

Reemerging measles

September, 2019

Measles and Rubella Targets

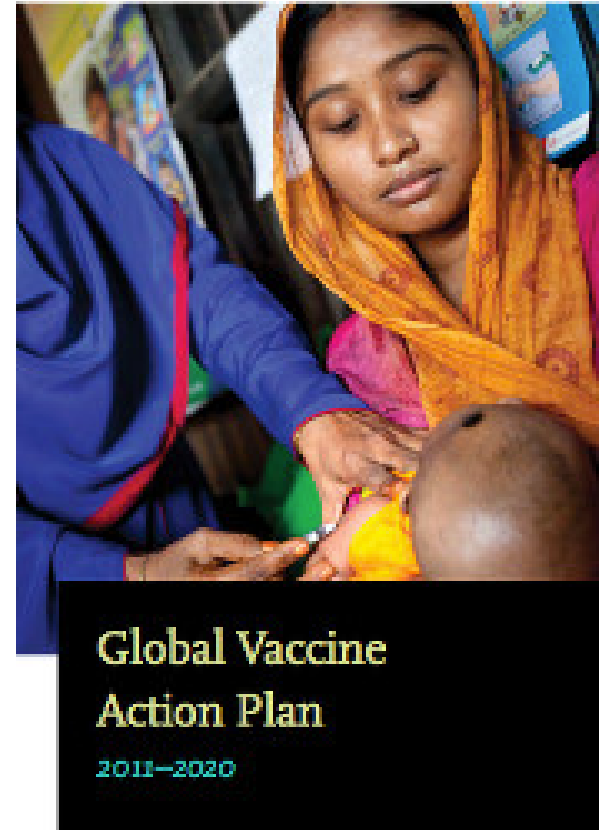
Regional elimination (GVAP, 2012):

By 2015:

- Elimination of measles in 4 WHO Regions
- Elimination of rubella in 2 WHO Regions

By 2020:

- **Elimination of measles & rubella in 5 WHO Regions**



Where are we on the 2020 target ?

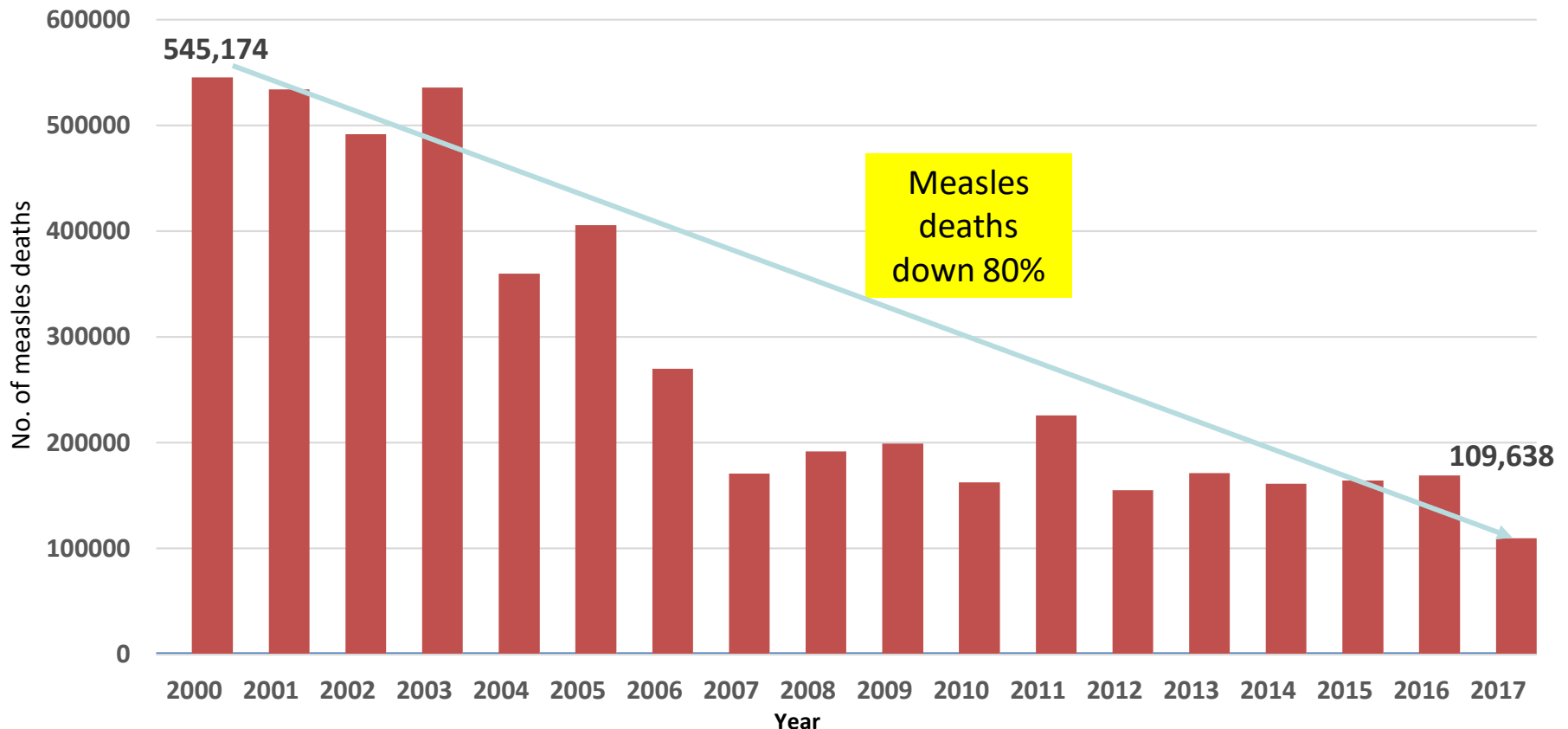
- **Significant progress made with 43% of Member States eliminating measles but the overall target is OFF TRACK**
- The Region of Americas is the only Region to be verified to have eliminated Rubella
- No Regions have been verified for measles elimination
- The Region of Americas has re-established transmission for measles following large outbreaks in continuing for more than a year in some countries.

