WHO South-East Asia Region Elimination of Measles and Control of Rubella and Congenital Rubella Syndrome

M&RI Partners Meeting

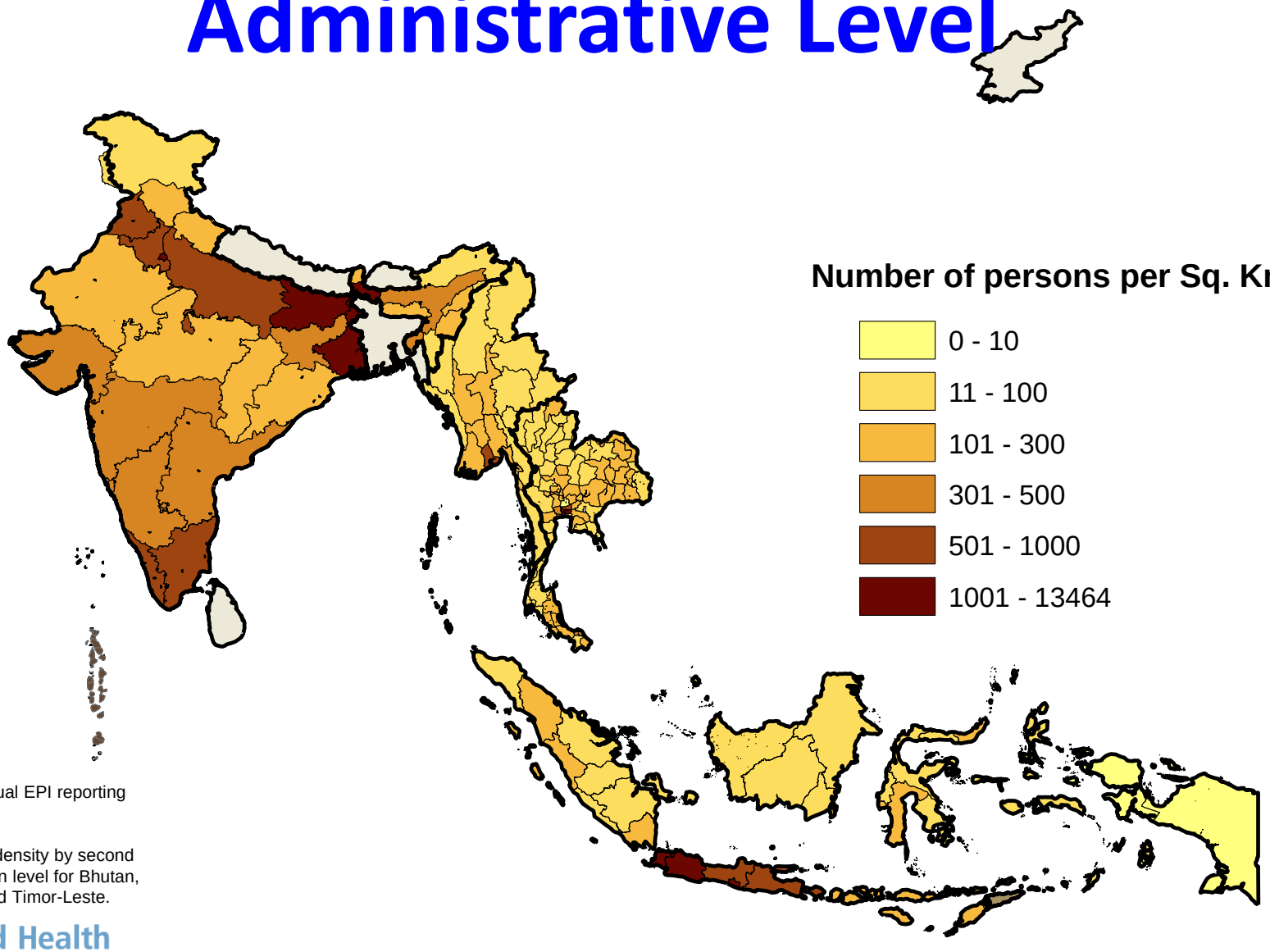
09 September 2014

Washington, D.C.

World Health Organization
Regional Office for South-East Asia

Immunization and Vaccine Development South-East Asia Region

SEAR Population Density by First Administrative Level



Source: Annual EPI reporting form 2013.

*Population density by second administration level for Bhutan, Sri Lanka and Timor-Leste.

