

Update on Progress and Challenges in Achieving Measles and Rubella Targets

SAGE Meeting

6 November 2013

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Overview

- Global progress
- Regional updates
- Summary

Measles and Rubella Targets

Global targets by 2015:

Measles mortality reduction of 95% vs. 2000

Measles reported incidence <5 cases per million

Measles vaccination coverage $\geq 90\%$ national and $\geq 80\%$ district

Regional targets:

Measles Elimination goals:

2000 AMRO

2012 WPRO

2015 EURO, EMRO

2020 AFRO, SEARO

Rubella Elimination goals:

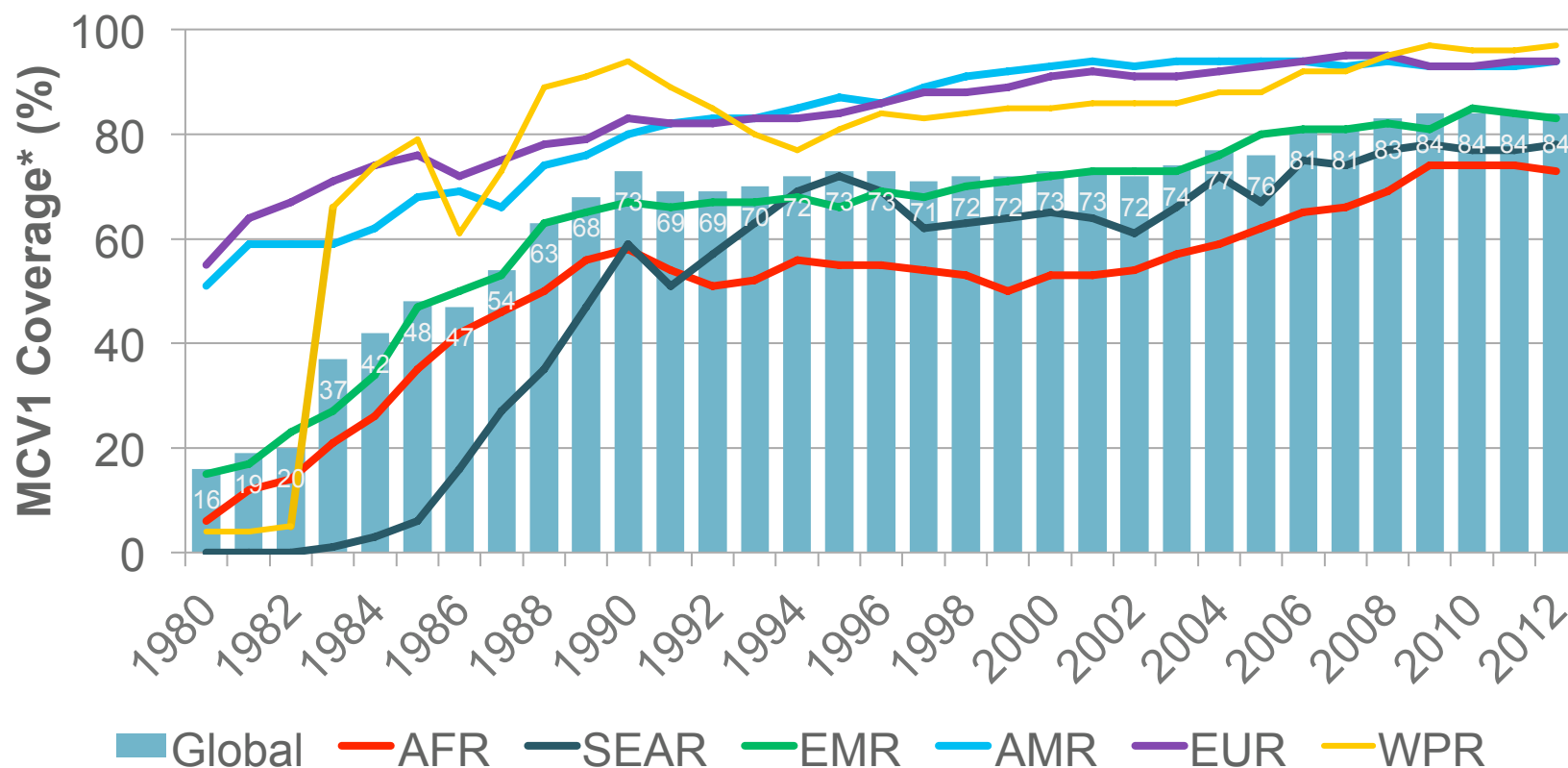
2010 – AMRO, 2015 – EURO

Global Vaccine Action Plan (GVAP):

