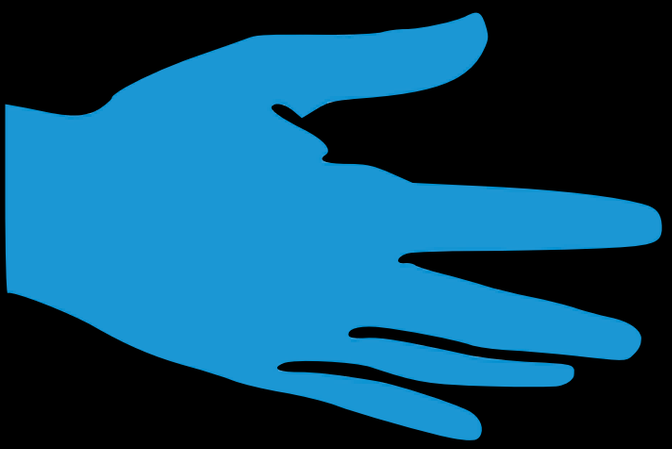
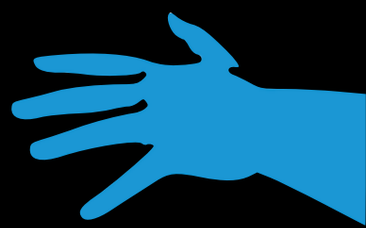
Decisive ACTIONS and stronger COMMITMENT to achieve the Decade of Vaccine Goals



The challenge to the international immunization community



Jean-Marie Okwo-Bele
Director
Department of Immunization, Vaccines & Biologicals
World Health Organization

SAGE meeting
18 October, 2016

World Health Organization

“If you want to build a ship, don’t drum up your men to go to the forest to gather wood, saw it, and nail the planks together. Instead, teach them to yearn for the vast and endless sea.”

Antoine de Saint-Exupéry

WORLD HEALTH ORGANIZATION
SMALLPOX
ZERO
26.10.79

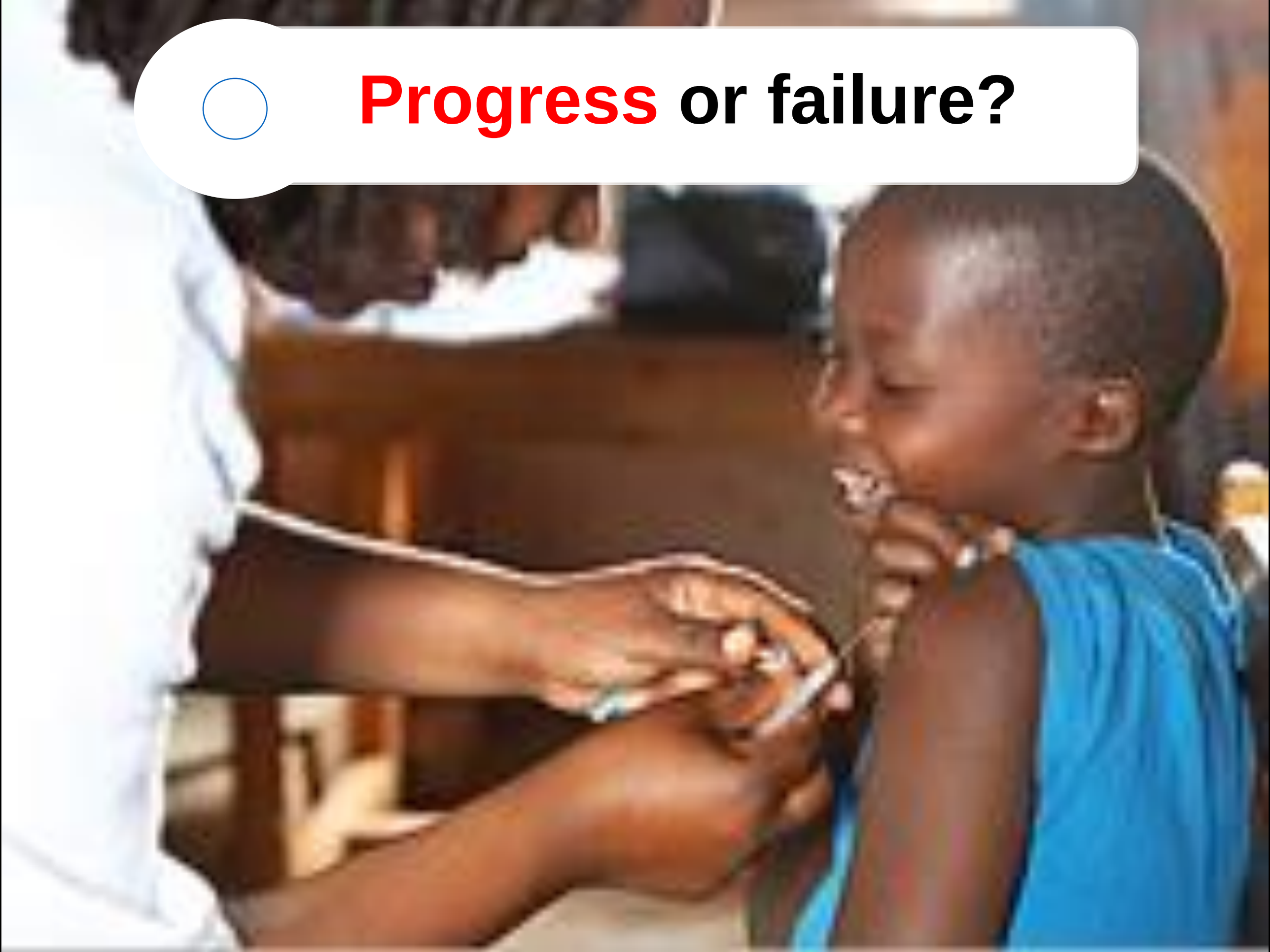
Progress or failure ?

What are the current and recurrent challenges?
Can they be addressed once and for all ?

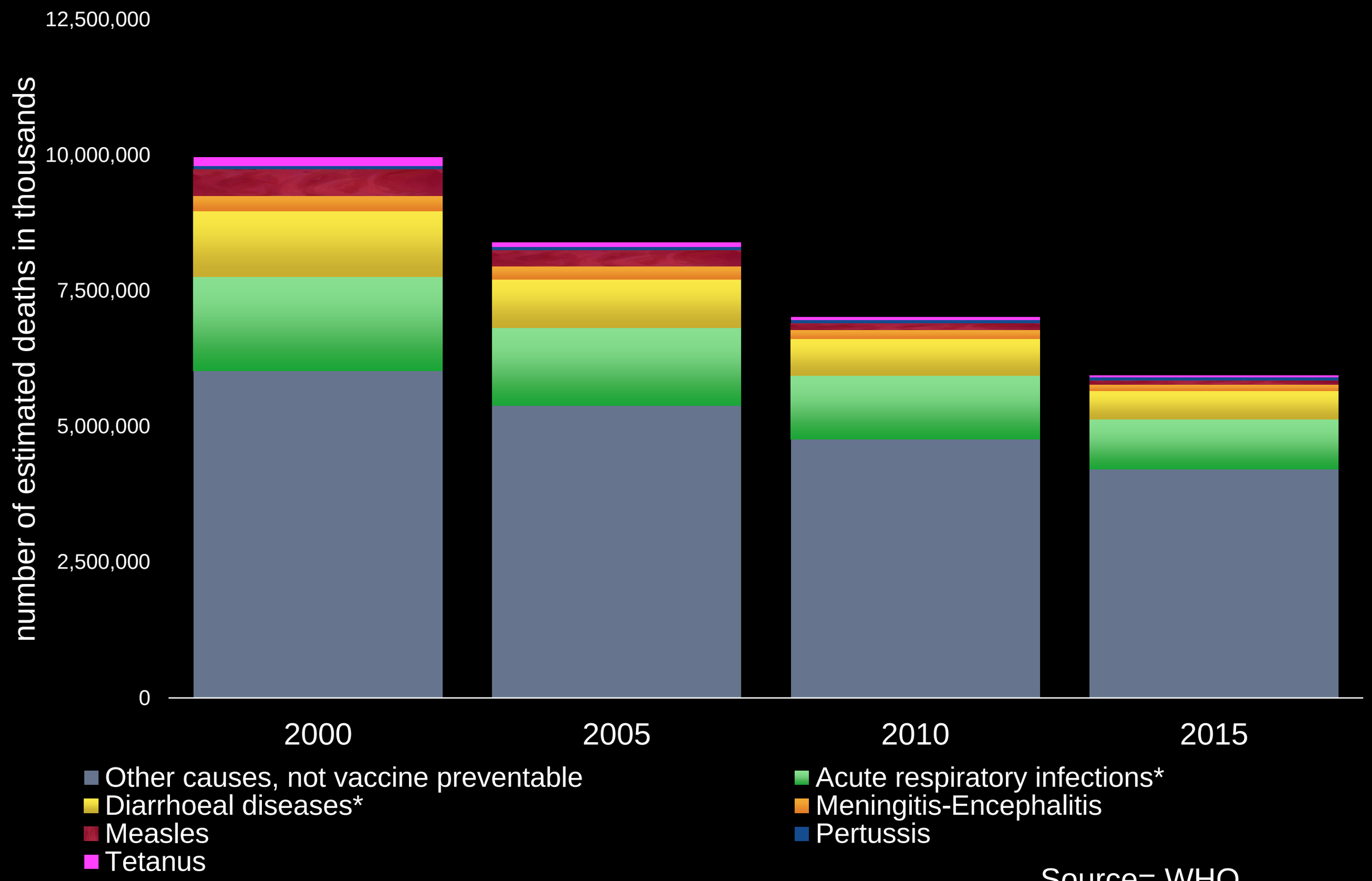
What decisive actions are needed to accelerate progress by mid-2018 ?

What will WHO do ?

Progress or failure?