WHO Region (no. countries)	Elimination Achieved	
	No. of Member States	%
Americas (n=35)	Measles: 33* Rubella: 35	94% 100%
Europe (n=53)**	Measles: 37 Rubella: 37	70% 70%
Western Pacific (n=27)	Measles: 7 Rubella: 4	26% 15%
Eastern Mediterranean (21)	Measles :2 Rubella: 3	10% 14%
South-East Asia (n=11)	Measles: 5	45%
Africa (n=47)	-	-
TOTAL	Measles: 84 Rubella: 79	43% 41%

(Data As of July 2019)

80% Reduction in Measles Deaths in last 17 years

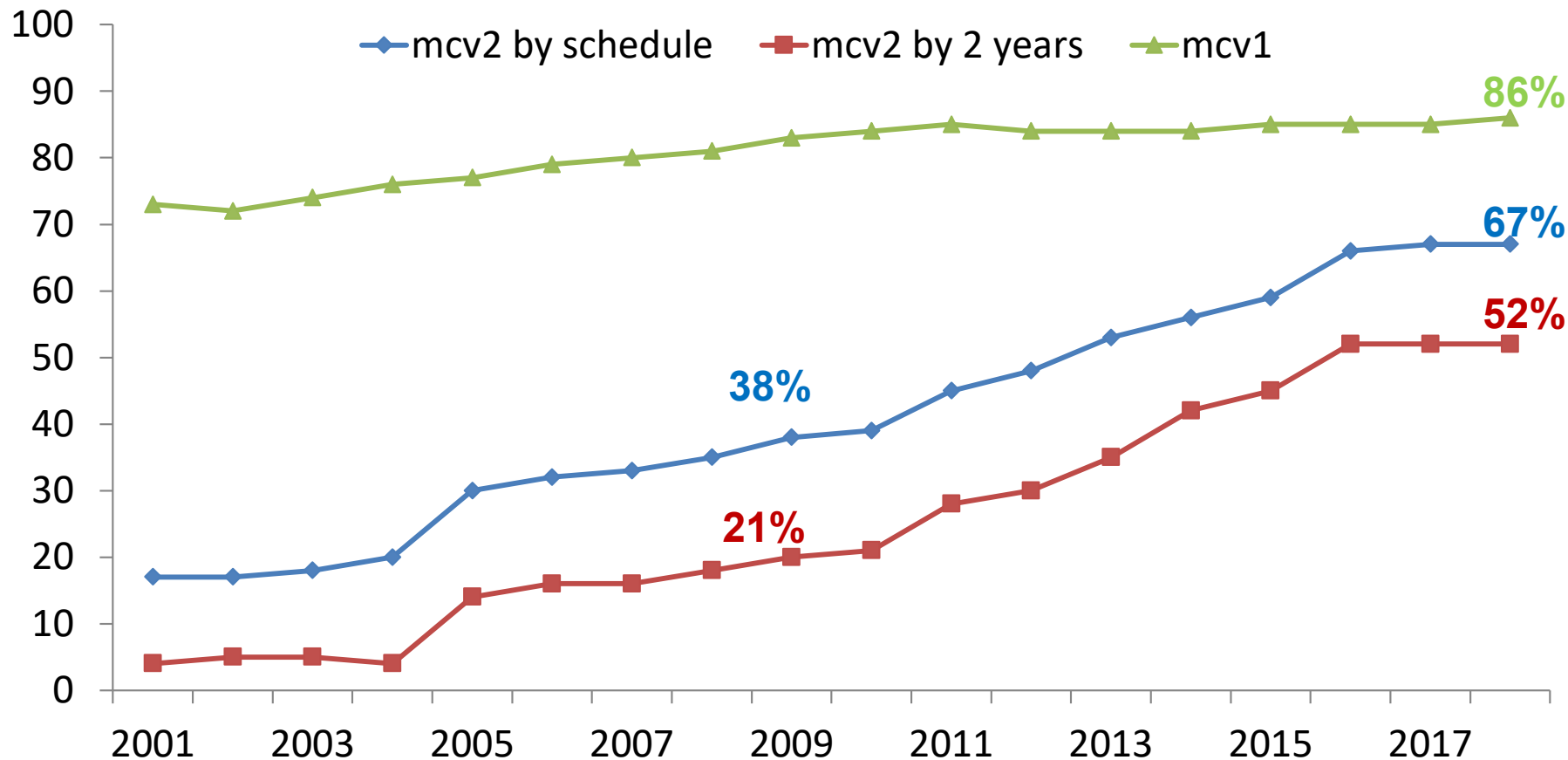
Measles Deaths, by Year 2000-2017



21.1 million deaths prevented from 2000-2017 by measles vaccination

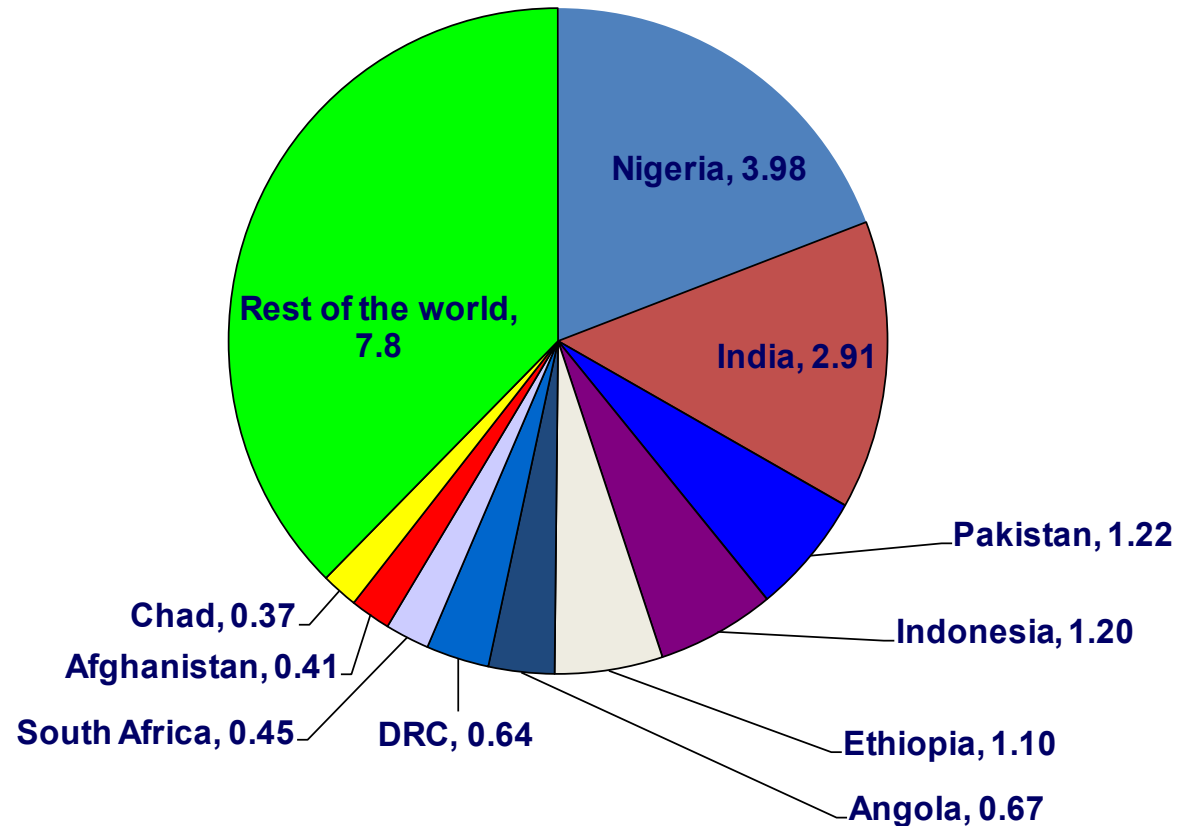
Global MCV Coverage has stagnated for a decade

Global MCV1 and MCV2 Coverage , 2000-2017



Source: WHO/UNICEF coverage estimates 2017 revision, July 2018.
Immunization Vaccines and Biologicals, (IVB), World Health Organization.
194 WHO Member States. Date of slide: 15 July 2018.