2020 Measles and rubella elimination in 5 WHO regions

Global MCV1 coverage has levelled off at 84%

1st Dose measles vaccine coverage by WHO region, 1980-2012



Source: WHO/UNICEF coverage estimates 2012 revision. July 2013; Immunization Vaccines and Biologicals, (IVB), World Health Organization.
194 WHO Member States. Date of slide: 17 July 2013

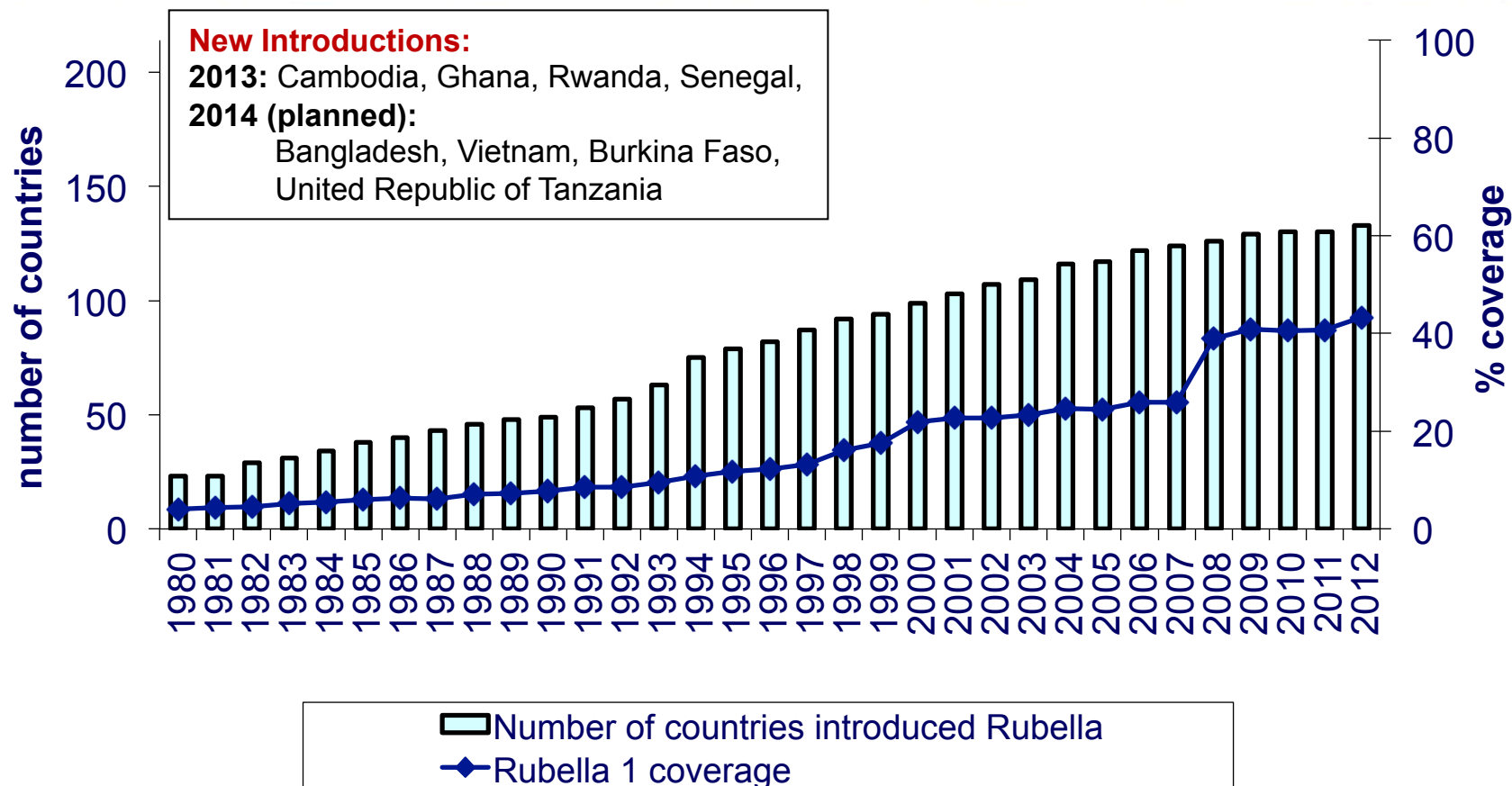
MCV2 in Routine and Measles SIAs, 2012-2013