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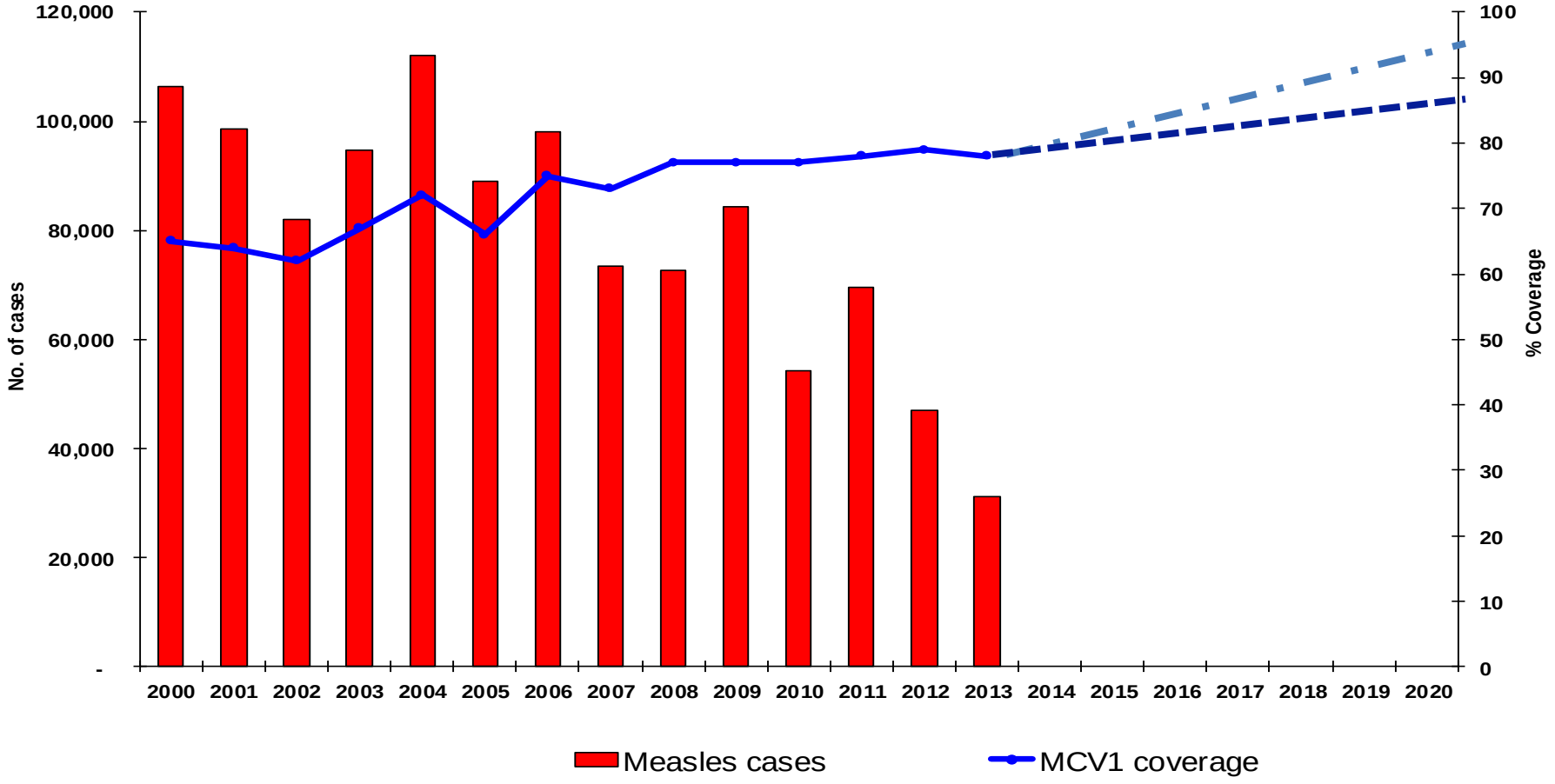
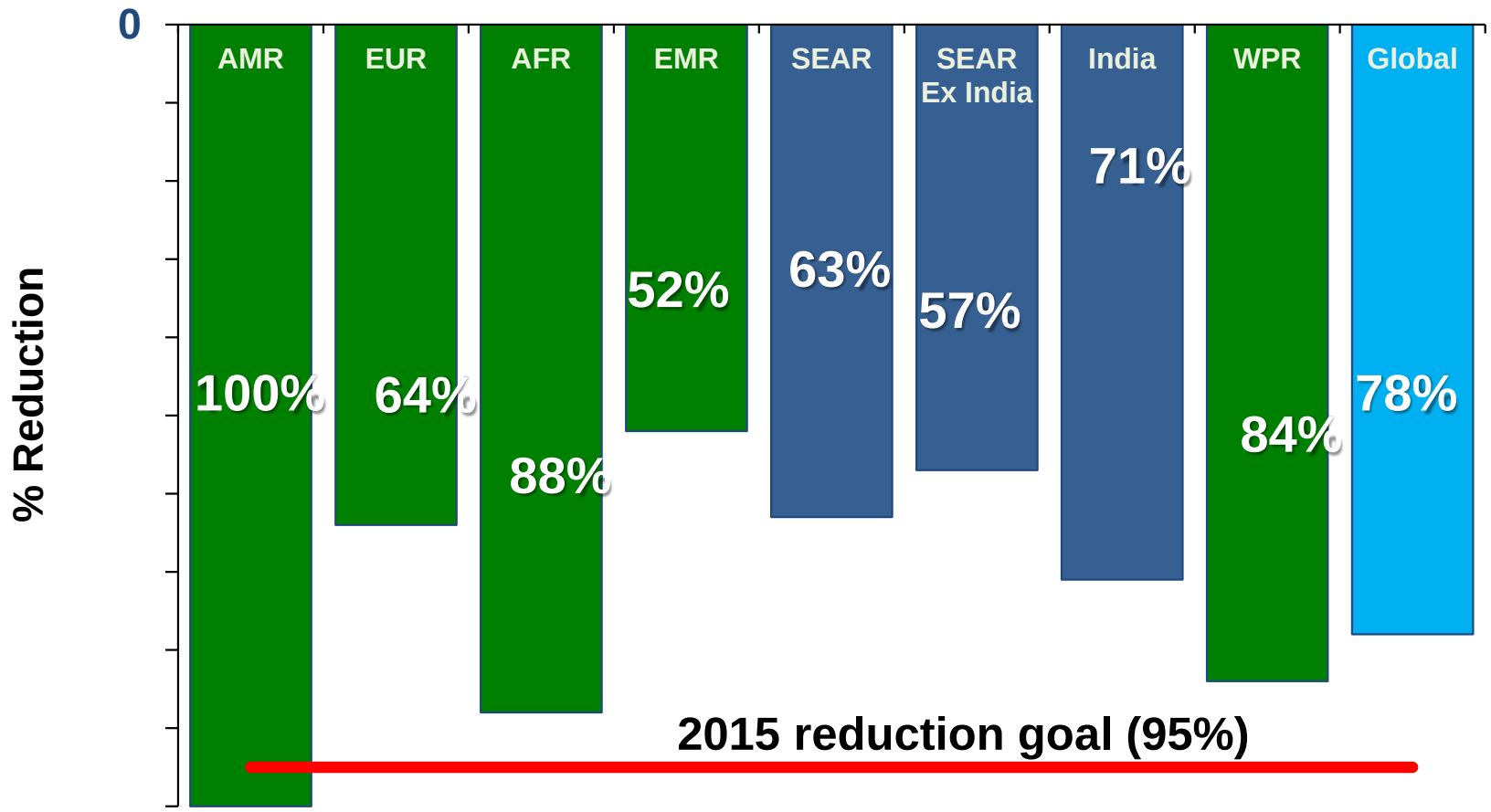
Reported Measles[1] and 1st Dose Measles RI Coverage[2] , SEAR, 2000–2013