20.7 Million Infants Not Immunized (MCV1), 2017

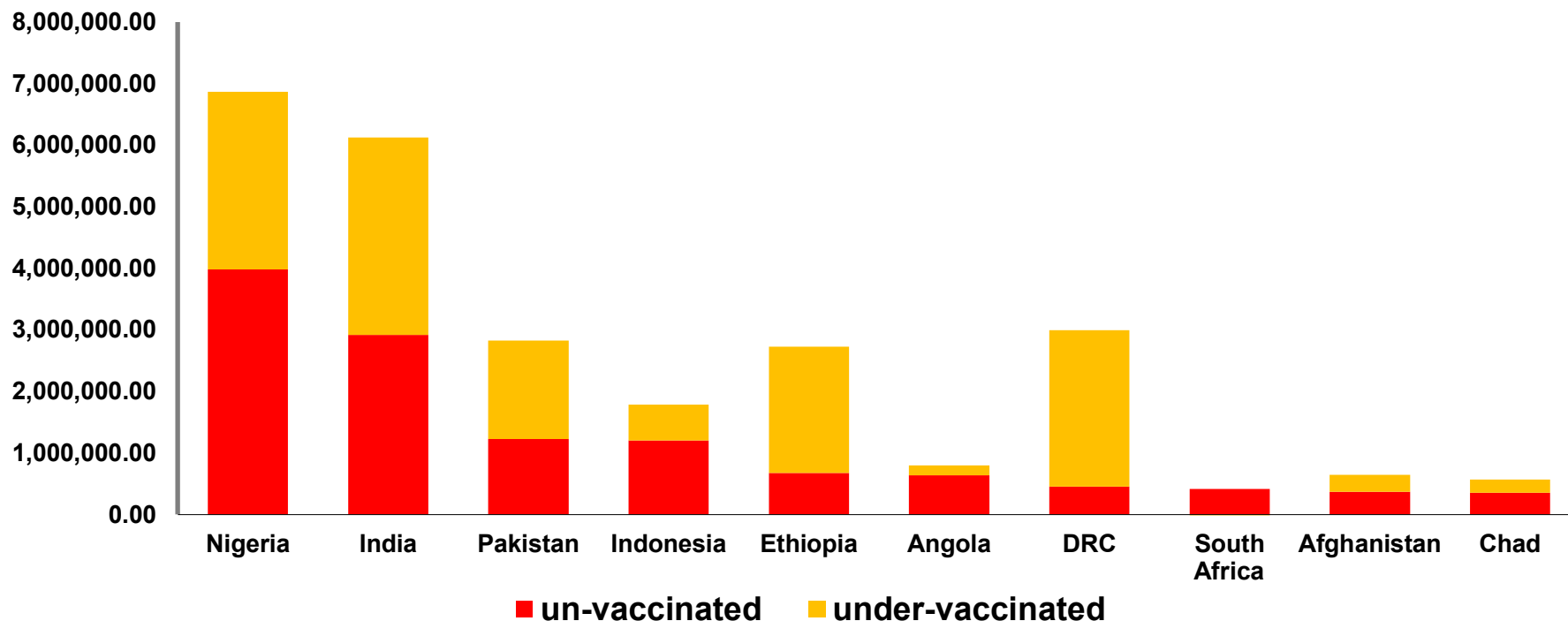


Data source: WHO/UNICEF coverage estimates 2017 revision, July 2018.
Immunization Vaccines and Biologicals, (IVB), World Health Organization



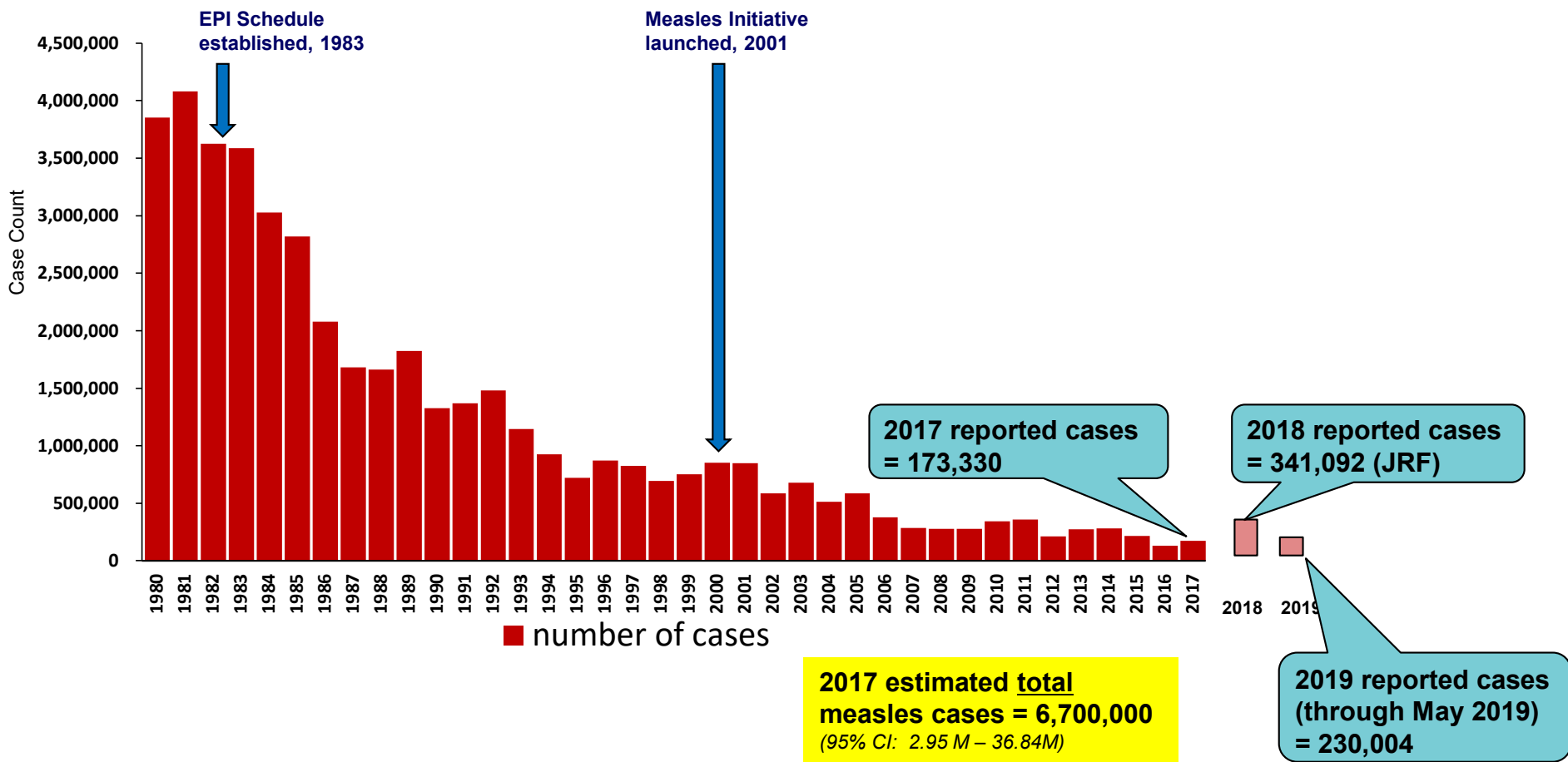
Top 10 countries with Most Un-vaccinated (MCV1) and Under-vaccinated (MCV2), 2017