- **MCV2 in routine**
 - 2012: in 146 of 194 countries (75%)
 - 2013: Kenya, Rwanda, Sao Tome, Zambia
 - 2014/5: Burkina Faso, Senegal, Malawi, Mozambique, Papua New Guinea, Sierra Leone
- **Measles, MR SIAs**
 - 2012: 112 million reached in 32 countries
 - 2013 (as of October): 64 million reached in 10 countries
 - Problems:
 - Low coverage in some countries
 - Administrative coverage often misleading (survey estimates lower)*

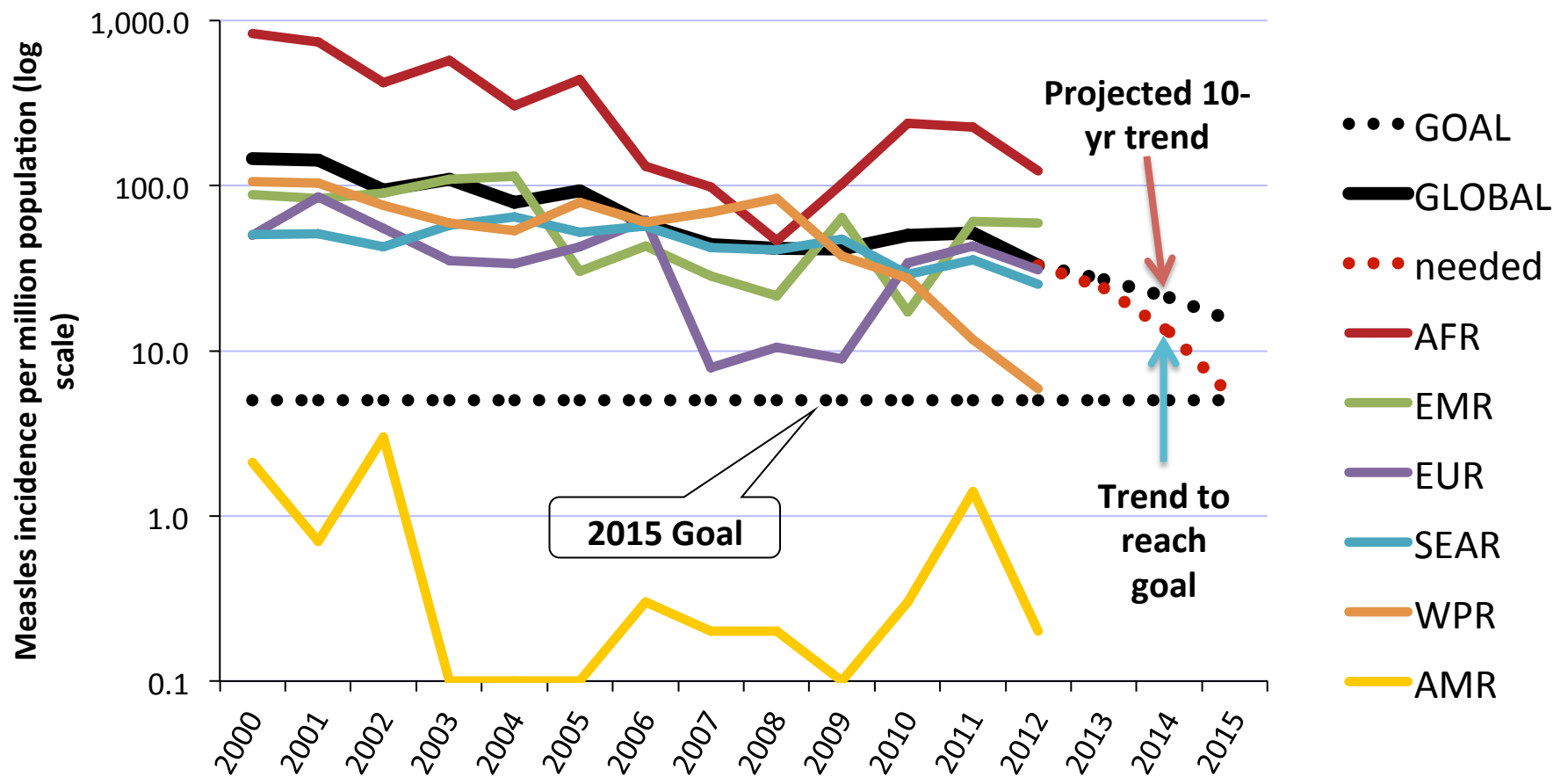
*Source: W. Gong, BMGF, unpublished literature review, 2013