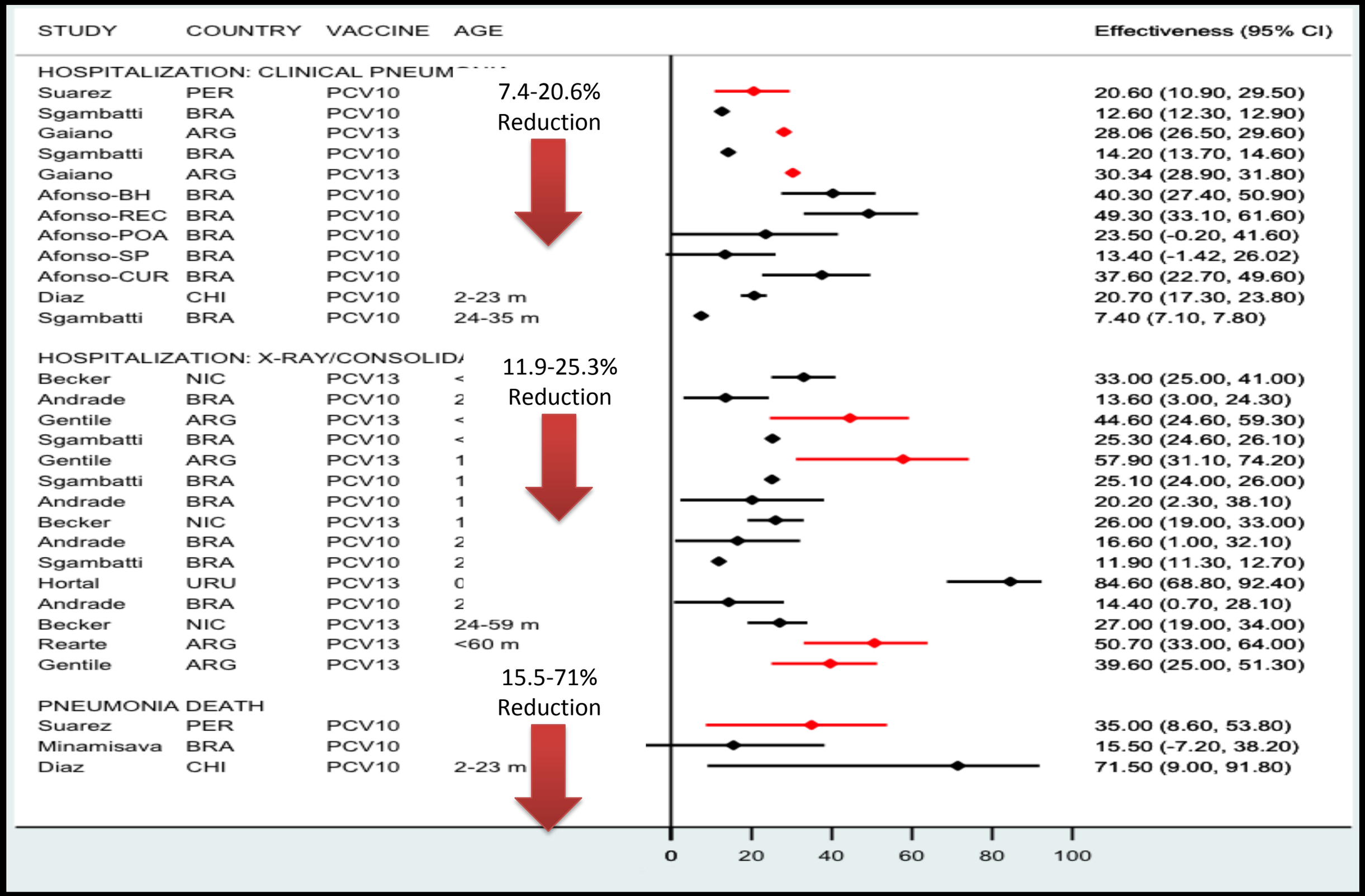


Vaccines have been contributors to the global reduction of under 5 mortality

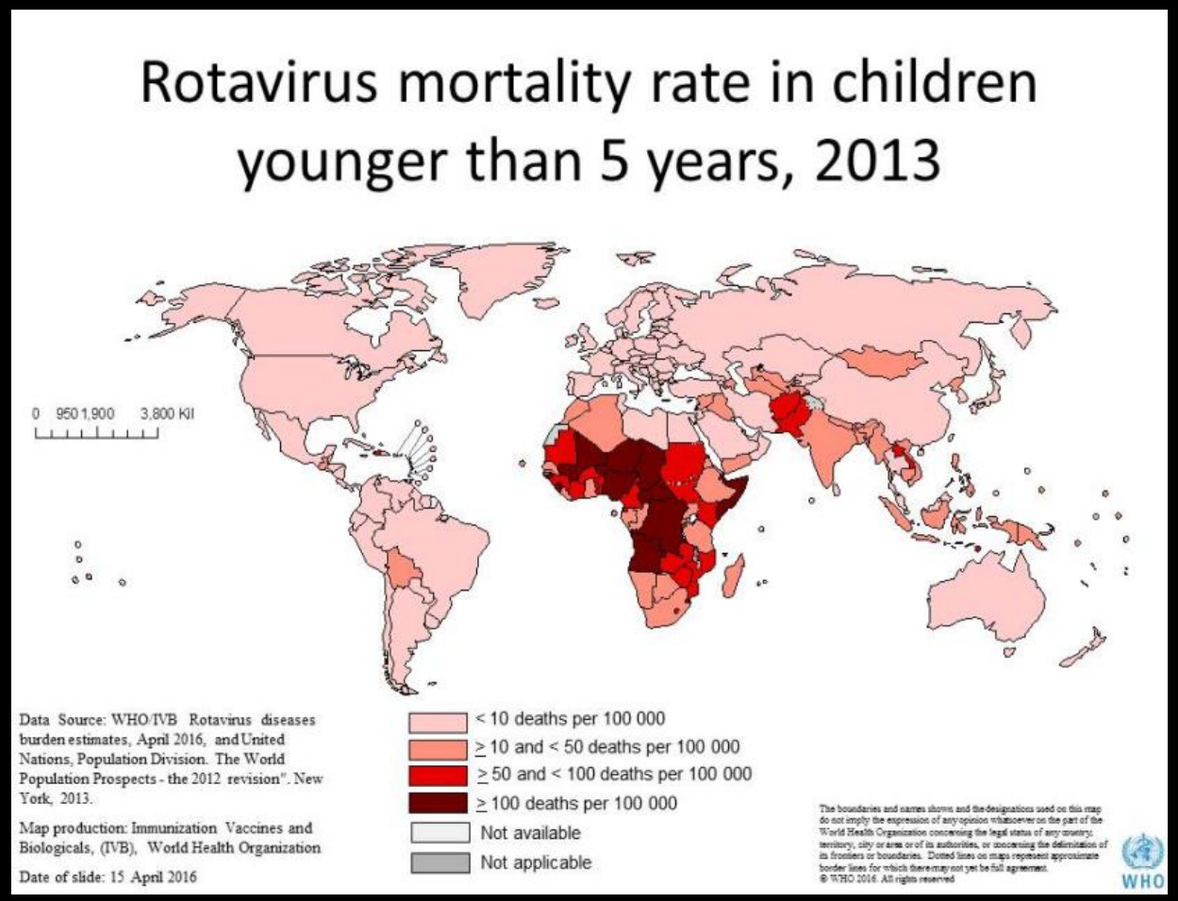


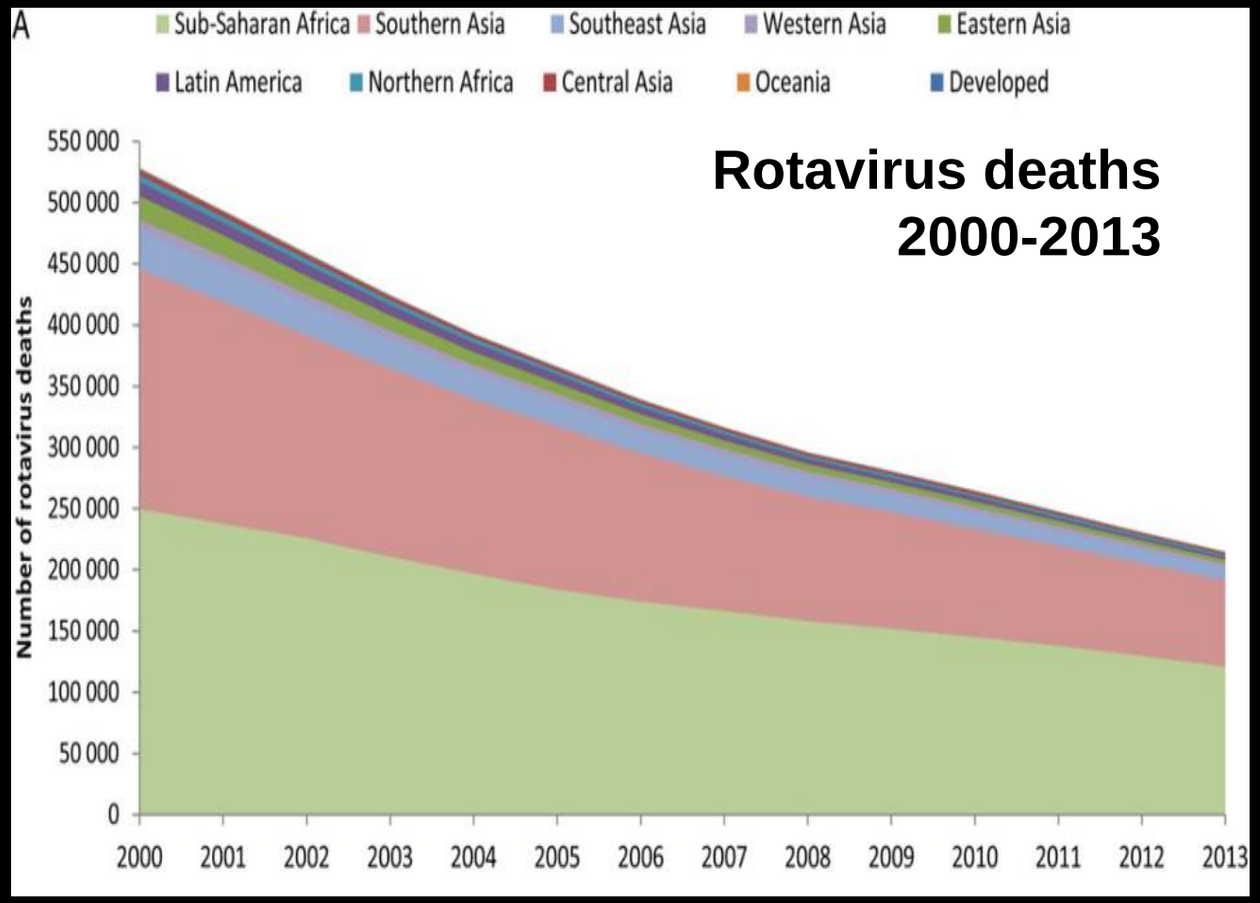
Source= WHO

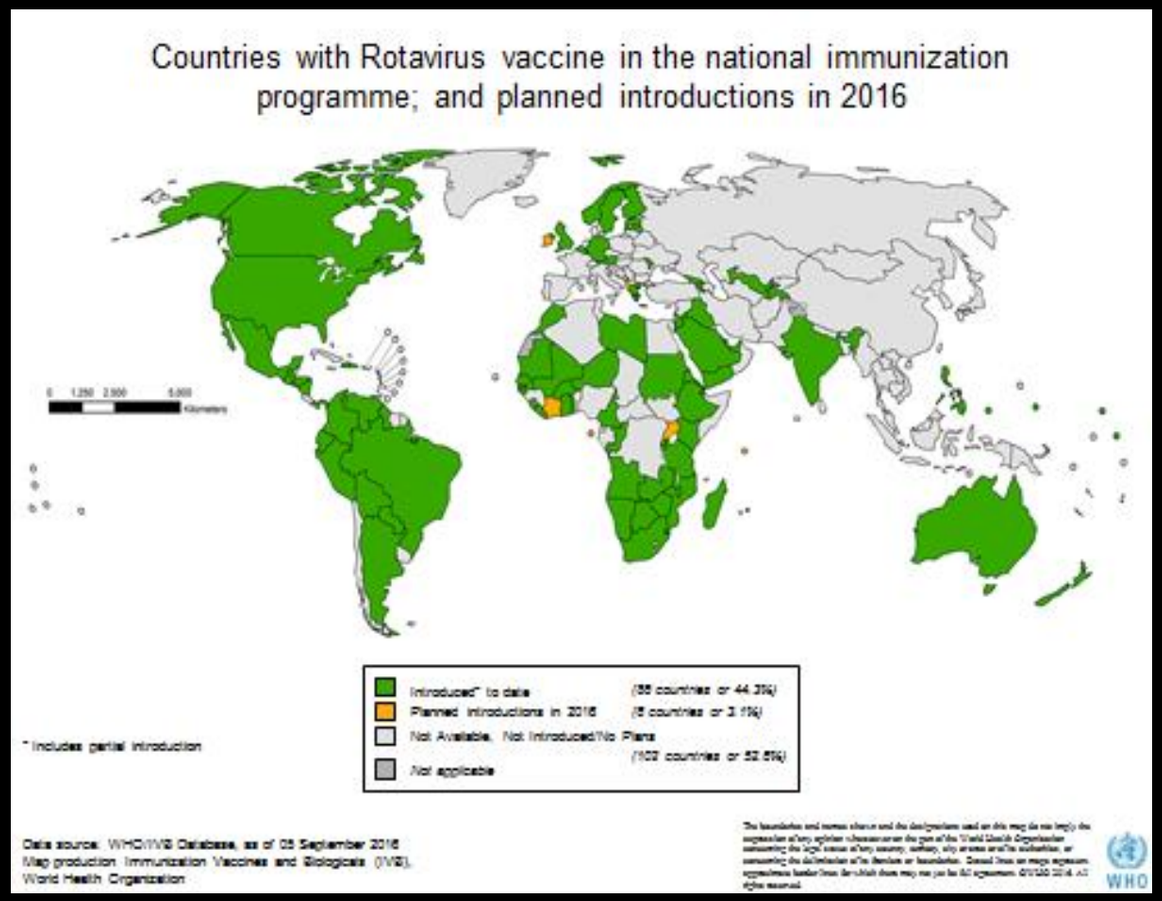
PCV effectiveness against pneumonia hospitalisation and death in Latin America & Caribbean, 2016



Oliveira, L. H. , et al. (2016). Impact & Effectiveness of PCV-10 and PCV-13 on hospitalization and mortality in children under 5 years in Latin America and Caribbean: a systematic review. *Scientific Abstract: ISPPD-10.*





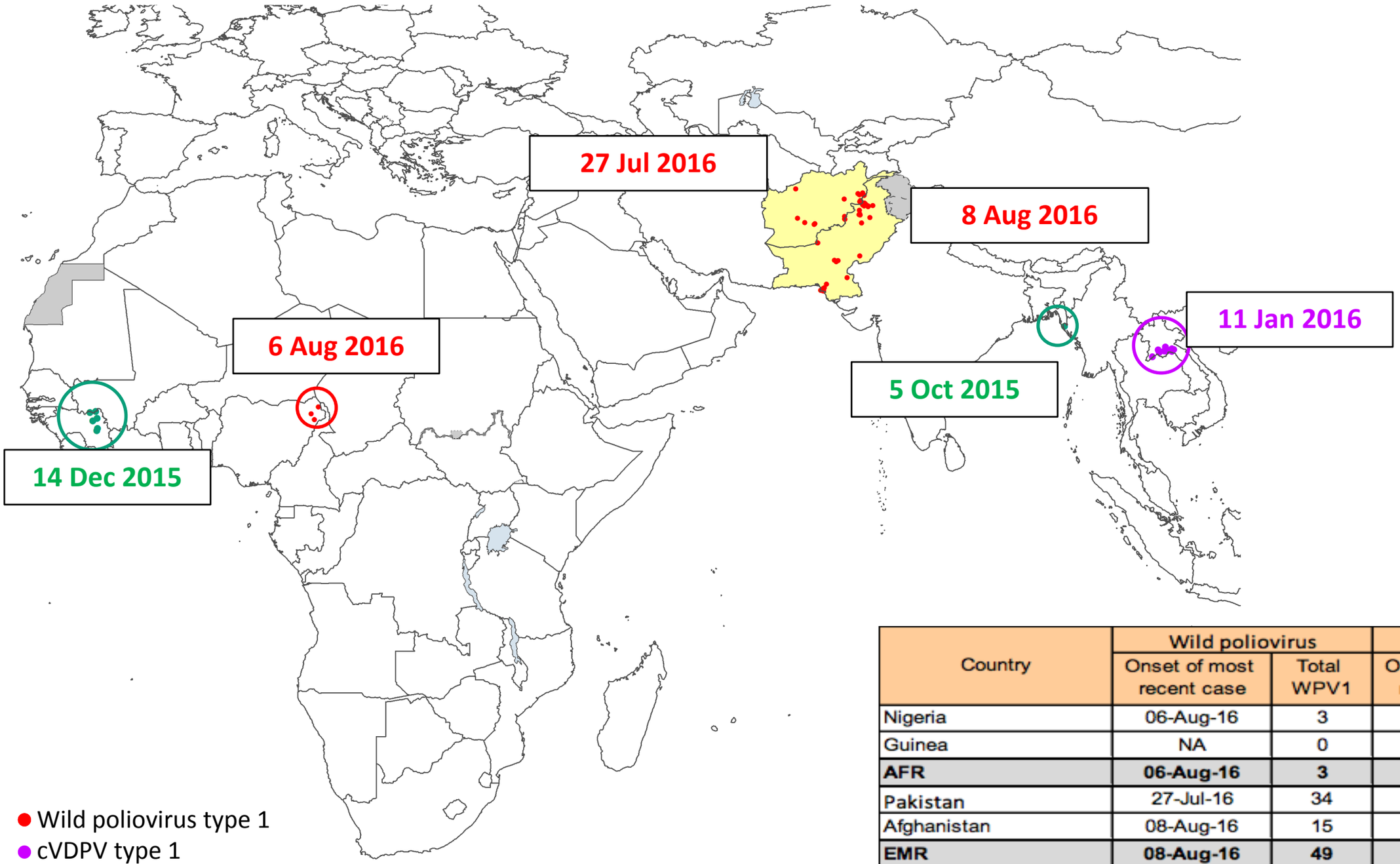


Rotavirus deaths have decreased over time.

But, countries with highest mortality rate are still not benefiting from vaccine

Wild Poliovirus & cVDPV Cases[1], Previous 12 Months[2]

POLIO GLOBAL ERADICATION INITIATIVE



- Wild poliovirus type 1
- cVDPV type 1
- cVDPV type 2
- Endemic country

Country	Wild poliovirus		cVDPV	
	Onset of most recent case	Total WPV1	Onset of most recent case	Total cVDPV
Nigeria	06-Aug-16	3	NA	0
Guinea	NA	0	14-Dec-15	6
AFR	**06-Aug-16**	**3**	**14-Dec-15**	**6**
Pakistan	27-Jul-16	34	NA	0
Afghanistan	08-Aug-16	15	NA	0
EMR	**08-Aug-16**	**49**		**0**
Lao People's Democratic Republic	NA	0	11-Jan-16	11
WPR		**0**	**11-Jan-16**	**11**
Myanmar	NA	0	05-Oct-15	1
SEAR		**0**	**05-Oct-15**	**1**
Global	**08-Aug-16**	**52**	**11-Jan-16**	**18**

NA: most recent case had onset of paralysis prior to rolling 12 months.