[1] WHO/UNICEF JRF

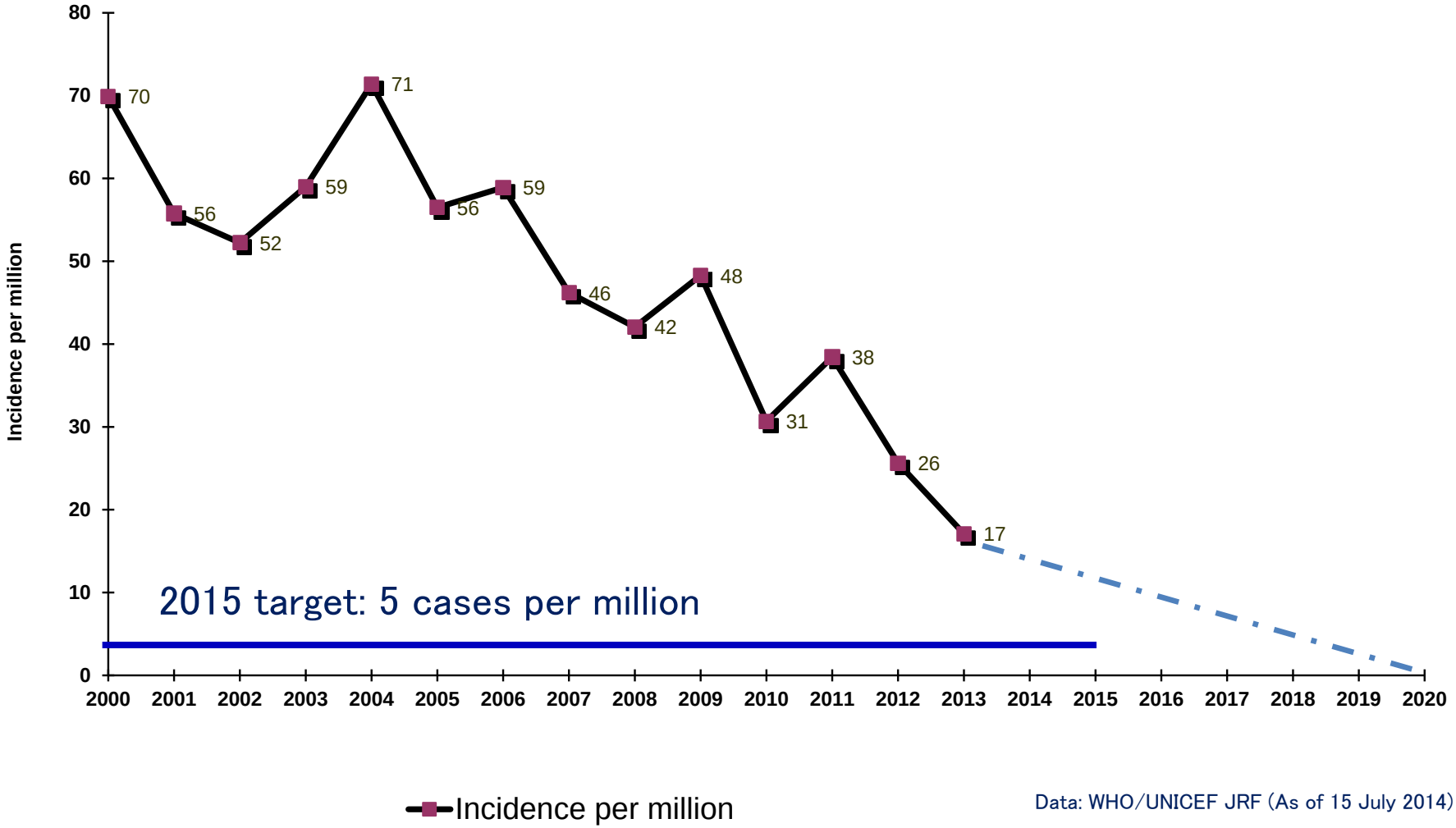
[2] WHO/UNICEF coverage estimates 2013 revision (July 2014)