Global RCV coverage has reached 43%

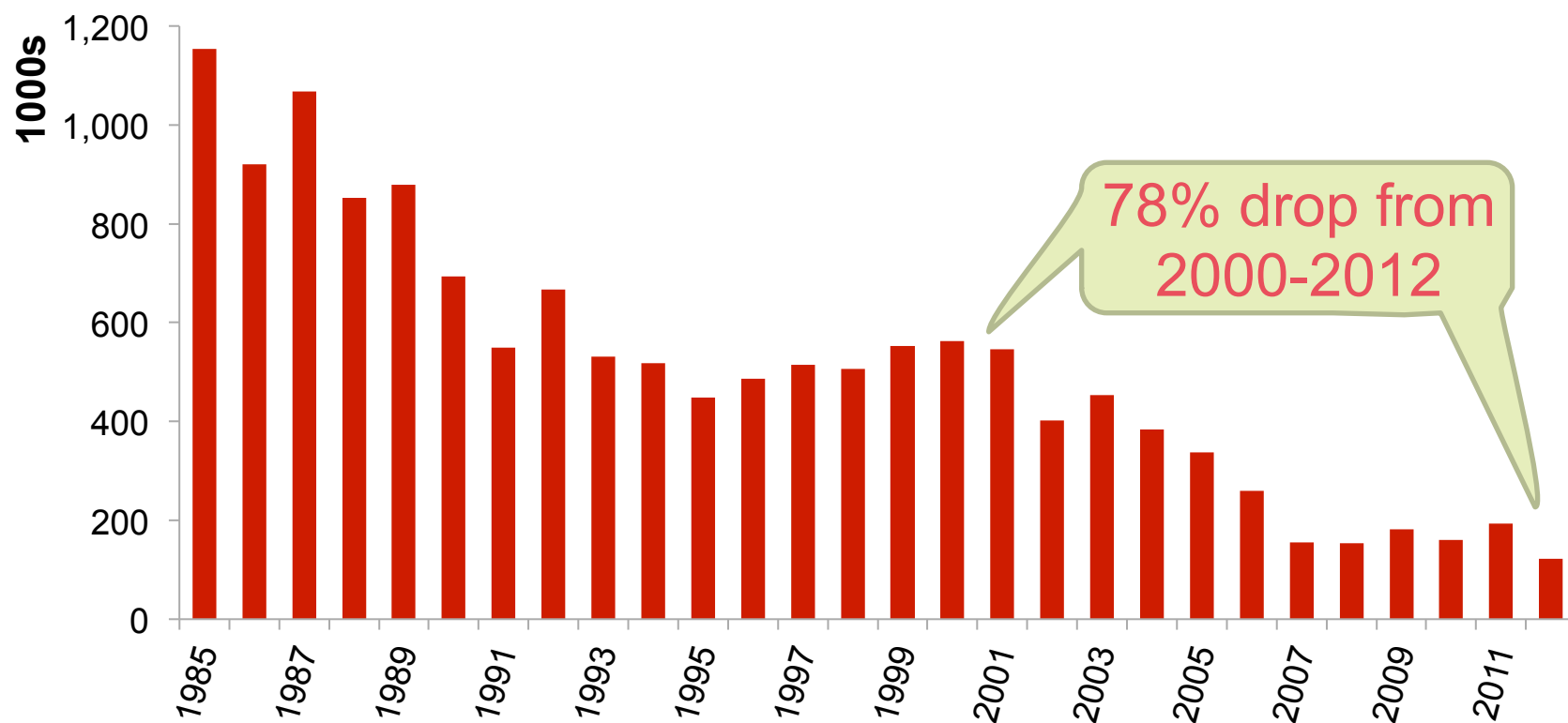
Number of countries using RCV and global coverage with RCV1