Date of chart: 10/29/2018

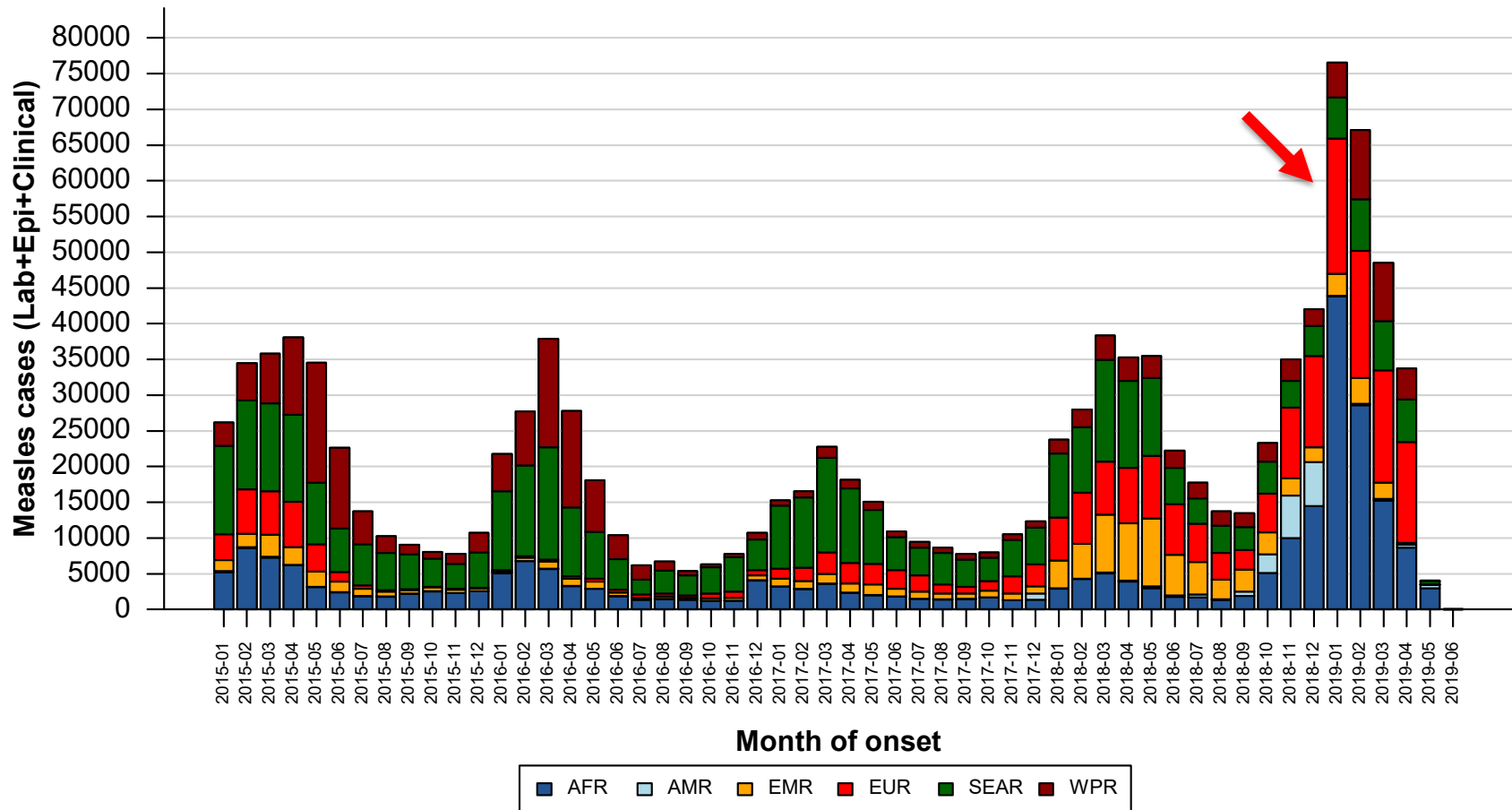


Data source: WHO/UNICEF coverage estimates 2017 revision, July 2018.
Immunization Vaccines and Biologicals, (IVB), World Health Organization

Measles Global Annual Reported Cases, 1980-2017



Measles Case Distribution by Month and WHO Region (2015-2019)