Reduction in Estimated Measles Deaths by WHO Region, 2000 to 2012



Source: WER: Progress in Global Control and Regional Elimination of Measles, 2000–2012. (Feb 7, 2014)

Reported Measles Incidence Rate SEAR, 2000-2013



Data: WHO/UNICEF JRF (As of 15 July 2014)

SEAR 2000 - 2013

- Last case of wild polio January 2011
- Great progress in reducing measles disease and deaths
- Two doses of a MCV in the routine immunization system in 9 countries
- RCV nationwide in 6 countries
- Measles / Rubella surveillance in all countries

Regional Goal

66th Meeting of the SEAR Regional Committee in September 2013 in New Delhi resolved to:

Adopt the goal of measles elimination and rubella/CRS control in the South-East Asia Region by 2020

Operational Definition

Measles Elimination

The absence of endemic measles transmission in a defined geographical area (e.g., region or country) for >= 12 months in the presence of a well-performing surveillance system.

…….and this means zero cases due to indigenous virus.

Objectives to Achieve 2020 Regional Goals

- Achieve and maintain at least 95% population immunity with two doses against measles and rubella within each district of each country in the Region through routine and/or supplementary immunization.
- Develop and sustain a sensitive and timely case-based measles and rubella and CRS surveillance system in each country in the Region that fulfils recommended surveillance performance indicators.
- Develop and maintain an accredited measles and rubella laboratory network that supports every country or area in the Region.
- Strengthen support and linkages to achieve the above three strategic objectives.

Immunization Strategies

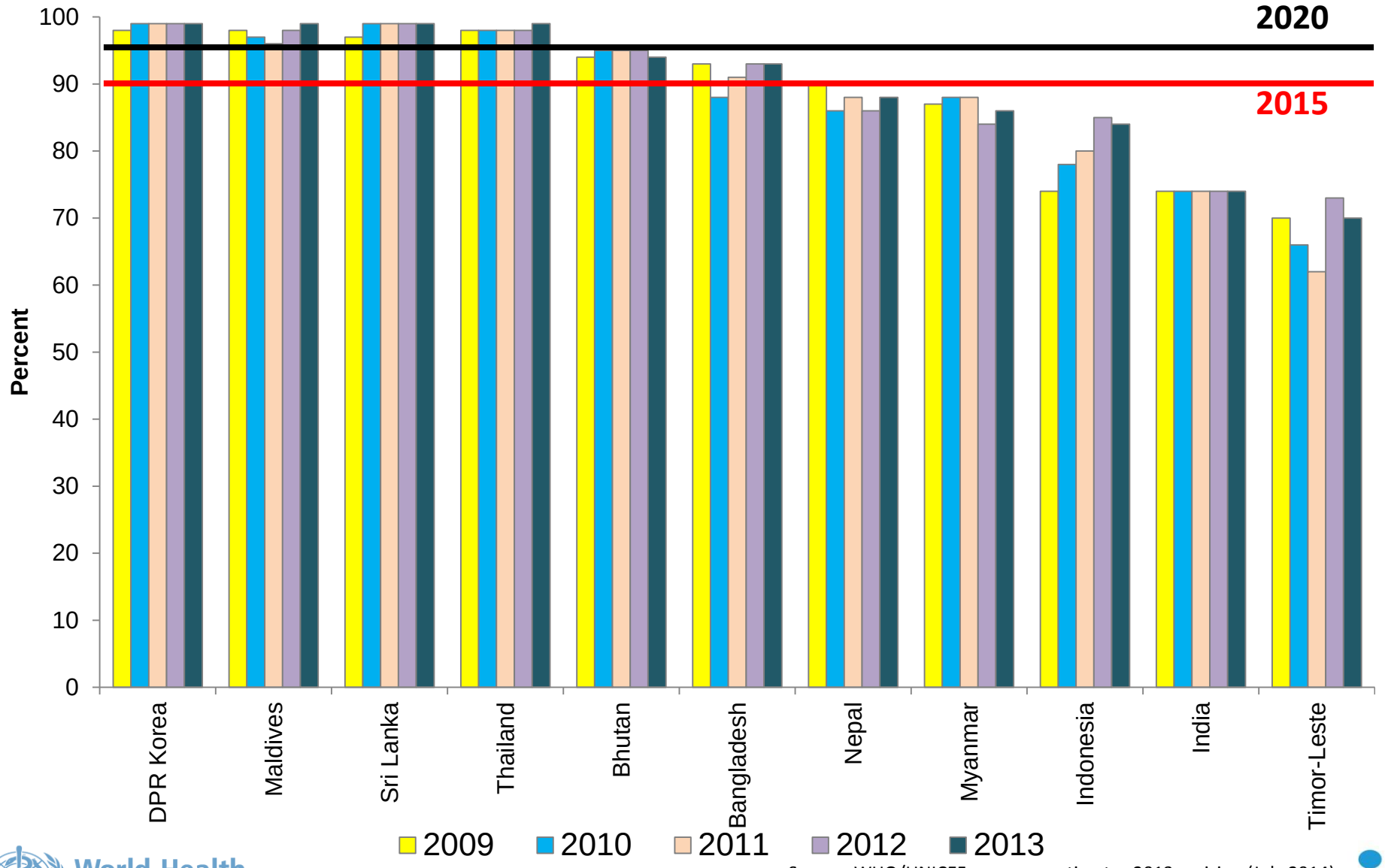
- Achieve and maintain at least 95% population immunity against measles and rubella within each district of each country
  - Combination of routine and campaigns
  - Extremely high 1st and 2nd dose coverage through routine immunization
  - Nationwide wide-age range (9m-15y) MR campaign “Catch Up”
  - Nationwide or sub-national narrow age range MR campaigns as necessary “Follow Up”

