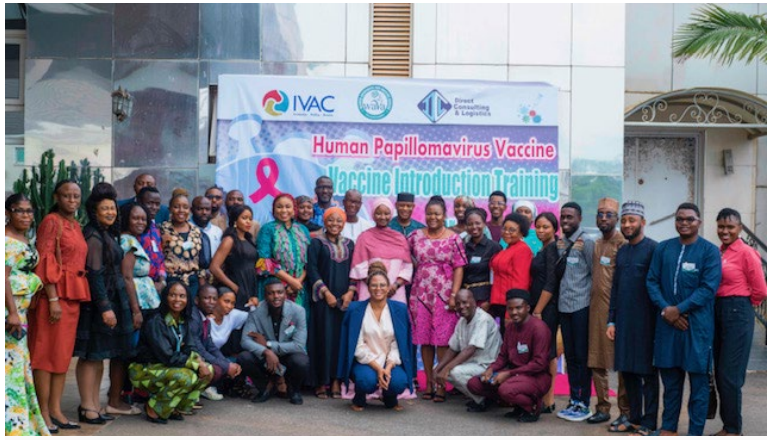
IVAC is supporting the HPV vaccine roll out in Nigeria

The Johns Hopkins International Vaccine Access Centre (IVAC) with funding from Gavi, is working with Direct Consulting and Logistics (DCL) to support the Nigeria with the HPV vaccine roll out in Nigeria

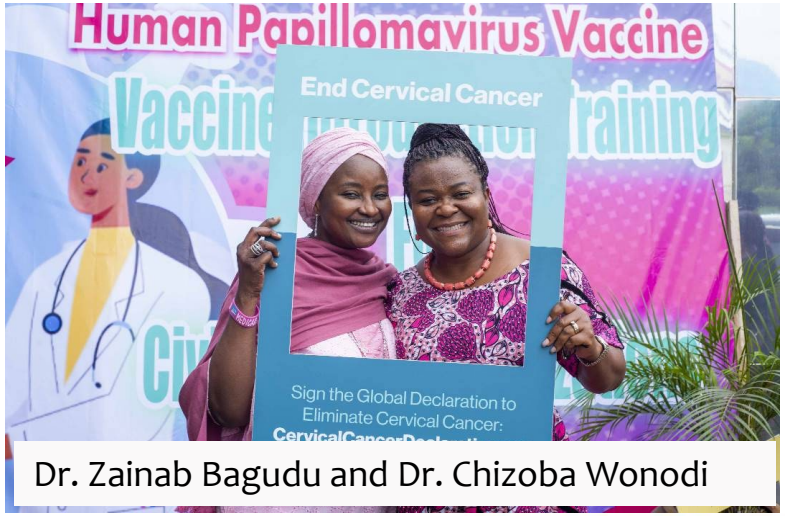
IVAC has trained and equipped > 200 CSOs and young people across 37 states to support demand generation for the HPV vaccine introduction.

The CSOs and youths have in turn activated more than 2,000 community-based vaccine champions

IVAC is a member of the national HPV technical working group and provides technical assistance

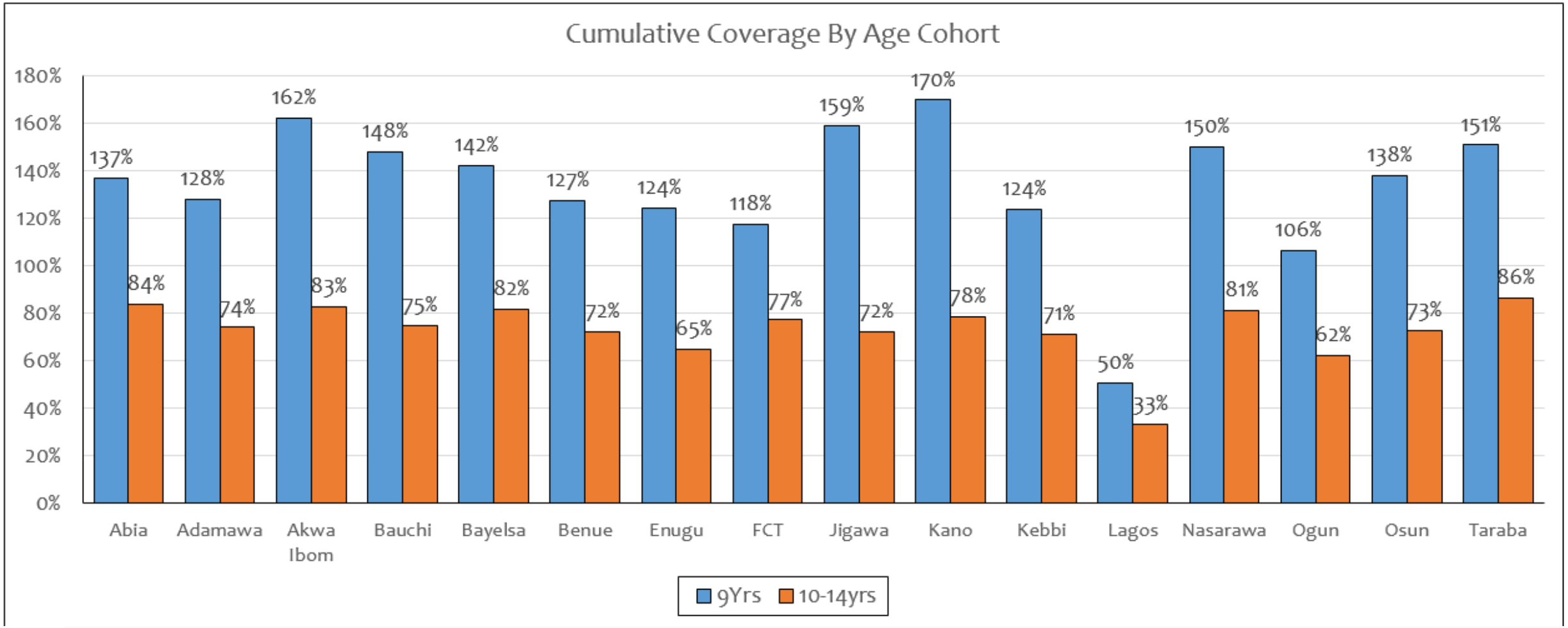


CSOs and the WAVA/DCL team at the training



Dr. Zainab Bagudu and Dr. Chizoba Wonodi

HPV Vaccination Rate Using MAC Campaign Targets (80% of TP). Data as at Feb 6th



Source: NPHCDA

In summary

- HPV is a major cause of cervical and other anogenital cancers globally, with 90% of deaths occurring in low- and middle-income countries.
- Despite the vaccine's introduction in over 137 countries, global coverage stands at 21%. Efforts to optimize coverage include school-based campaigns and catch-up initiatives.
- Challenges include access, affordability, and misinformation.
- IVAC supports countries with technical assistance, advocacy, and capacity building to improve coverage and address challenges.

Thank you