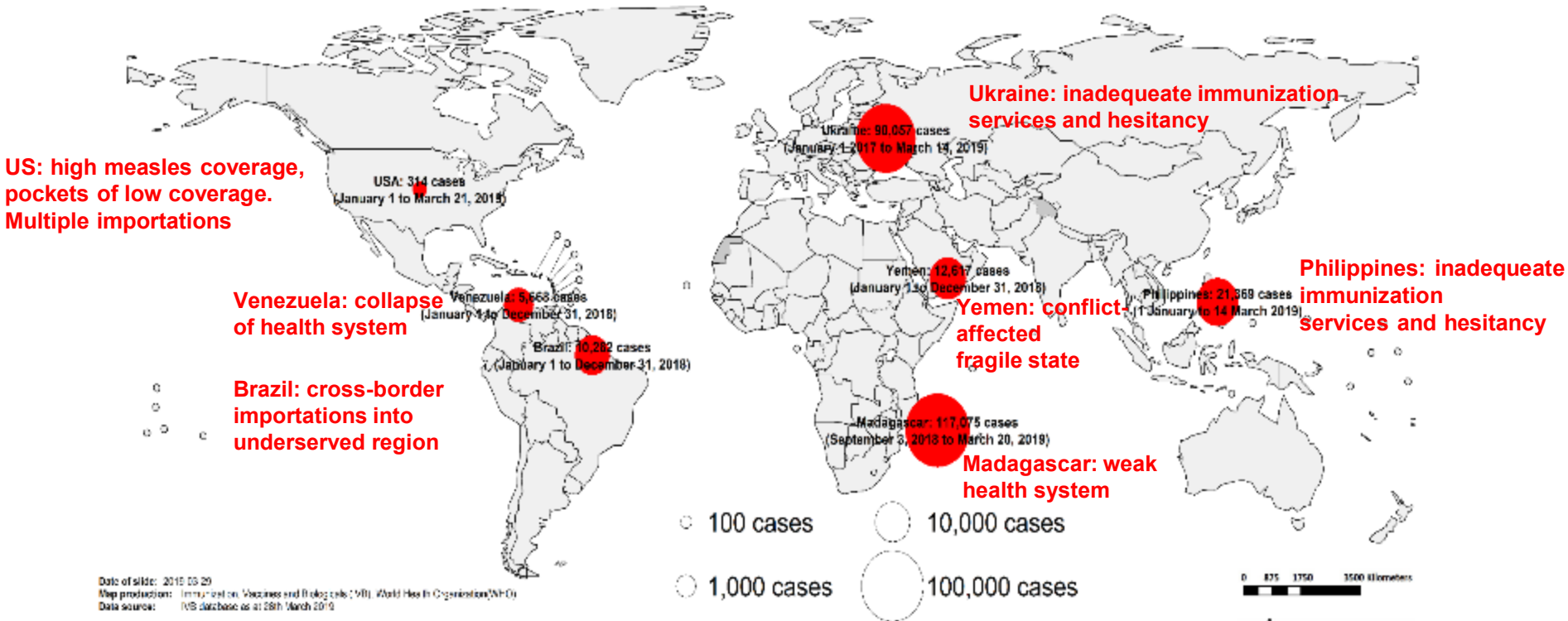


Notes: Based on data received 2019-06 - Data Source: IVB Database - This is surveillance data, hence for the last month(s), the data may be incomplete.

Measles Outbreaks in All Regions with Increased Size and Frequency

Same root cause: failure to vaccinate over many years

Selected Ongoing Measles Outbreaks



Date of slide: 2019-03-20
 Map production: Immunization, Vaccines and Biologicals (IVI), World Health Organization (WHO)
 Data source: IIS database as at 28th March 2019

Disclaimer:

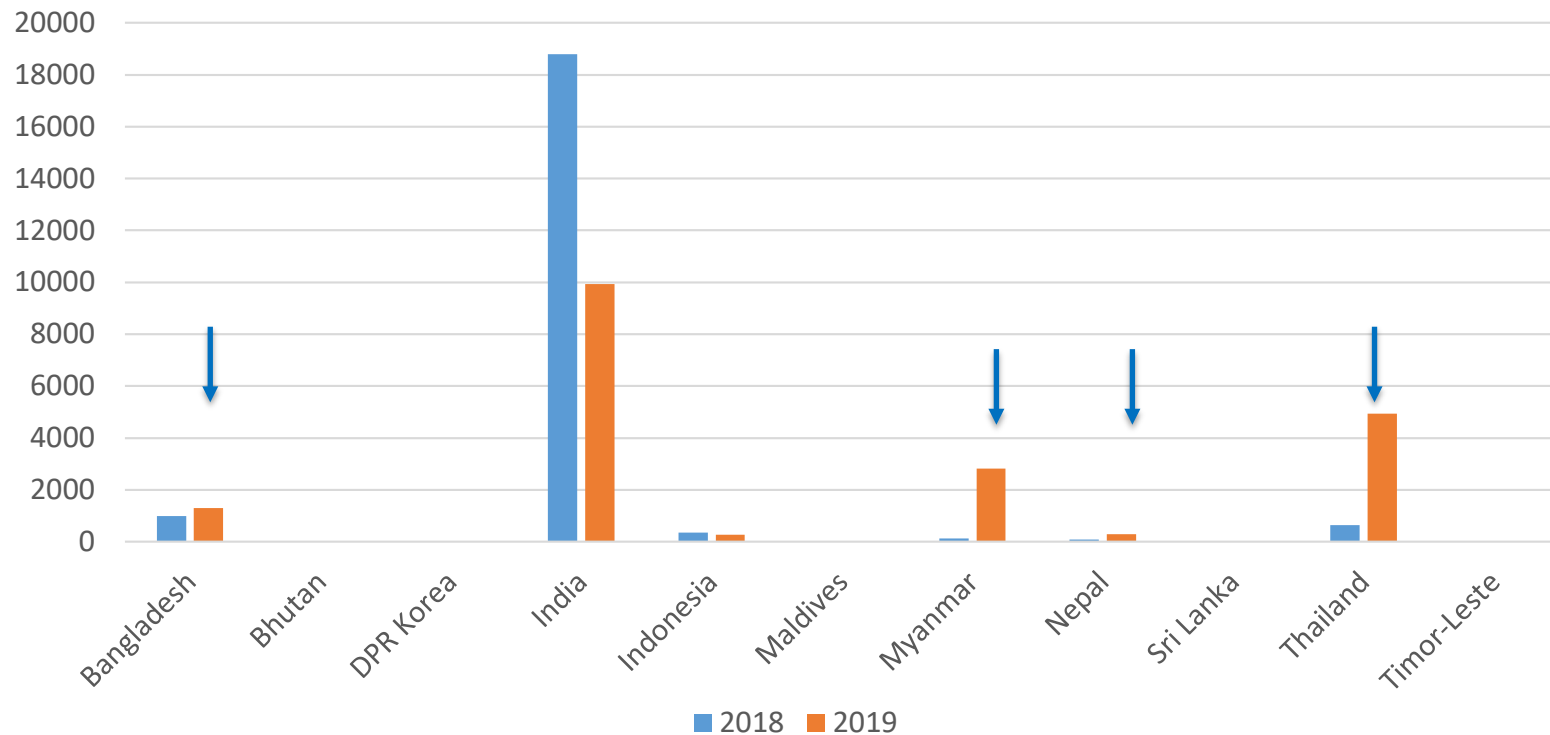
The boundaries and names shown and the designations used on this map do not imply the endorsement of the World Health Organization concerning the legal status of any country, territory or sea area or its authorities, or concerning its jurisdiction or its frontiers or boundaries. It is also to be noted that the appearance of borders does not imply that there may not be further agreements. World Health Organization, WHO, 2019. All rights reserved.



What is Happening in WHO South-East Asia Region ?

Overall reduction in the cases of measles merely due to large campaigns in India and Indonesia as a result of which the total cases number in the Region has decreased BUT many other countries in the Region have in fact experience a significant increase in cases- notably Myanmar and Thailand

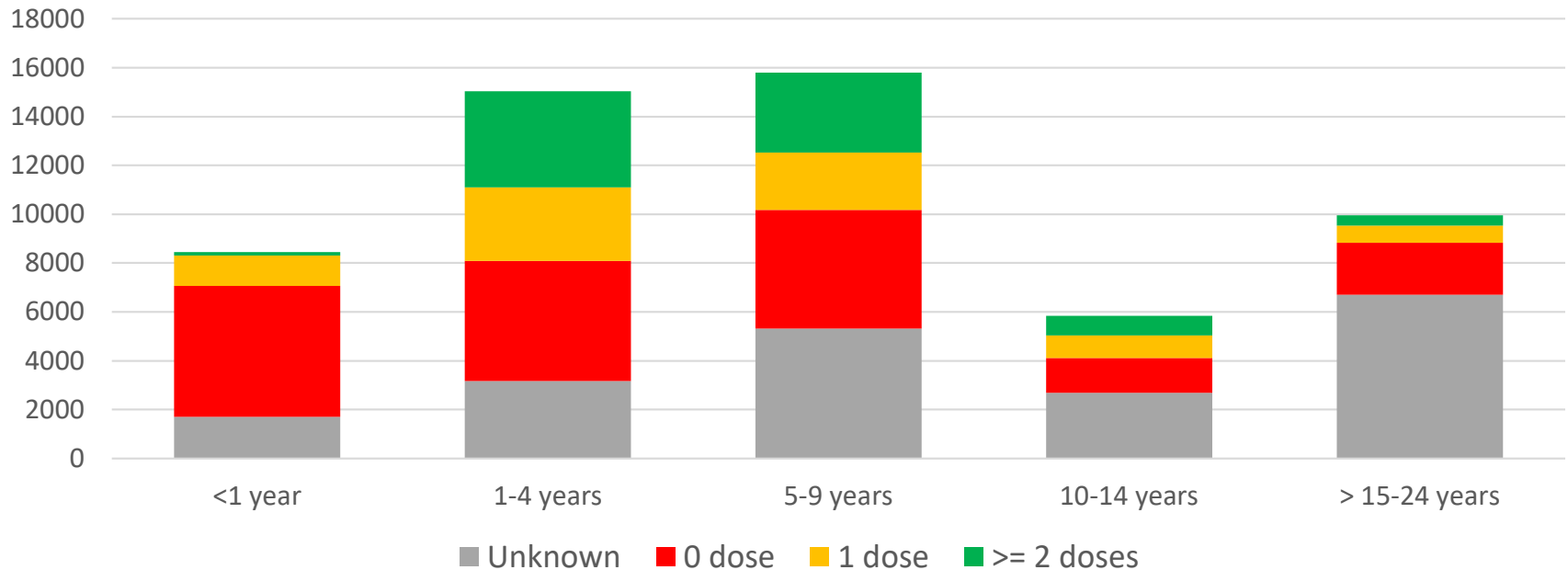
6.8 % overall decrease in reported measles cases in 2019 compared to same time period in 2018 (EPI week 24)