Immunization

Immunization Strategies (cont)

- Strengthen vaccine management systems
- Improve vaccine, immunization and injection safety
- Monitor and evaluate

1st Dose Measles RI Coverage by Country, SEAR, 2009-2013



Source: WHO/UNICEF coverage estimates 2013 revision (July 2014)

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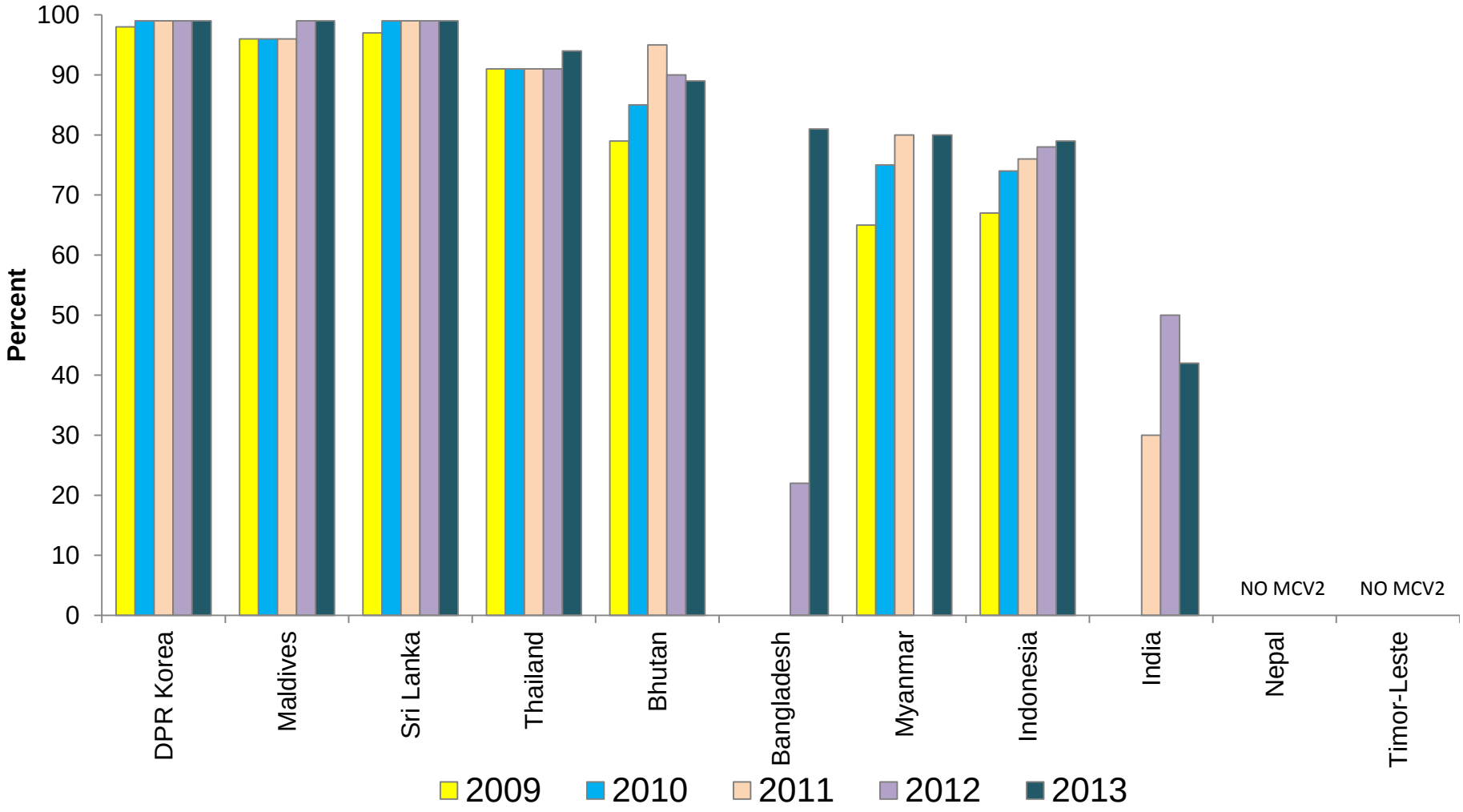
2nd Dose Measles RI (MCV2) Coverage by Country SEAR, 2009-2013