[1]Excludes viruses detected from environmental surveillance.
[2]Onset of paralysis 07 Sept 2015 – 06 Sept 2016

Coverage of interventions across the continuum of care, 2015

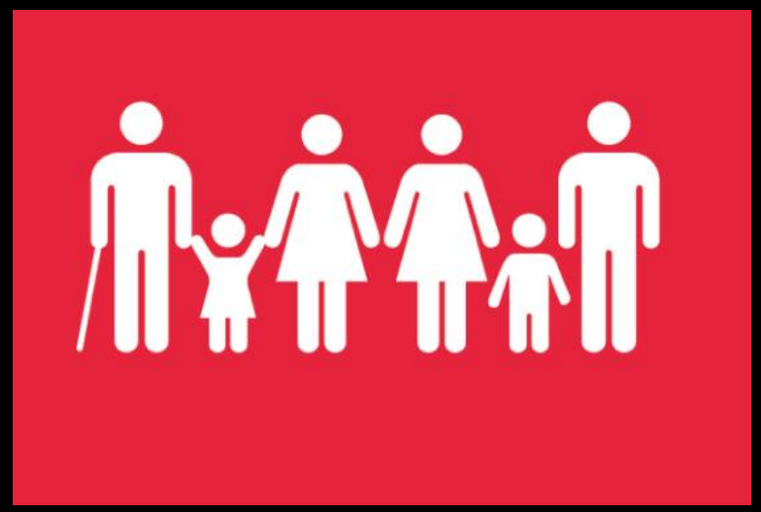
[a] Median national coverage of 75 countries, based on most recent survey 2009 or later.

Source: WHO, 2015. Health in 2015: From MDGs to SDGs. WHO. http://www.who.int/gho/publications/mdgs-sdgs/en/

Immunisation has a broader impact in the communities

Productivity gains

Measles vaccination results in a 9.5% increase in future school enrolment for boys in Bangladesh



Community benefits

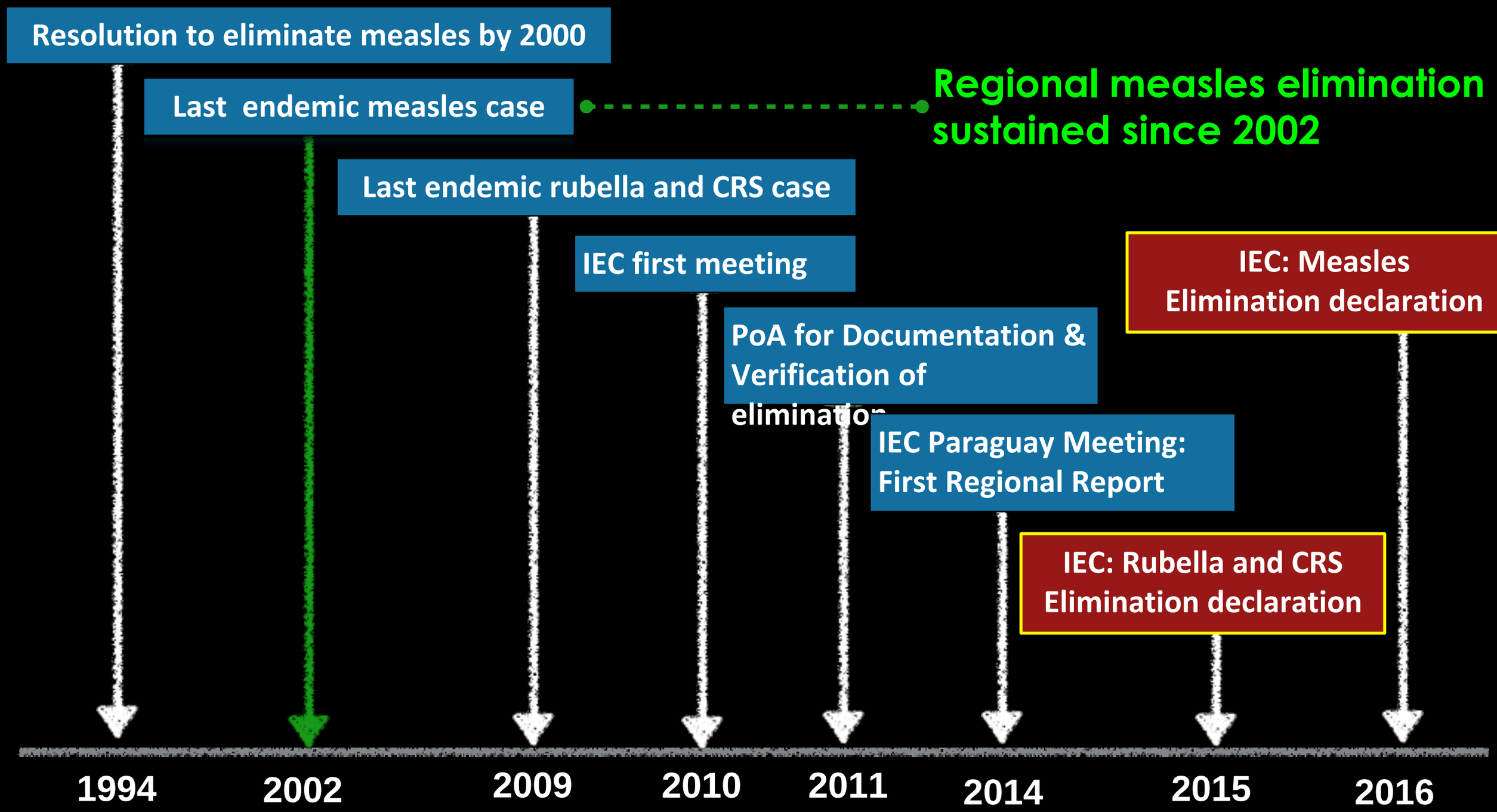
Rotavirus vaccination averts US$800,000 in catastrophic health expenditures, improving **household risk protection** in Ethiopia

Economic impacts

Rotavirus vaccination increases government **net tax revenue** by US$58 million over 50 years in Egypt

trollback.com/the-global-goals

Timeline of Measles, Rubella and CRS elimination in the Americas: 1994-2016



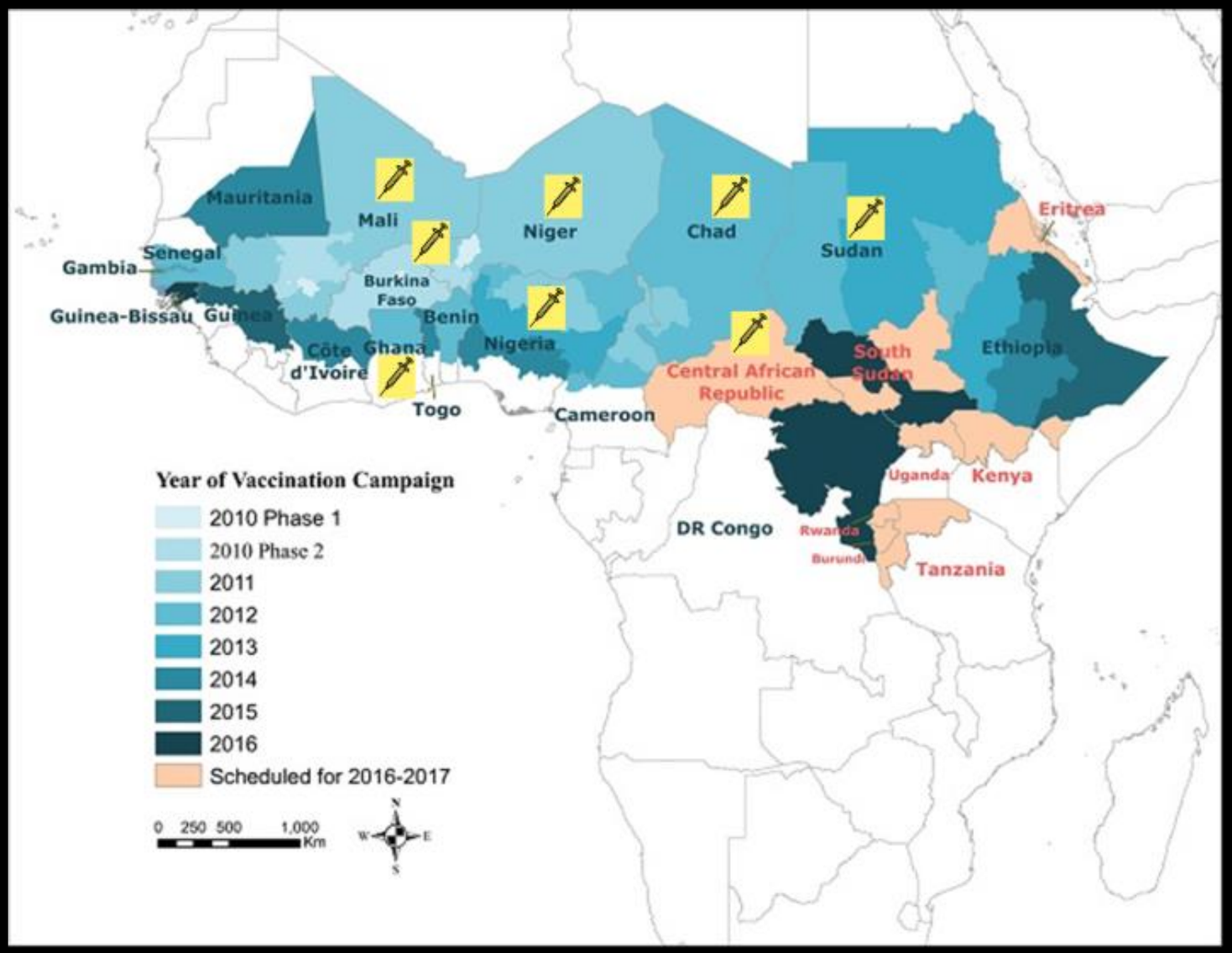
PAHO: Pan-American Health Organization
GVAP: Global Vaccine Action Plan

Pan American Health Organization

World Health Organization
Regional Office for the Americas

Measles Elimination declaration

Meningitis A vaccine



> 260 million immunized

19/26 countries conducted campaigns 1-29 year-olds

8/26 countries introducing in routine national EPI for 9-18 month-olds (2016-mid-2017)

71% decline in risk of meningitis (suspected cases)

>99% decline in risk of NmA meningitis (confirmed cases)

94% reduction in incidence of meningitis in vaccinated vs. unvaccinated districts (suspected cases)

60% decline in risk of epidemics = risk of a district reaching the epidemic threshold

Increase in incidence of non-NmA meningitis not statistically significant

Elimination of NmA carriage in vaccinated & unvaccinated population up to 13 months after mass vaccination, when comparing pre- and post-vaccination carriage prevalence

98% decrease in NmA carriage prevalence 4-6 months after mass vaccination vs. pre-vaccination

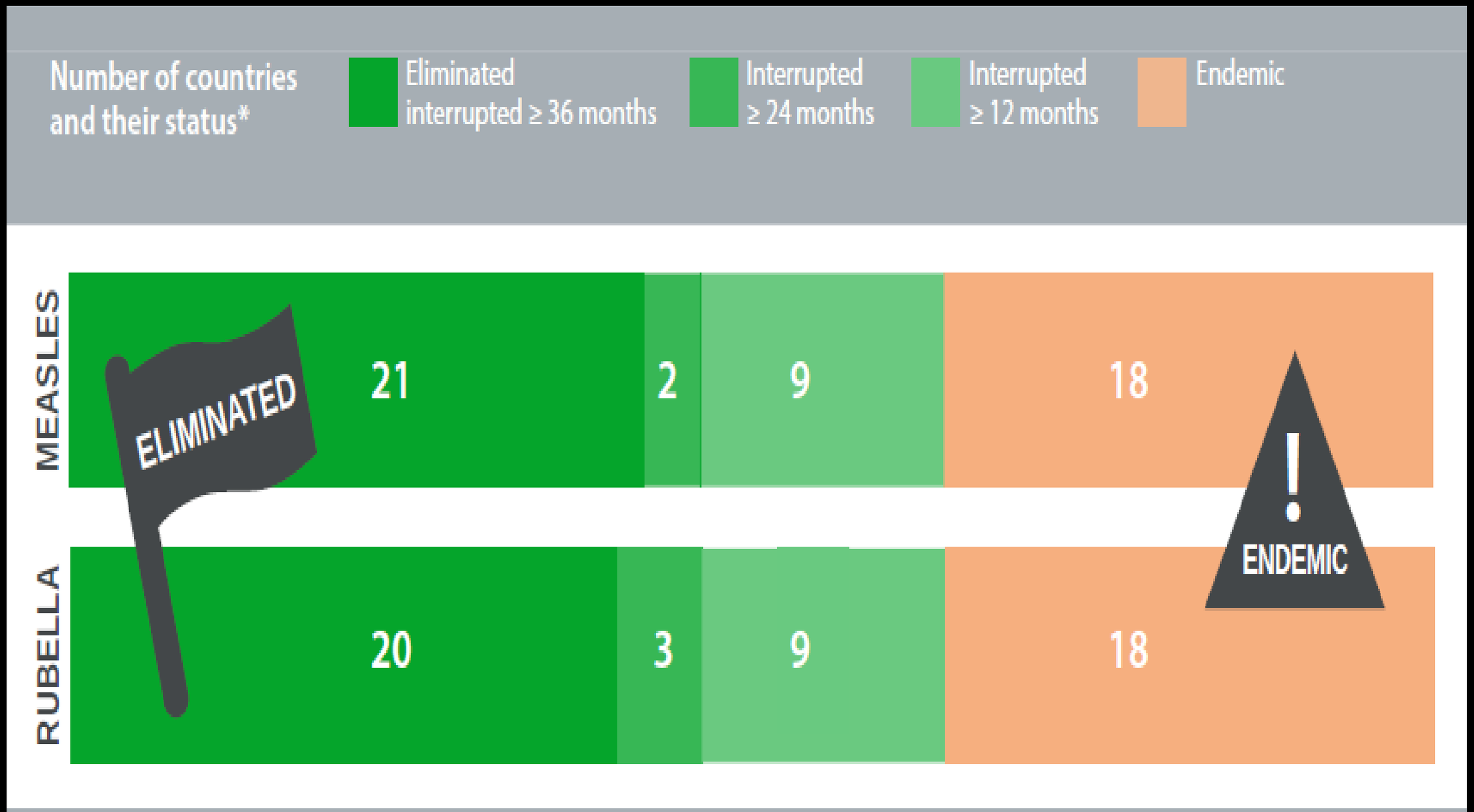
58% decline in incidence of meningitis (suspected cases)