Source- Weekly case based data submitted to SEARO by MS. Note: All cases in India with “pending classification” have been classified as Clinical compatible measles

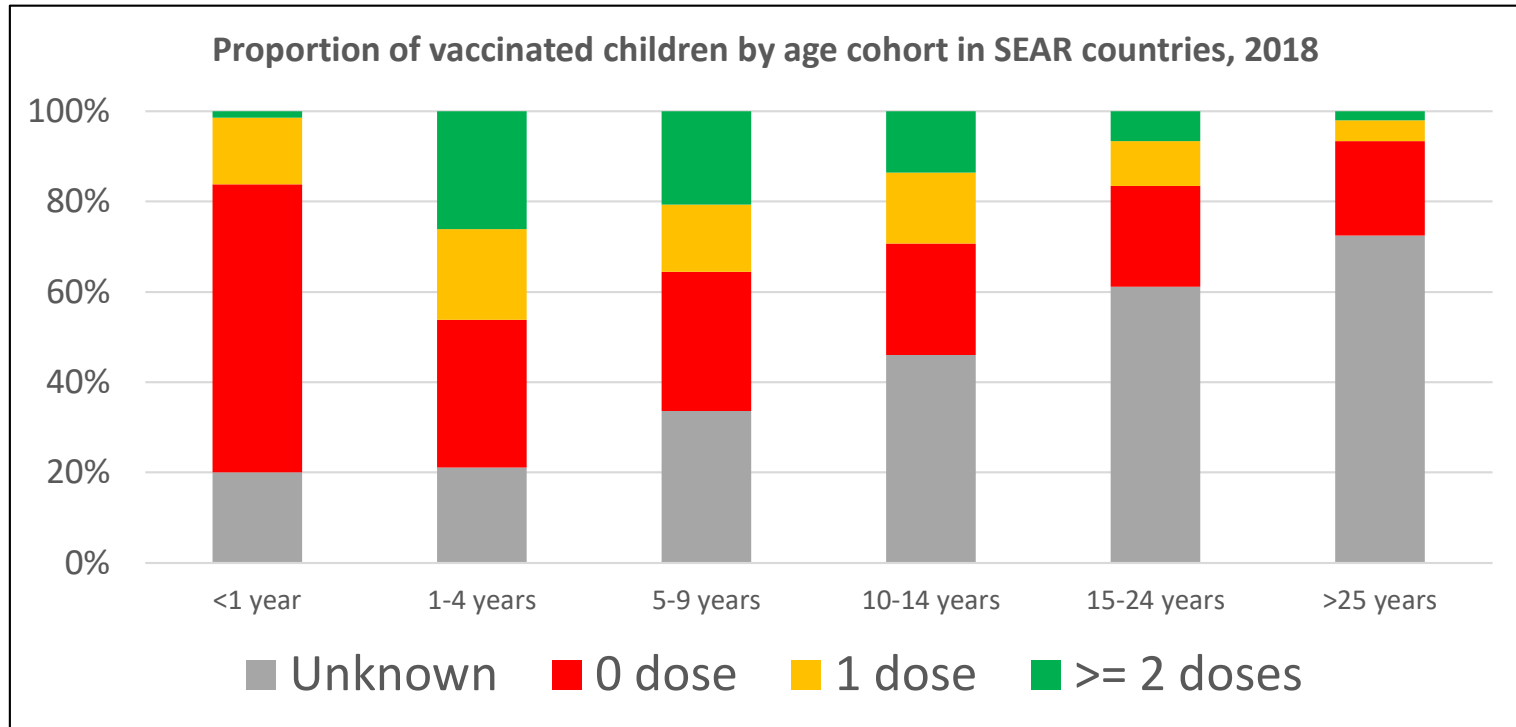
All age groups effected with measles infection

Age groups and vaccination status of measles cases in 2018 in SEAR countries



Epidemiology of measles has changed with unusual age groups being effected due to sustained low coverage , making elimination drive more costly

Suboptimal vaccination as the cause for most measles cases



Failure to vaccinate optimally is the root cause of resurgence in all of these countries

Reminders

- Measles is the most infectious virus known to mankind ($R_0=12-18$)
- It can easily target pockets of unvaccinated population and spread like bush-fire as seen in the European and the American Region
- Two doses of measles have 99% vaccine effectiveness
- When the size of unvaccinated /susceptible population reach equivalent to a birth cohort in an epidemiological blocks, outbreaks are most likely
- 95% coverage with two doses of measles containing vaccine is required to achieve HERD IMMUNITY

Summary

- Substantial progress in measles control since 2000
 - Global number of cases and deaths significantly reduced
 - All regions striving for measles elimination and three for rubella elimination
- Population immunity will have to be enhanced through immunization and surveillance will have to be strengthened to identify areas with low coverage
- Concerns
 - Resurgence of measles due to **failure to vaccinate**
 - Pockets of under/un vaccinated populations remain that pose threat to the measles elimination target
 - Need for national , regional and global commitment towards achieving and sustaining global and regional goals

Thank you from the Measles and Rubella Initiative Partners