Source: WHO/UNICEF coverage estimates 2013 revision (July 2014)

Measles-Rubella Wide-Age Range Catch-up Campaigns

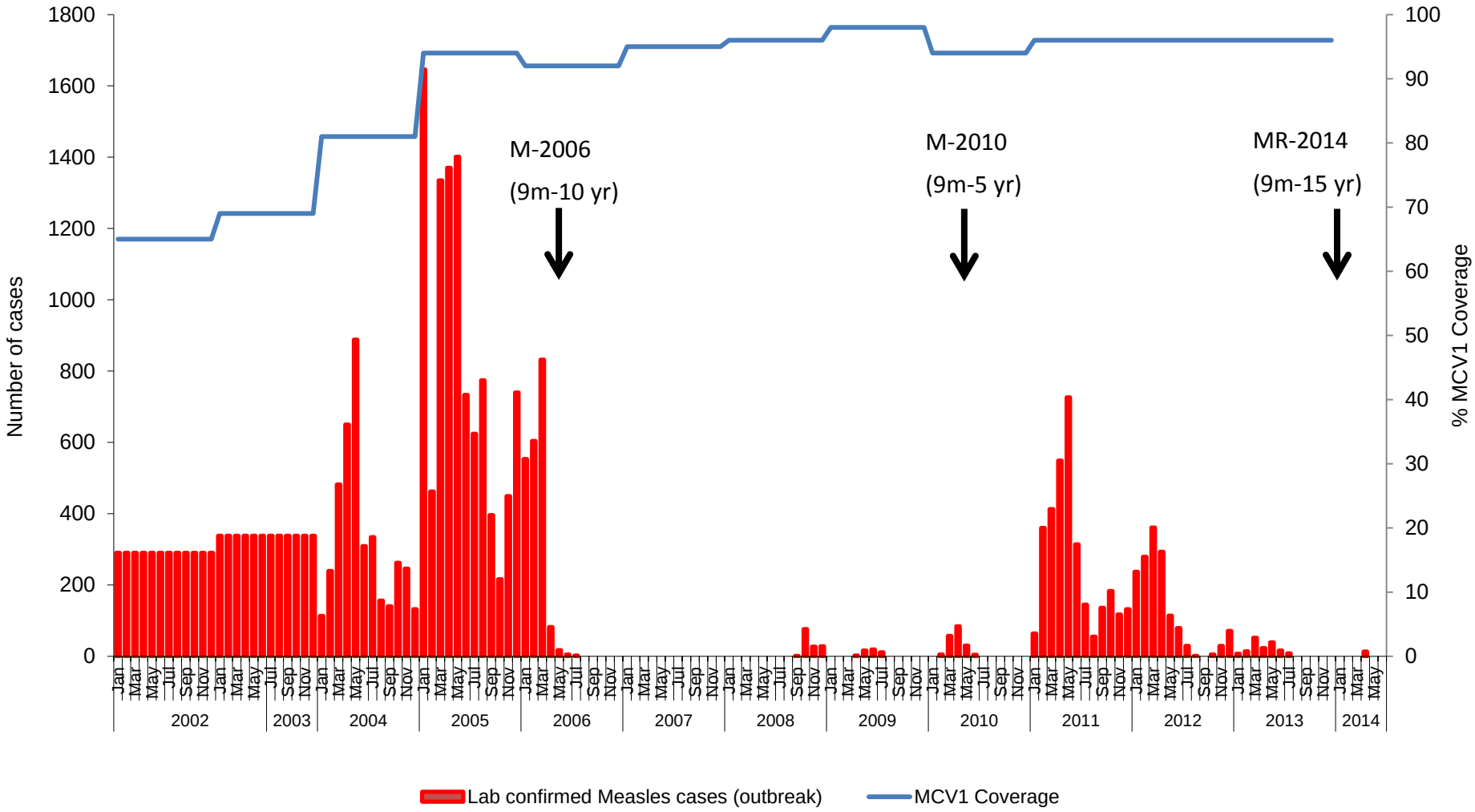
Country	Year	Type	National or Sub-nat	Vax Ags	Target Ages	SIA Target pop (no.)	No. vax	Cov (% of SIA target)
BAN	2014	Catch Up	National	MR	9 M-14 Y	51,745,231	53,644,603	104
BHU	2006	Catch Up	National	MR	9 M-44 Y	338,040	332,041	98
DPRK								
IND	from 2015	Catch Up	Rolling National	MR	9 M-15 Y			To do
INO								
MAV	2005, 2007	Catch Up	National	MR, MMR	6-34Y, 4-6Y	174,526	140,104	80
MMR	2014/2015	Catch Up	National	MR	9 M –15 Y			To do
NEP	2012	Catch Up	National	MR	9 M-15 Y	9,958,196	9,991,152	100
SRI	2004	Catch Up	Rolling-national	MR	16-20 Y	1,890,326	1,362,108	72
THA								
TLS								