>99% decline in incidence of NmA meningitis (confirmed cases)

Number of Yellow Fever outbreaks reported in West Africa, 2004-2015

EMR is setting the example and showing the way forward with their commitment

Measles and Rubella
Europe is closer than ever to elimination

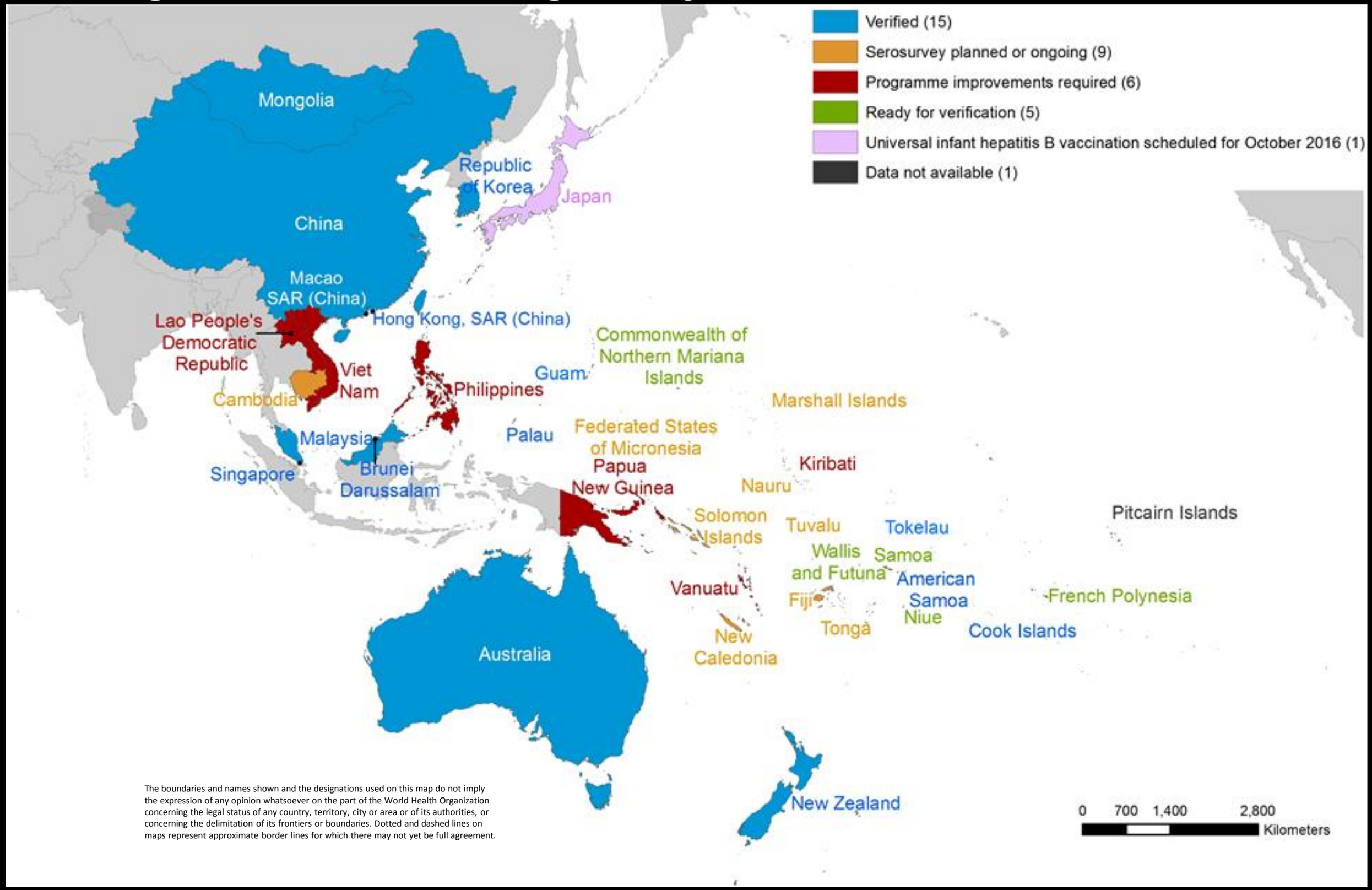


* Conclusions of the 4th Meeting of the European Regional Verification Commission for measles and rubella elimination, October 2015. Three countries have not yet started the verification process.

South–East Asia Region eliminated Maternal and Neonatal Tetanus

Neonatal Tetanus is less than one per 1,000 live births in all the 11 countries

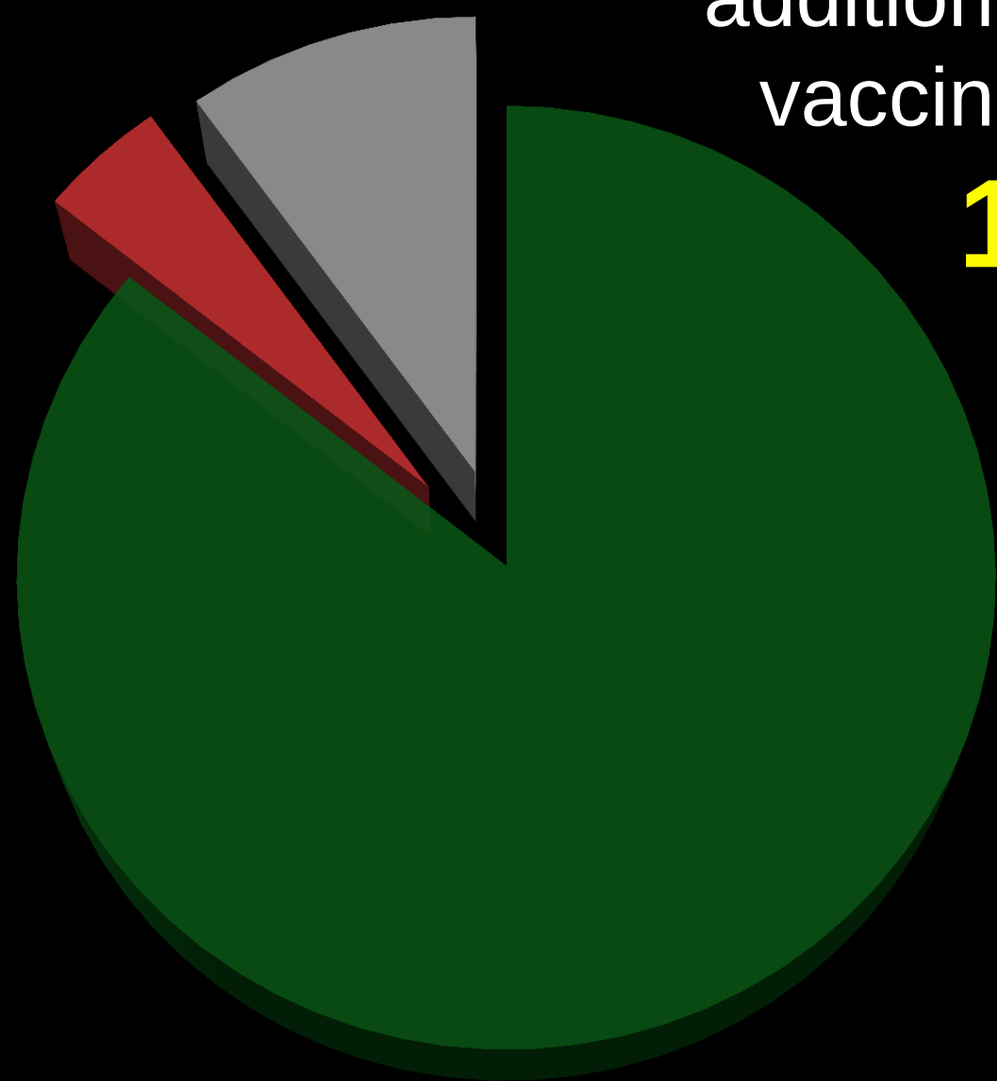
Status of the hepatitis B control through immunization target of <1% among five-year old children in 2016



Infants in the world according to their DTP3 vaccination status, 2015

13.5 M
additional infants to be vaccinated to reach
100%

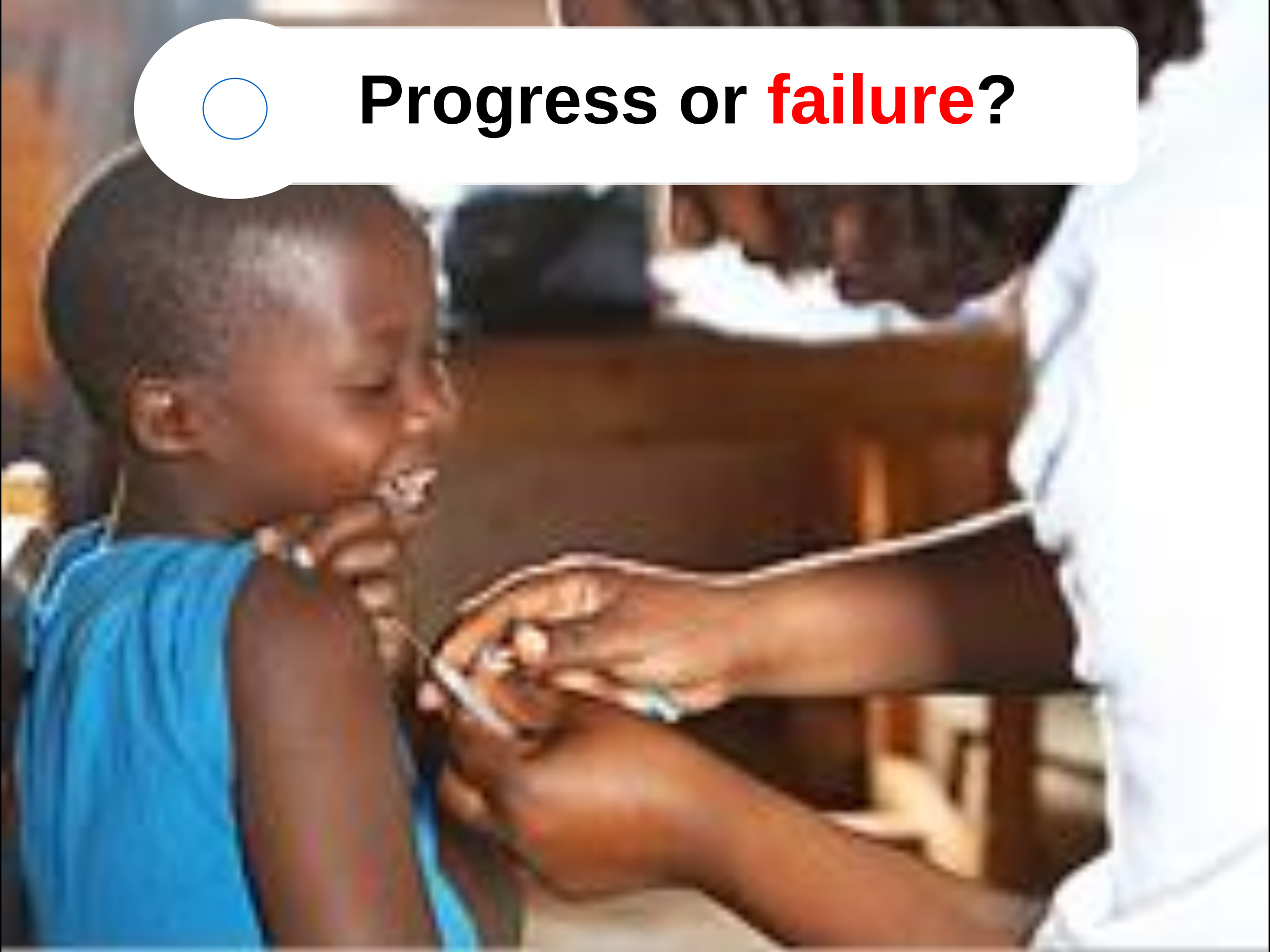
5.9 M
additional infants to be vaccinated to reach
90%