77% Reduction in Global Measles Incidence, 2000-2012



Reduction in estimated measles deaths, 1985 - 2012

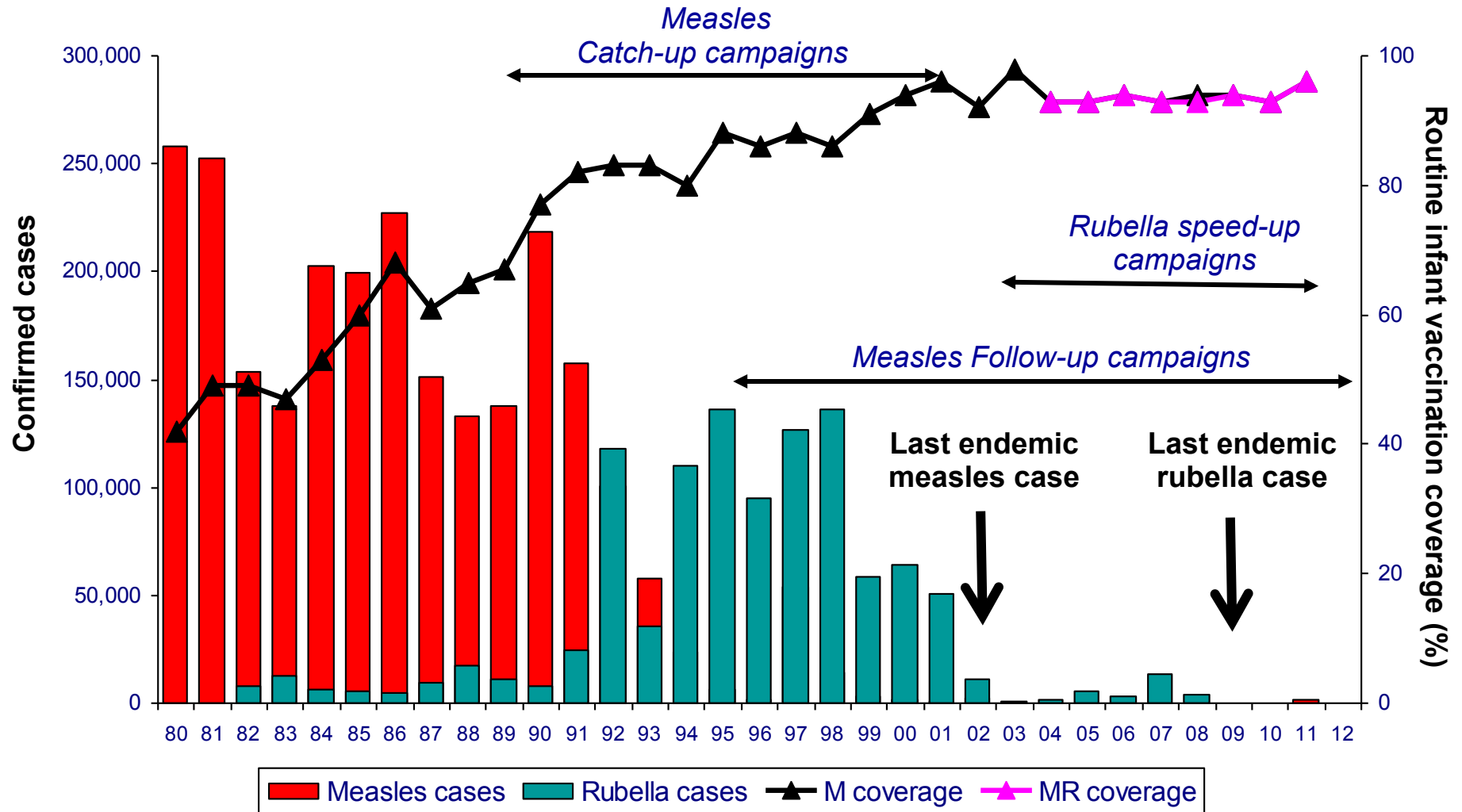


Source: WHO/IVB provisional estimates, 21 October 2013

Regional Updates

The Americas

Measles vaccination coverage among children <1 year of age* and reported measles and rubella cases, 1970-2012