Country Elimination Targets, MCV, RCV and Wide Age Range Nation-Wide Catch-up SIA, SEAR

Country	MCV in RI	RCV in RI	Catch-up SIA
Maldives	2 dose	MMR	Yes; MR-6y-25y ↗ & 6y-35y ✚
Bangladesh	2 dose	MR	Yes; M-9m-10y; MR-9m-15y
Bhutan	2 dose	MR	Yes; M-9m-15y; MR-9m-15y & 15y-44y ✚
Indonesia	2 dose	**No**	No
Nepal	2 dose	MR	Yes; M-9m-15y; MR-9m-15y
DPR Korea	2 dose	**No**	Yes; M-6m-15y & 16y-45y
India	2 dose	**MR**	No; MR-9m-15y from 2015
Myanmar	2 dose	**No**	No; MR-9m-15y (Dec14/Jan15)
Sri Lanka	2 dose	MMR	No
Thailand	2 dose	MMR	No
Timor-Leste	**1 dose**	**No**	No

Source: WHO/UNICEF JRF 2013, SEARO

Mass Immunization Campaigns Are an Important Strategy Impact on Measles Outbreaks, Bangladesh, 2002-2014



Source: [1] 2002-2003 JRF annual cases; and 2004-2014 Monthly VPD data reporting.
[2] WHO- Unicef Estimates 2013

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Surveillance

Regional Measles Elimination and Rubella/CRS Control by 2020

- The new regional goals require new activities in relevant areas including surveillance
- Case-based, laboratory supported measles/rubella surveillance is required to meet the 2020 regional goals

Surveillance standards for measles and other priority vaccine-preventable diseases in South-East Asia

Report of a regional workshop
New Delhi, India, 23–27 September 2013

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Current Status

- All countries do some form of case-based surveillance
- All countries report case data to SEARO
- 10 countries have an accredited national laboratory
- BHU, DPRK, MAL and SRL may have eliminated measles
- BAN, NEP, THA and TLS with relatively low level of measles transmission
- MYN will conduct a nationwide wide-age range MR campaign Jan/Feb 2015
- TLS yet to introduce RCV or conduct an MR campaign
- IND and INO have relatively high levels of virus transmission and yet to conduct a nationwide wide-age range MR campaign
- CRS surveillance
  - Two countries report cases to SEARO
  - Two additional countries piloting
- Certification level AFP surveillance in all countries

Definition

Case-based laboratory supported measles/rubella surveillance is:

Case-based reporting of every clinically-suspected measles case with the results of laboratory testing, and “zero” reporting, and not merely confirming a few cases by laboratory testing and then reporting of aggregate numbers as is currently done. This means tracing all cases, and obtaining personal and epidemiological details of each case in order to establish chains of transmission.