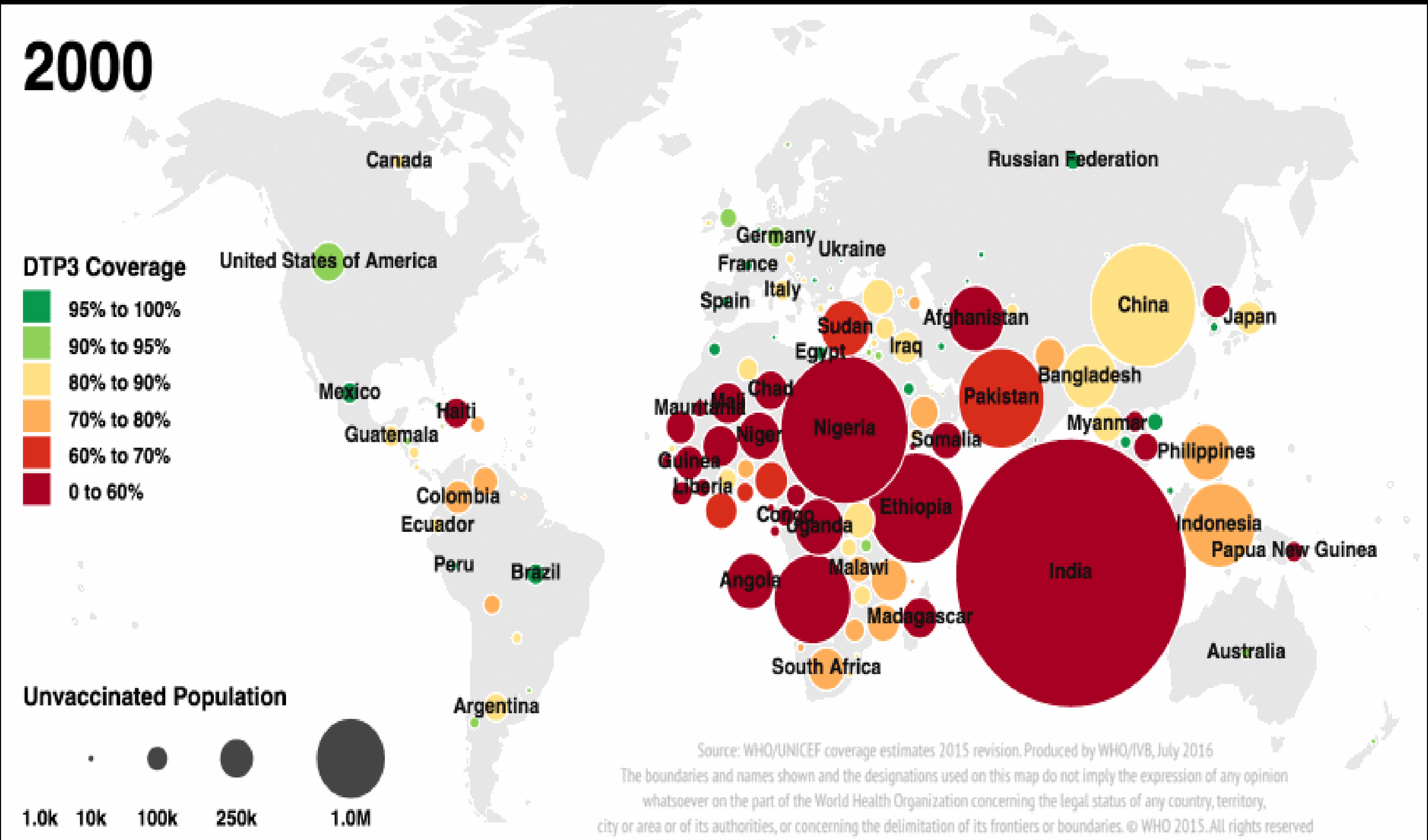
116.1 M
infants vaccinated
86%

Source: JRF 194 WHO Member States. Updated on 18 July 2016

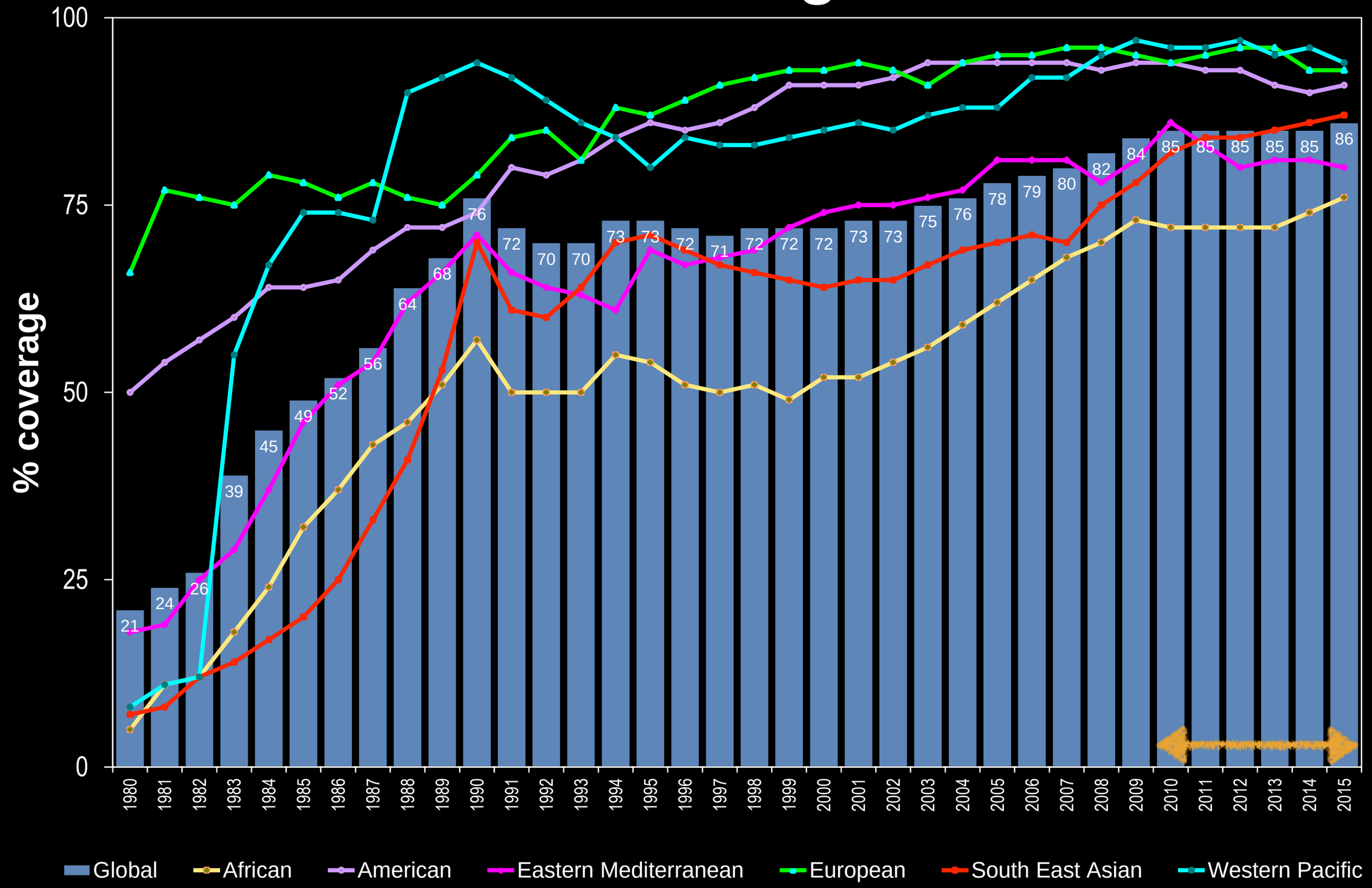
Progress or failure?



Significant progress have been achieved over the last 15 years



Global DTP3 coverage 1980 - 2015



Source: WHO/UNICEF coverage estimates 2015 revision. July 2016
Immunization Vaccines and Biologicals, (IVB), World Health Organization.
194 WHO Member States. Date of slide: 16 July 2016.

What are the current and recurrent challenges?
Can they be addressed once and for all?

Immunisation programmes are more ambitious and complex than ever before

THEN …1970's

3.8 Billion Global population

Infants

All countries 4 vaccines
6 diseases

NOW….2016

Global population 7.3 Billion

Pregnant women
Women Childbearing Age
Adolescents
Children
Infants

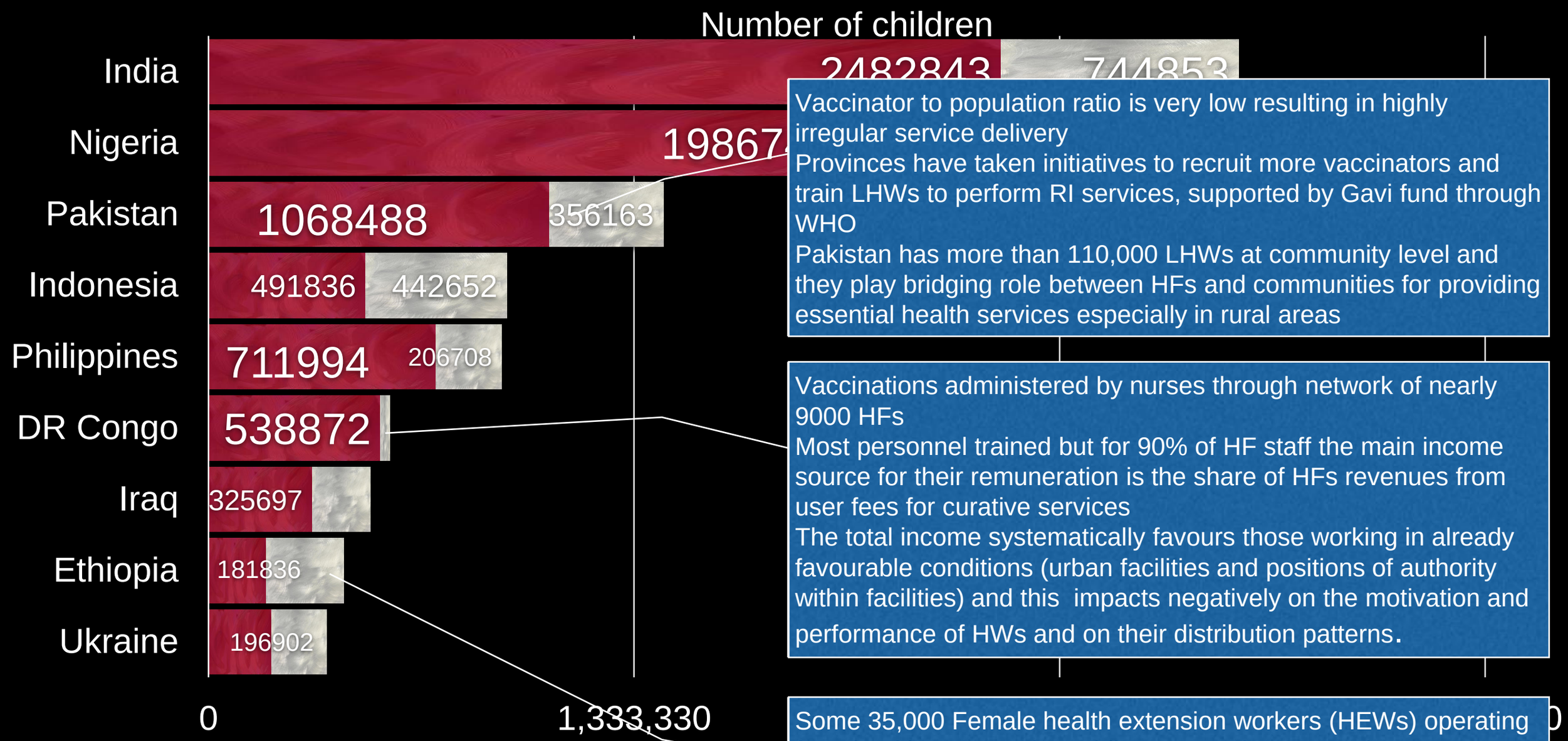
>12 vaccines All countries
>15 diseases

>3 vaccines Some regions
>3 diseases

>7 vaccines High risk popn.
> 10 diseases

>3 vaccines Certain countries
>6 diseases

The 10 countries with most under-vaccinated and un-vaccinated children, 2015



Vaccinator to population ratio is very low resulting in highly irregular service delivery
Provinces have taken initiatives to recruit more vaccinators and train LHWs to perform RI services, supported by Gavi fund through WHO
Pakistan has more than 110,000 LHWs at community level and they play bridging role between HFs and communities for providing essential health services especially in rural areas

Vaccinations administered by nurses through network of nearly 9000 HFs
Most personnel trained but for 90% of HF staff the main income source for their remuneration is the share of HFs revenues from user fees for curative services
The total income systematically favours those working in already favourable conditions (urban facilities and positions of authority within facilities) and this impacts negatively on the motivation and performance of HWs and on their distribution patterns.

Some 35,000 Female health extension workers (HEWs) operating from health posts and providing range of MCH services are considered a key factor in the country's increase in immunization coverage since 2004
Assessments have found deficiencies in skills and knowledge (requiring additional training) as well as gaps in the supervision, monitoring and accountability of HEWs

Source: WHO/UNICEF coverage estimates 2015 revision. July 2016
Immunization Vaccines and Biologicals, (IVB), World Health Organization.
194 WHO Member States. Date of slide: 19 July 2016

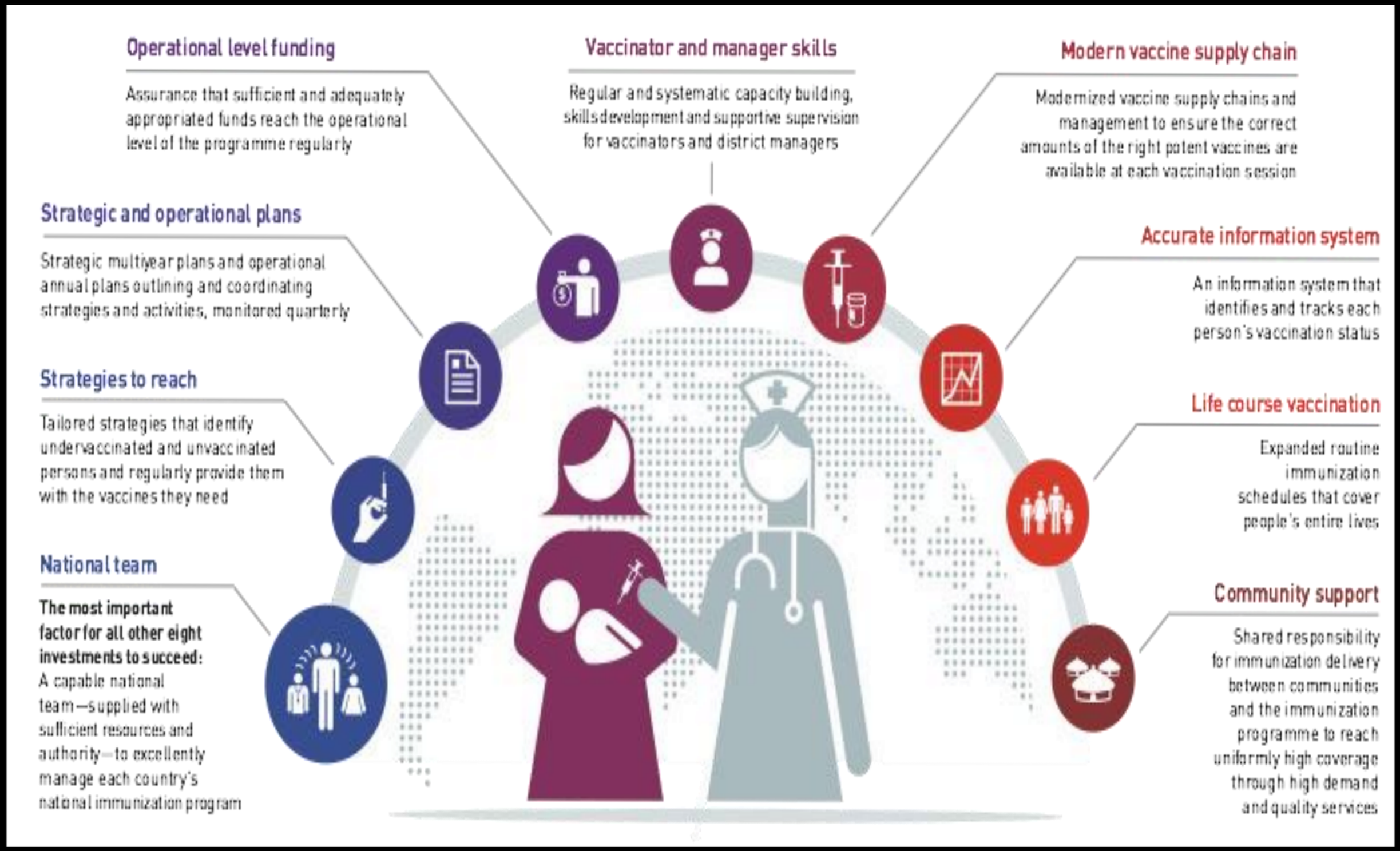
There are huge issues that have to be tackled immediately:

Stronger national leadership

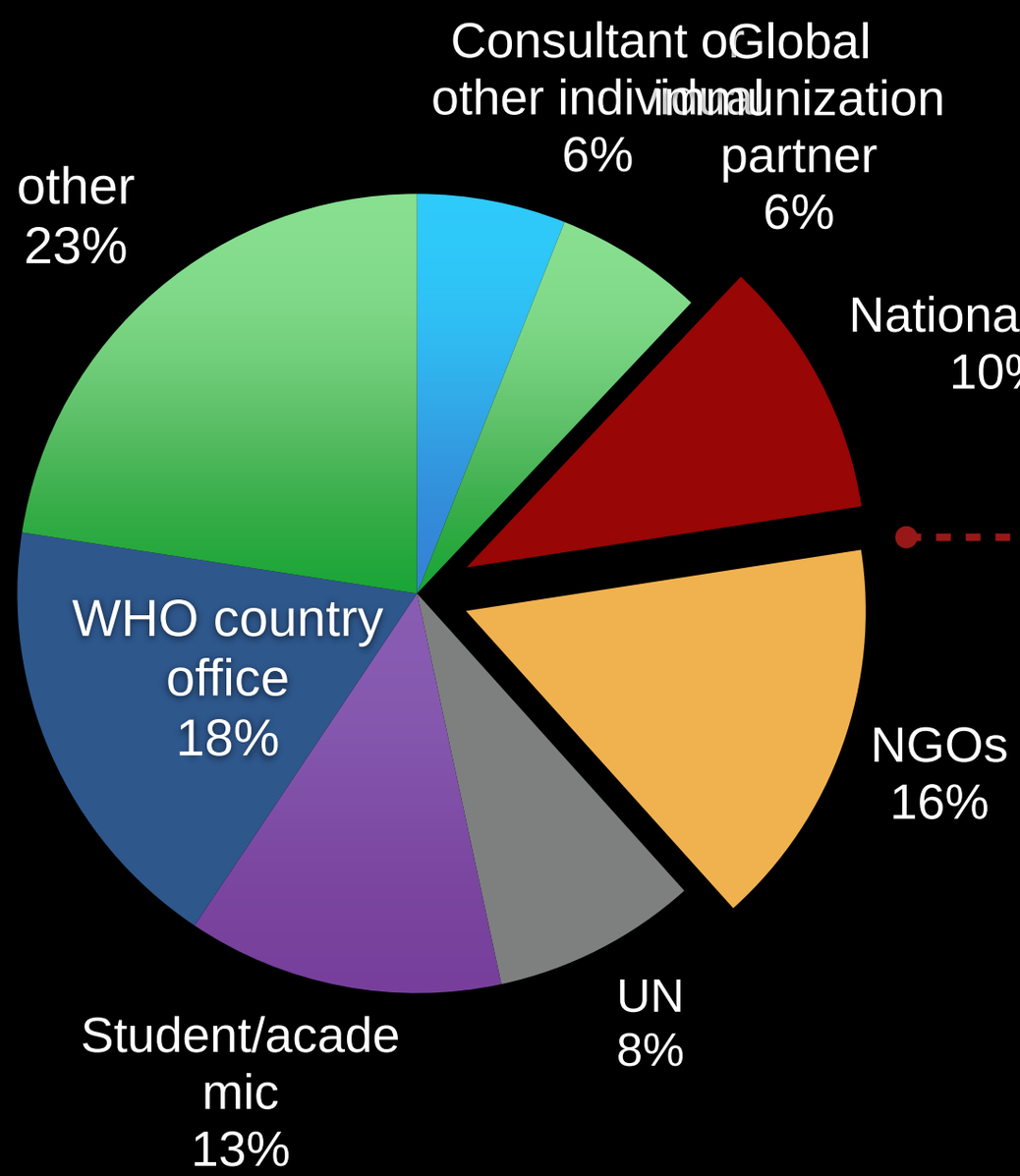
Reliable and timely systems for funding and disbursement

Transparent mechanisms to monitor “ top level” issues

Global Routine Immunization Strategies and Practices Training for middle level managers



Global Routine Immunization Strategies and Practices Training for middle level managers



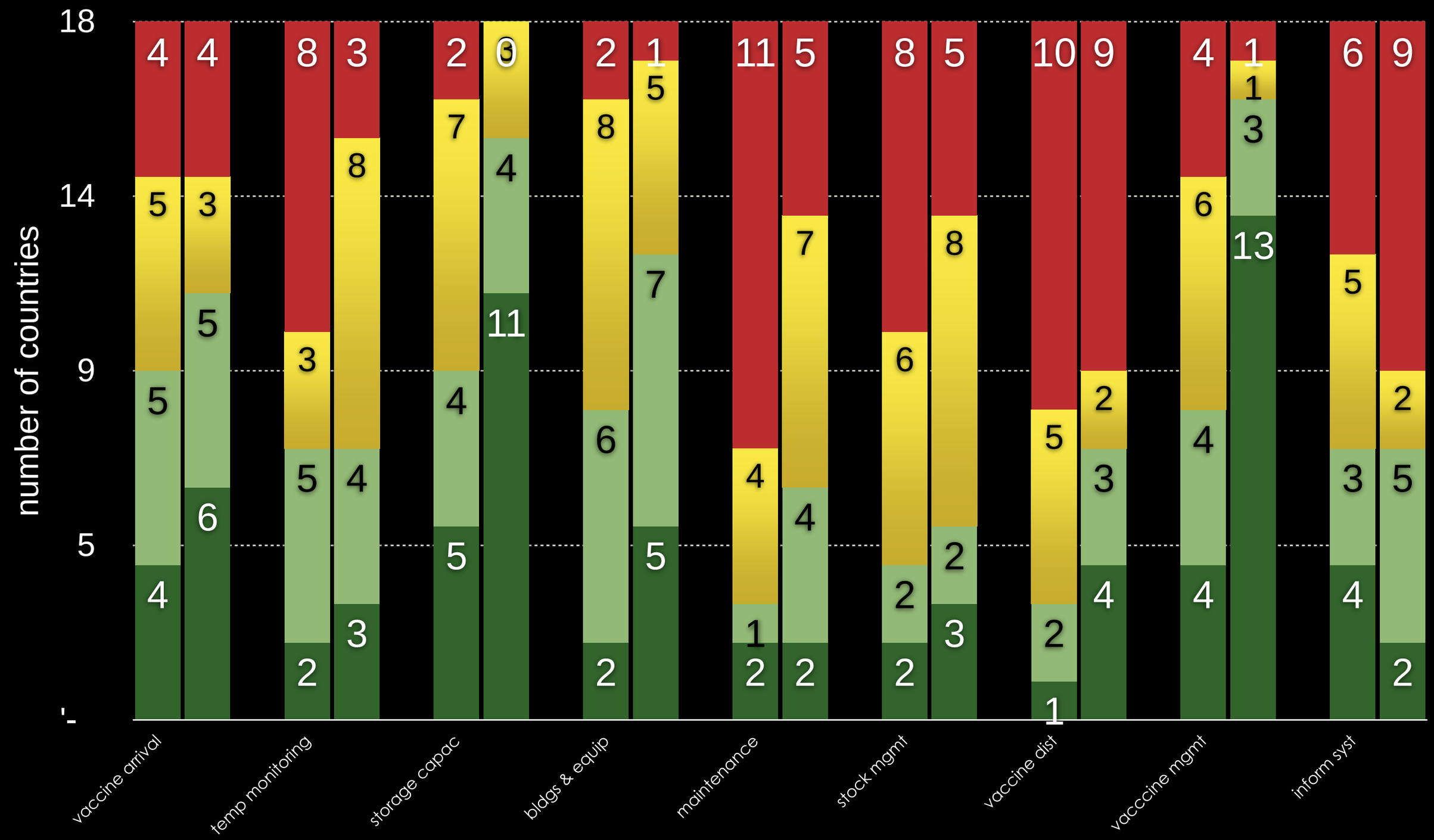
872 people applied

85 participants

30 countries

79% with 5 years or more EPI experience

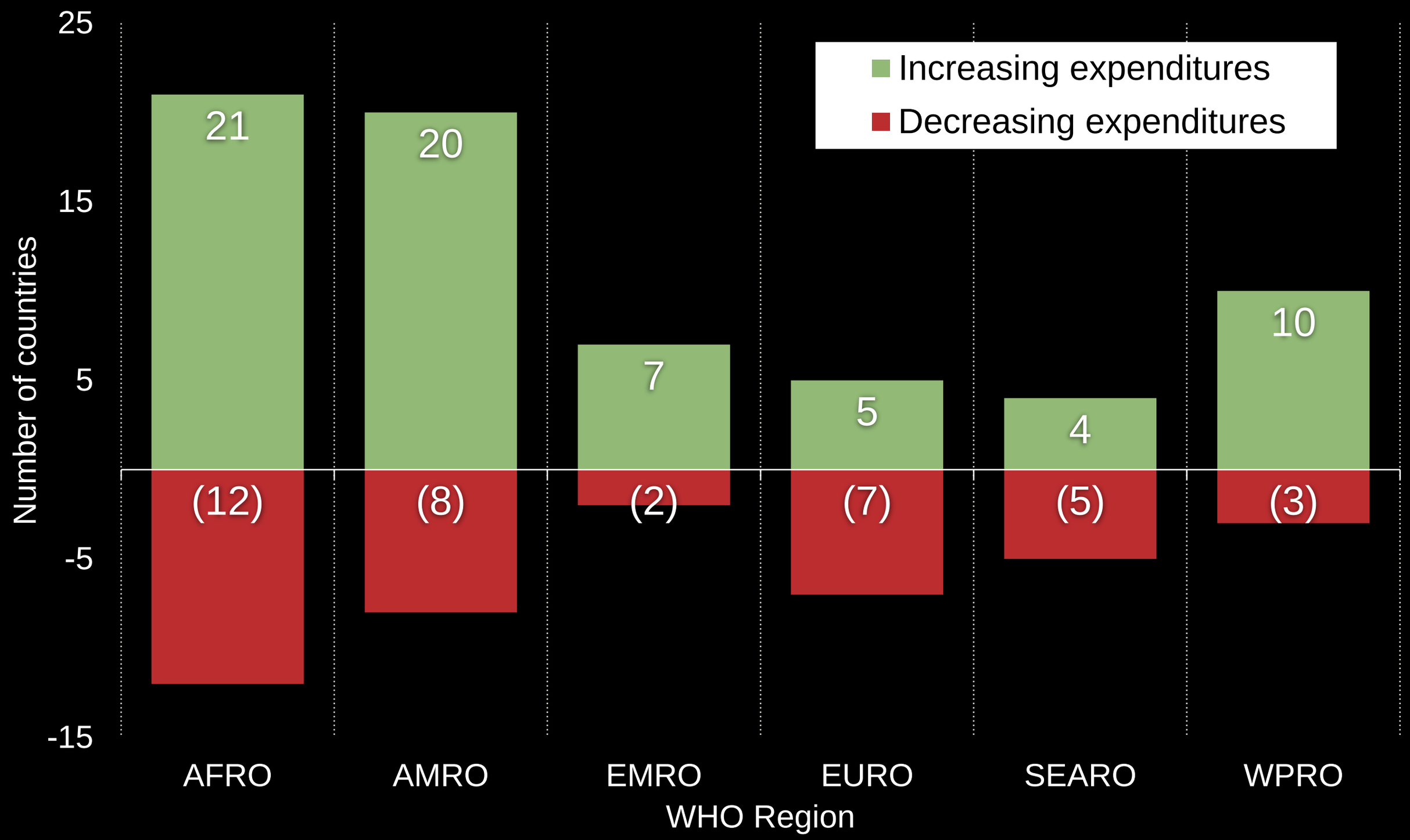
Countries according to Effective Vaccine Management criteria Results from previous evaluation and 2015



Source – WHO, 2016

80%&+ 70-80% 60-70% <60%

Trends in country expenditures in the immunisation programme by Region (2010-2015)



Note: Number of countries reporting increasing/decreasing trends of Government Expenditure on Routine Immunization
Source: JRF, WHO-UNICEF

Participation of countries in WHO's Vaccine Product, Price and Procurement (V3P) Web Platform

2013

AMR & UNICEF

- 96 countries participating

2014

AMR, UNICEF plus 26 additional countries

- 118 countries participating
- New data from Europe becomes available through V3P.

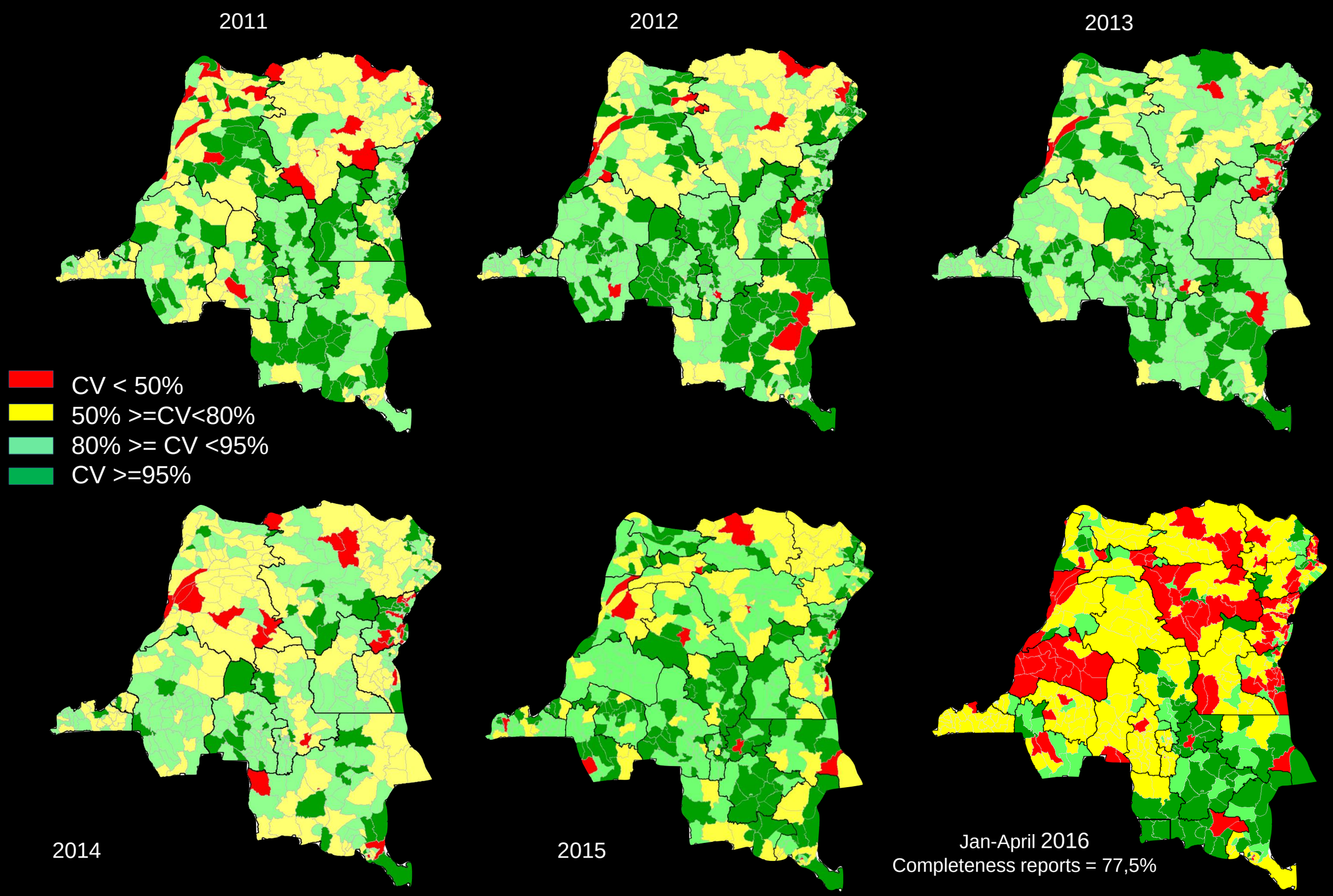
2015

AMR, UNICEF plus 40 countries

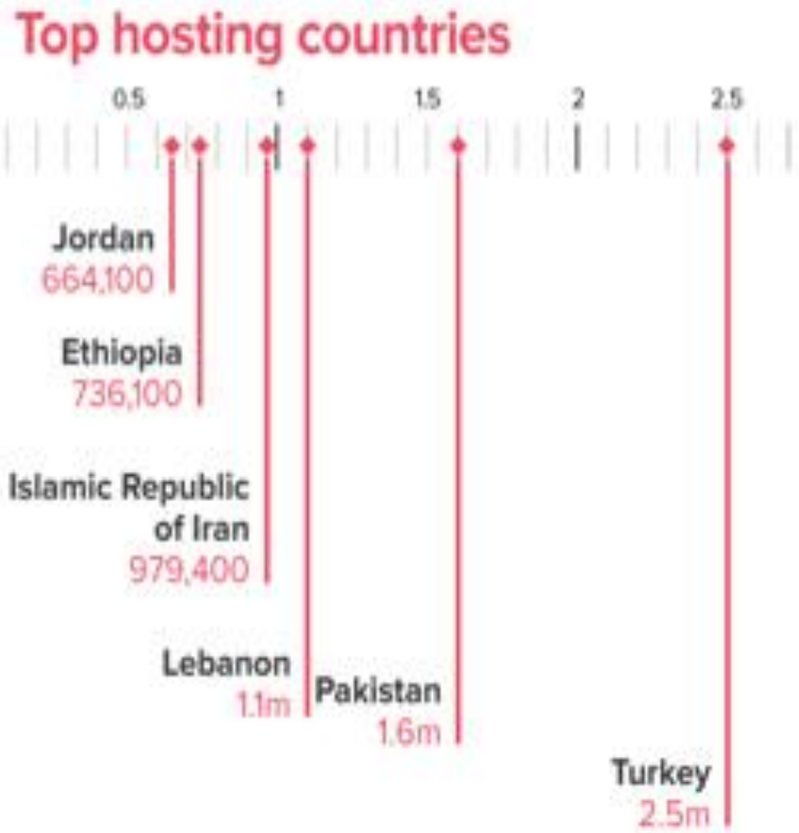
- 125 countries participating
- New countries and regions start to share price information.

V3P
PAHO
UNICEF (Gavi)

Measles vaccine coverage in DRC, 2011-2016



We are now witnessing the highest levels of displacement on record



UNHCR
The UN Refugee Agency

Humanitarian emergencies
Global Landscape

Increasing risks and needs

200 million+ affected by natural and techno disasters
130 million people in need; >65.3 million displaced
$19.6 bn requested; 42.8% funded
>100 epidemic-prone events / year, e.g. SARS, H1N1

Protracted nature of conflict

Average period of displacement – 7 years
DR Congo = 20 years; Somalia = 24 years
Key indicator: 8 of 10 countries with highest U5MR = emergency

Operational complexities

Insecurity and humanitarian space
Attacks on health ; Access ; Capacity

World Health Organization

Humanitarian Health Action

Crises

The links below provide information on countries with health concerns, crises and emergencies.

Grade 3 countries

Iraq
Nigeria
South Sudan
Syrian Arab Republic
Yemen

Grade 2 countries

Cameroon
Central African Republic
Democratic Republic of the Congo
Ecuador
Ethiopia
Haiti
Libya
Myanmar
Niger
Ukraine

Countries of concern

Afghanistan
Burkina Faso
Burundi
Chad
Djibouti
Gambia
Ecuador
Fiji
Guatemala
Haiti
Mali
Mauritania
Nigeria
occupied Palestinian territory
Pakistan
Somalia
Sudan
Zika virus and complications
Zimbabwe

El Niño and health

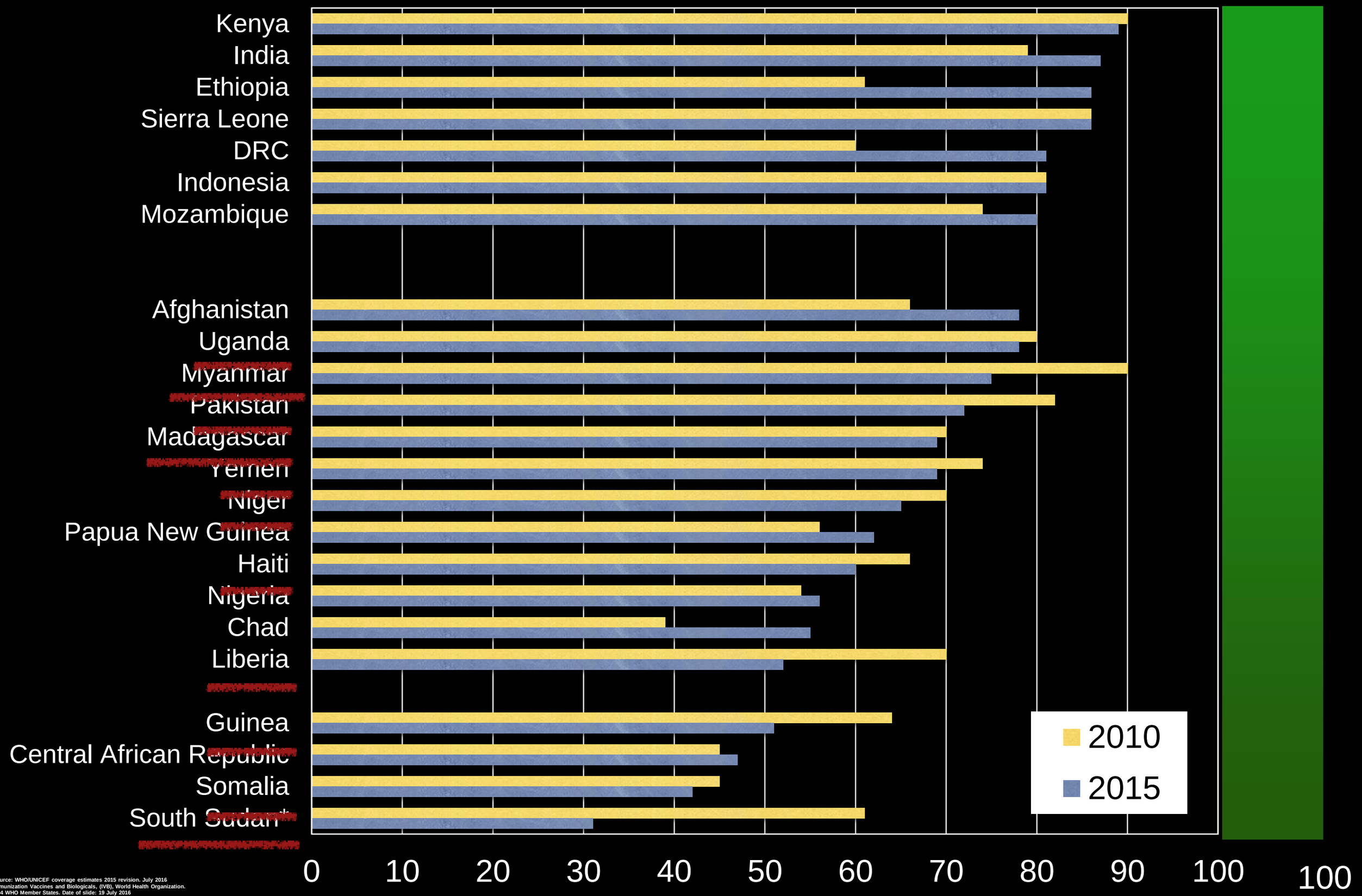
Health impacts of El Niño in regions and countries

Countries of concern

Angola
Tanzania

What decisive actions are needed to accelerate progress by mid-2018 ?

DTPcV3 coverage in selected countries, 2010-2015



Source: WHO/UNICEF coverage estimates 2015 revision. July 2016
Immunization Vaccines and Biologicals, (IVB), World Health Organization.
194 WHO Member States. Date of slide: 19 July 2016

We must work towards and document high level national & local commitments to develop and implement coverage improvement plans

Develop & act on plans clearly aimed at alleviating identified barriers

Work <u>together</u> in a coordinated approach

Actively seek real support from agencies operating "on the ground"

Improve accountability **at all levels**

Effective synergies across programmes:
GPEI, WHE, HSS ....

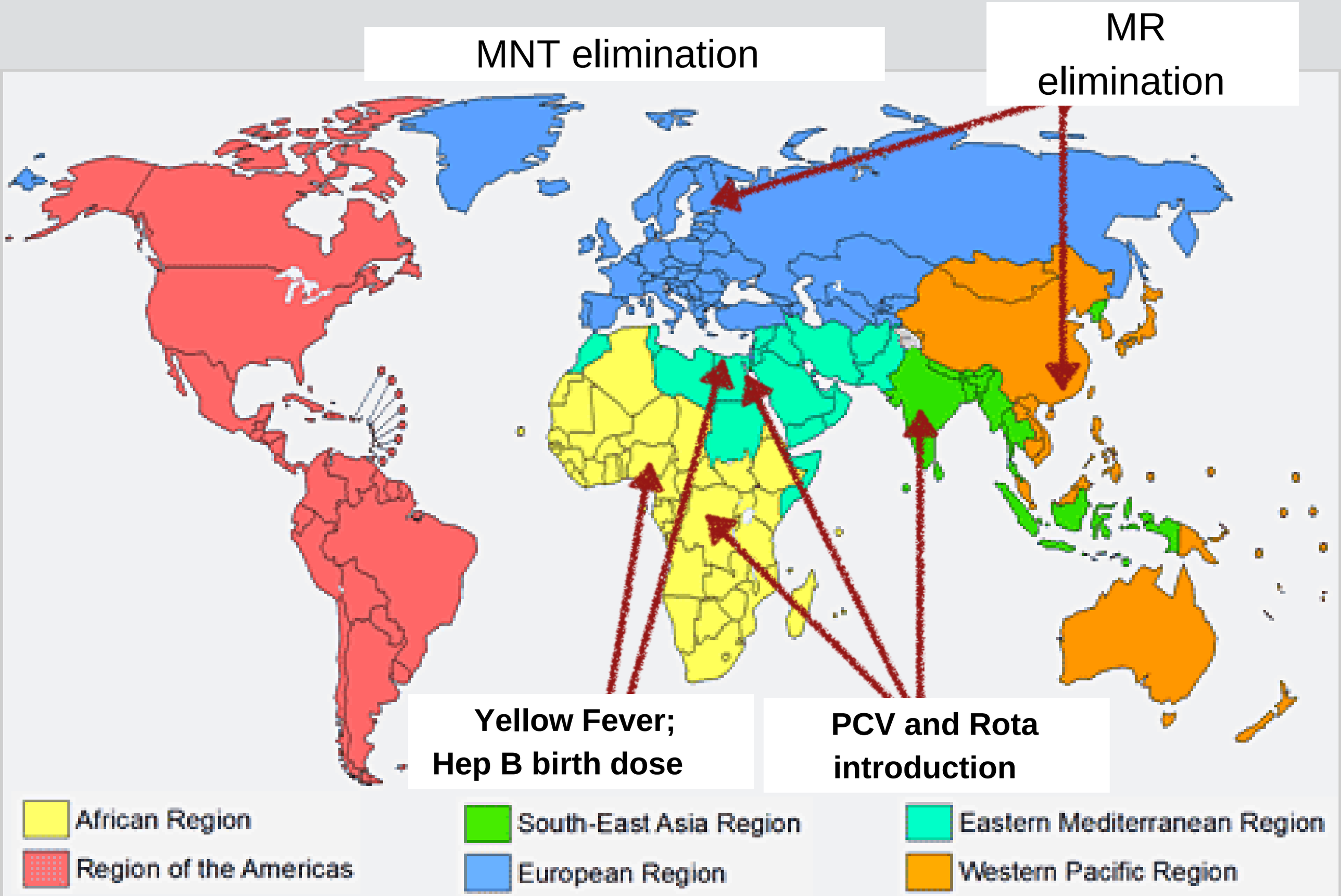
Use disease specific disease targets to catalyse commitment, funds & monitor progress