Criteria

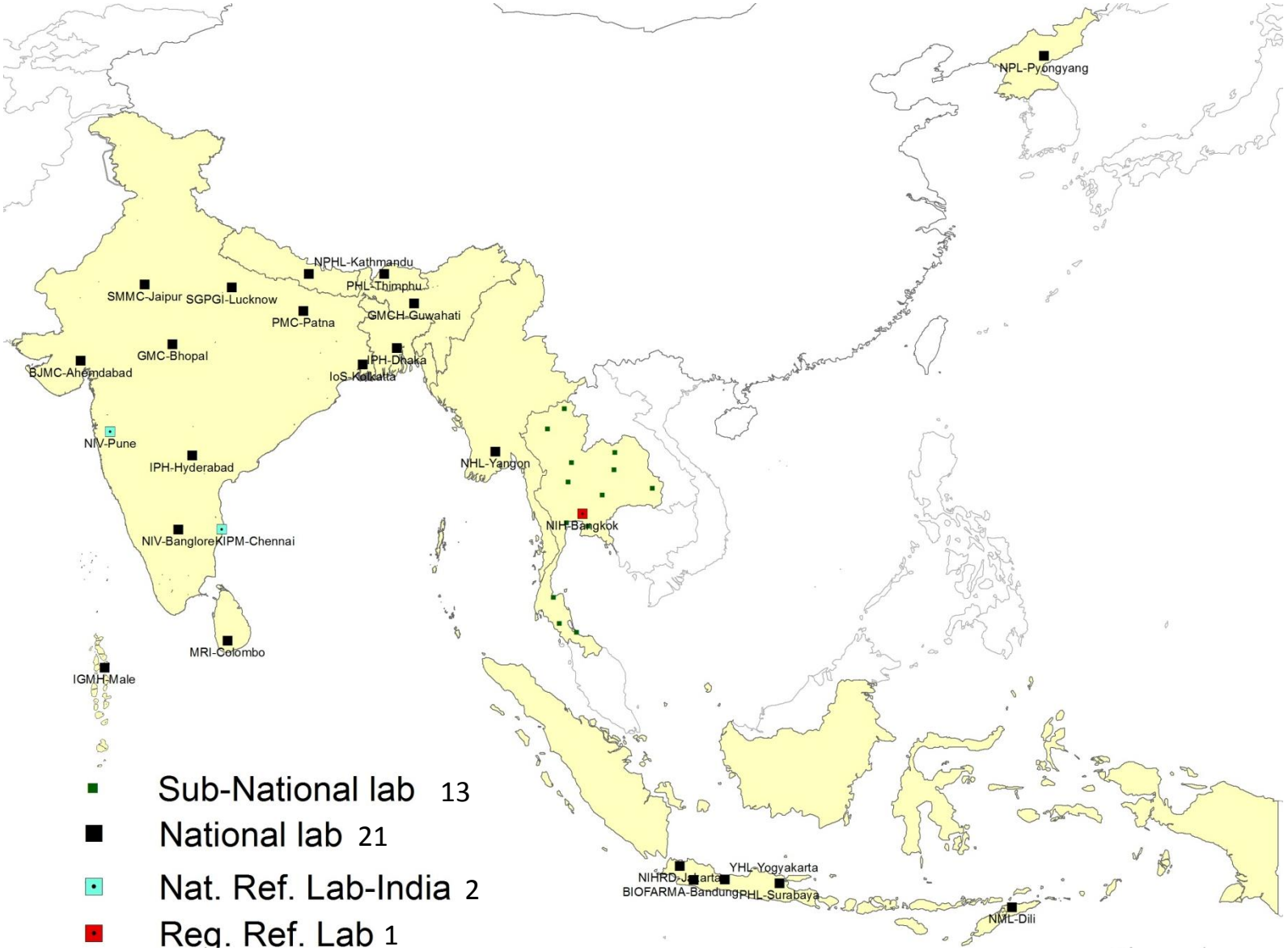
- Countries should establish nationwide case-based, laboratory supported measles / rubella surveillance as soon as feasible
  - Relatively low levels of virus transmission
  - After a nationwide wide-age range MR campaign
  - All countries except IND and INO ready to establish now
  - IND and INO conduct case-based reporting in selected areas, and will implement nationwide case-based surveillance only after the nationwide wide-age range MR campaign

Laboratory

Laboratory

- All countries have a national laboratory for measles / rubella surveillance
  - 10 countries have an accredited one
- 37 laboratories currently in the Regional network
- All report results to SEARO

SEAR MR laboratory network, 2014: 37 Labs



Strengthen Support and Linkages

Support and Linkages

- Advocacy, social mobilization and communication
- National and subnational coordination and advisory bodies for measles elimination and rubella/CRS control
- A regional verification commission (RVC) and national verification committees (NVC) for measles (and rubella/CRS) elimination
- Identify and utilize synergistic linkages of integrated program efforts
- Programme monitoring and oversight

Support and Linkages (cont)

- Will cost approximately an additional 800 million USD
- Political support from the highest level of national governments
- Line budgets for these activities
- Partnering with governments, civil society, philanthropic, NGOs, international organizations, religious organizations and private companies

Key Challenges

- Increasing routine immunization coverage
  - Can't rely on repeated SIAs as polio did in some areas
- The large countries – India and Indonesia
- Ensuring adequate vaccine supply
- Ensuring adequate funding
- Ensuring adequate trained staff

The Funding Challenge, 2014-2020
Regional Requirements of about US$800 mill.

- GAVI funding support available
- Measles Rubella Initiative funding support
- Reliable funding support from USCDC
- National budget lines:
  - India will cover its vaccine costs
  - Indonesia may have potential funds for vaccine
  - Other countries: mix of external and internal funds

Strengthening Routine Immunization

- If routine immunization does not achieve greater than 95% coverage for both doses, then measles elimination will likely not be achieved
- This has not been achieved for any antigen throughout the Region
- No greater challenge

Conclusion:
The 2020 Target Can Be Reached

Positives:

- BHU, DPRK, MAL and SRL may have eliminated measles
- BAN, NEP, THA with relatively low level of measles transmission
- Polio infrastructure still in place in the five priority countries of BAN, IND, INO, MYN and NEP

Challenges:

- Routine immunization coverage for both doses of MR or MMR must be extremely high, ≥95%
- All countries that have yet to conduct national wide-age range MR campaigns must do so
- All countries need to rapidly achieve required case-based, laboratory supported surveillance standards
- Need to accelerate implementation of the recommended strategies

Anne Ray Charitable Trust

Japan International Cooperation Agency