Ensure SIAs are of highest quality and reach high coverage

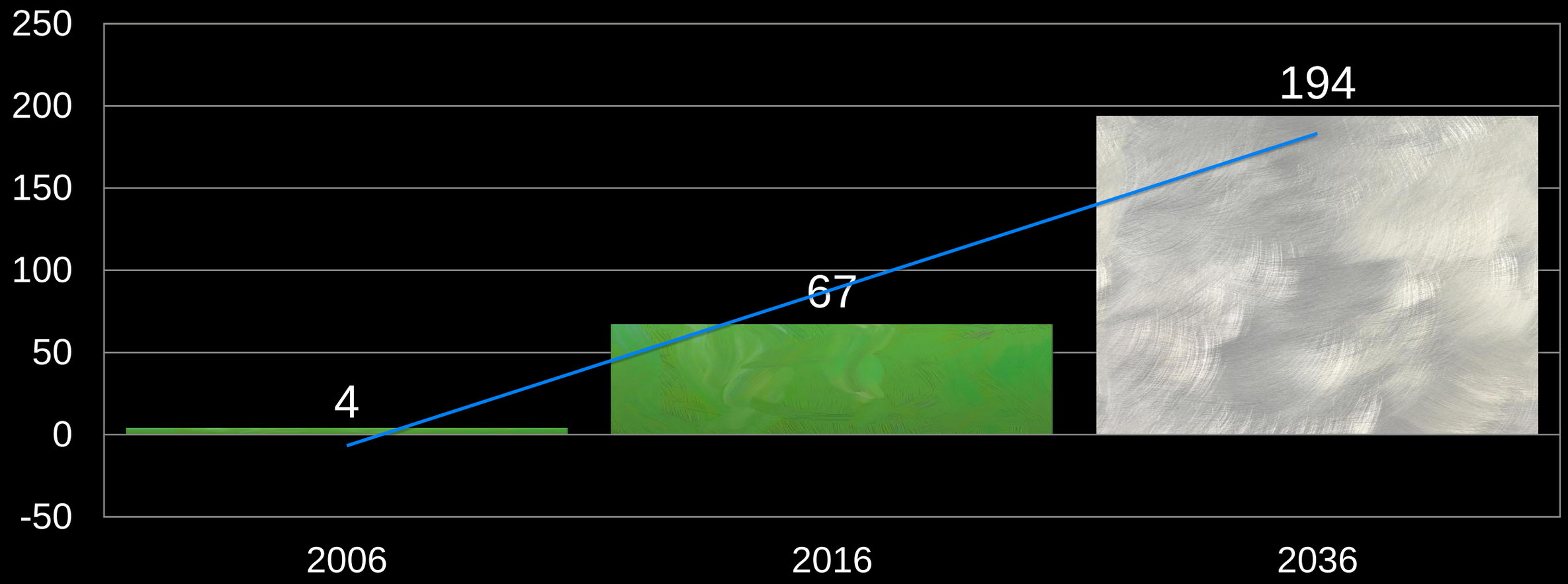
Drastically improve cov monitoring & surveillance
use information to adjust programme strategy

<u>National</u> leadership should be stronger

Pursue and attain the Regional disease control goals

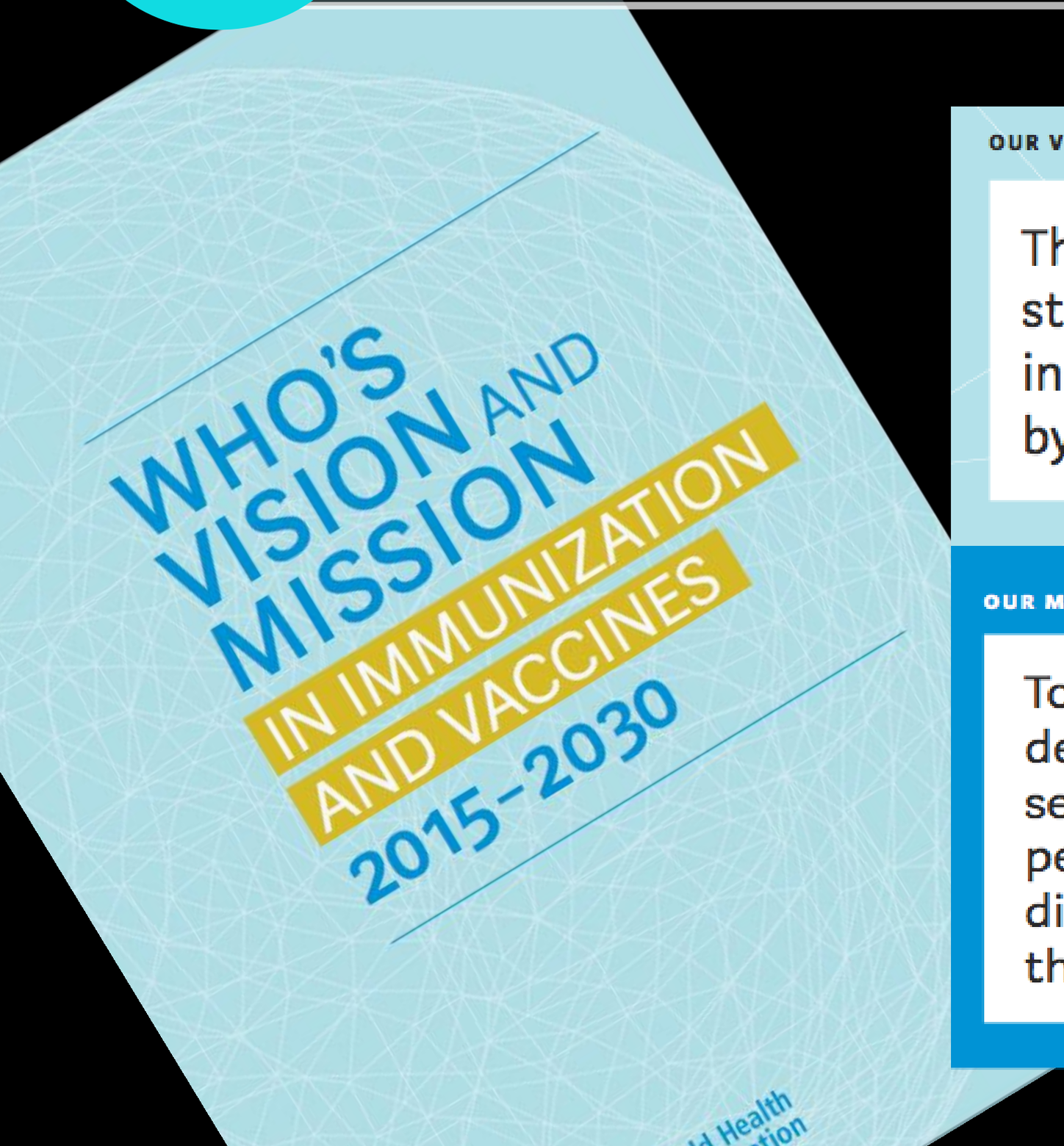


Number of countries introducing HPV vaccine



Guidelines & tools available to support HPV vaccine use

What will WHO do ?



OUR VISION:

The highest attainable standard of health for all individuals and communities by preventing disease.

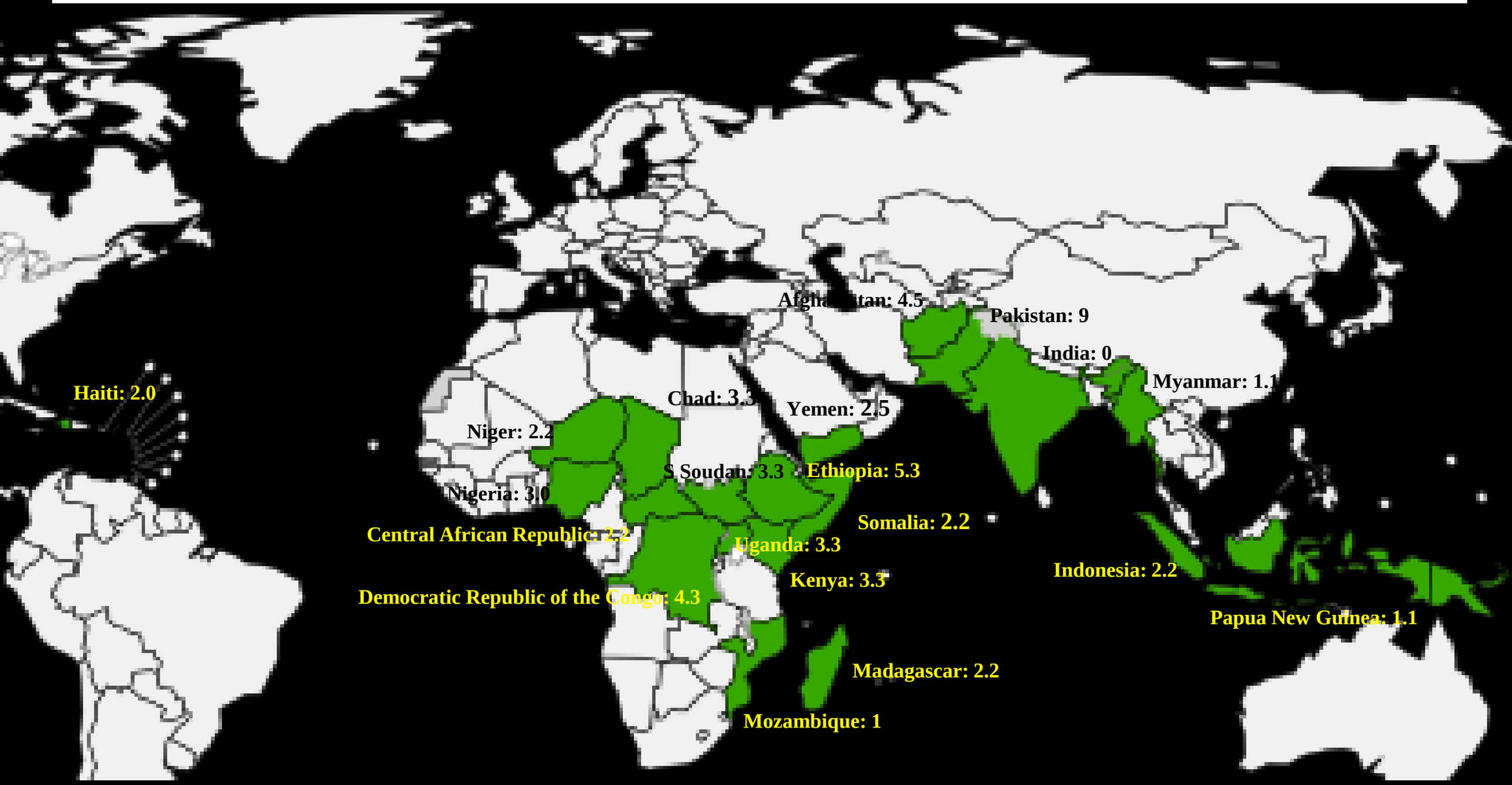
OUR MISSION:

To support all countries to deliver quality immunization services as part of an integrated, people-centred platform of disease prevention that spans the human life-course.

EPI: sharpening our focus

Mission	**To support all countries to deliver quality immunization services as part of an integrated, people-centred platform of disease prevention that spans the human life-course**			
Groups	**Immunization policy and strategies**	**Sustainable supply & financing**	**Immunization delivery & operations**	**Immunization programme monitoring & surveillance**
	Accelerated disease control project			
Strategic Objectives	*Develop policies, strategies and guidance to inform evidence-based decision-making and effective programme design.*	*Ensure a reliable and affordable supply of vaccines, access to innovative technologies and supply chain solutions, and enhance financial sustainability.*	*Enable improved outcomes in fragile and chronically-underperforming priority countries, and reinforce approaches to reach the underserved and unvaccinated.*	*Monitor immunization programme performance and assess health trends to guide evidence-based decision-making on vaccine preventable disease control and elimination.*

Number of WHO Staff funded through Gavi TCA in the 20 Priority Countries



High level advocacy to ensure sustained international support for immunisation

Upgrade & harmonize global information systems

Complete harmonization of WHO internal collection & reporting systems across the regions

Share data and lessons learned with countries

Further promote methods to validate data

Improve generation & use of data at subnational level

Use vaccine research as an additional tool to achieve set goals

Position Vaccines research in emerging global agendas

Blueprint - R&D for diseases with a PHEIC potential

Vaccine research on Anti-Microbial Resistance

esearch to assess and enhance the impact of available vaccines

Ensuring policy is informed by emerging evidence & developments

SAGE: Selected topics on the horizon

(*tentatively planned for April 2017)

Cross-cutting

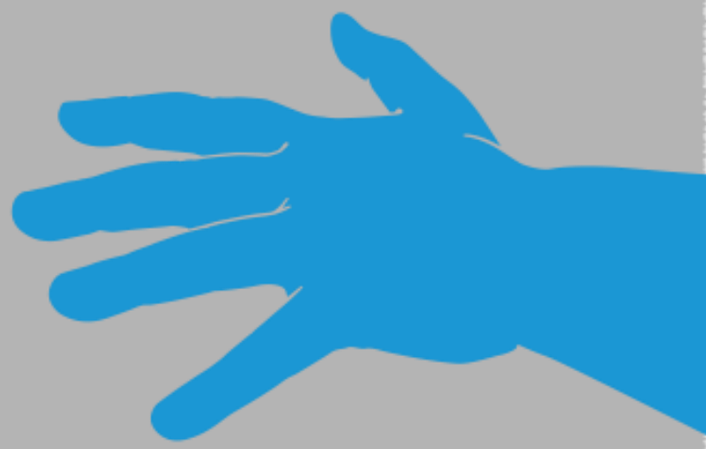
- Strengthening NITAGs*
- GVAP monitoring of progress
- Plans for post GVAP
- Engagement of the private sector
- Use of vaccines in immunocompromised populations
- Vaccine health economics
- Strategies to reach older age groups
- Maternal vaccination
- Middle Income countries strategies
- Emergency vaccine development
- Implementation policies
- Middle income countries strategies
- Implementation science
- Optimizing immunization schedules

Vaccine specific

- Polio eradication*
- Oral cholera vaccines*
- Ebola vaccines*
- Measles and rubella elimination
- Typhoid
- BCG
- Pneumococcal conjugate
- Rabies
- Meningitis B
- Rotavirus
- RSV
- Influenza vaccines

CONCLUSIONS…

CLOSE THE IMMUNIZATION GAP



IMMUNIZATION FOR ALL THROUGHOUT LIFE