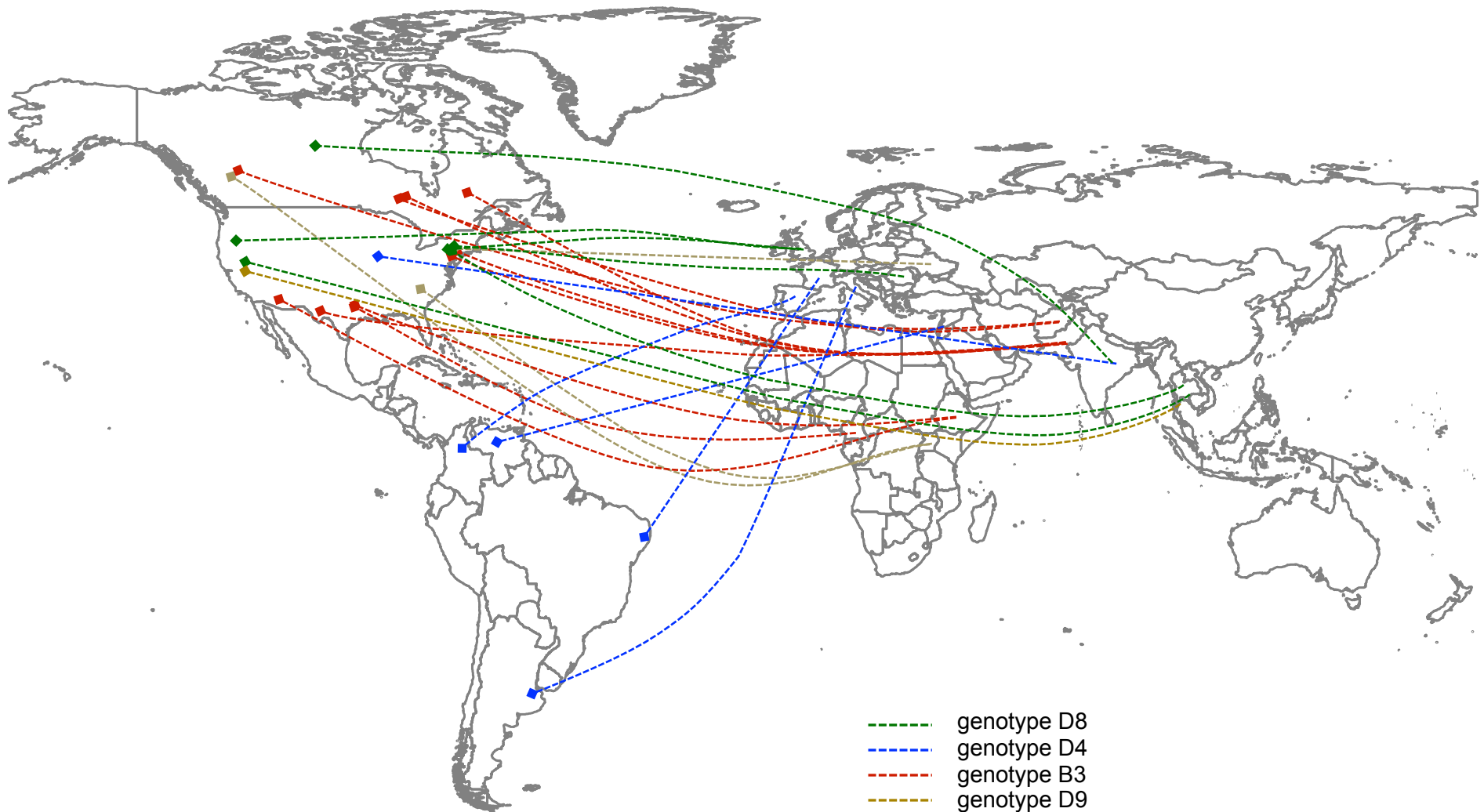


*MR in children aged 1 year as countries introduced measles-rubella containing vaccines

Source: Country reports to FCH-IM/PAHO.

Reported measles importations by genotype

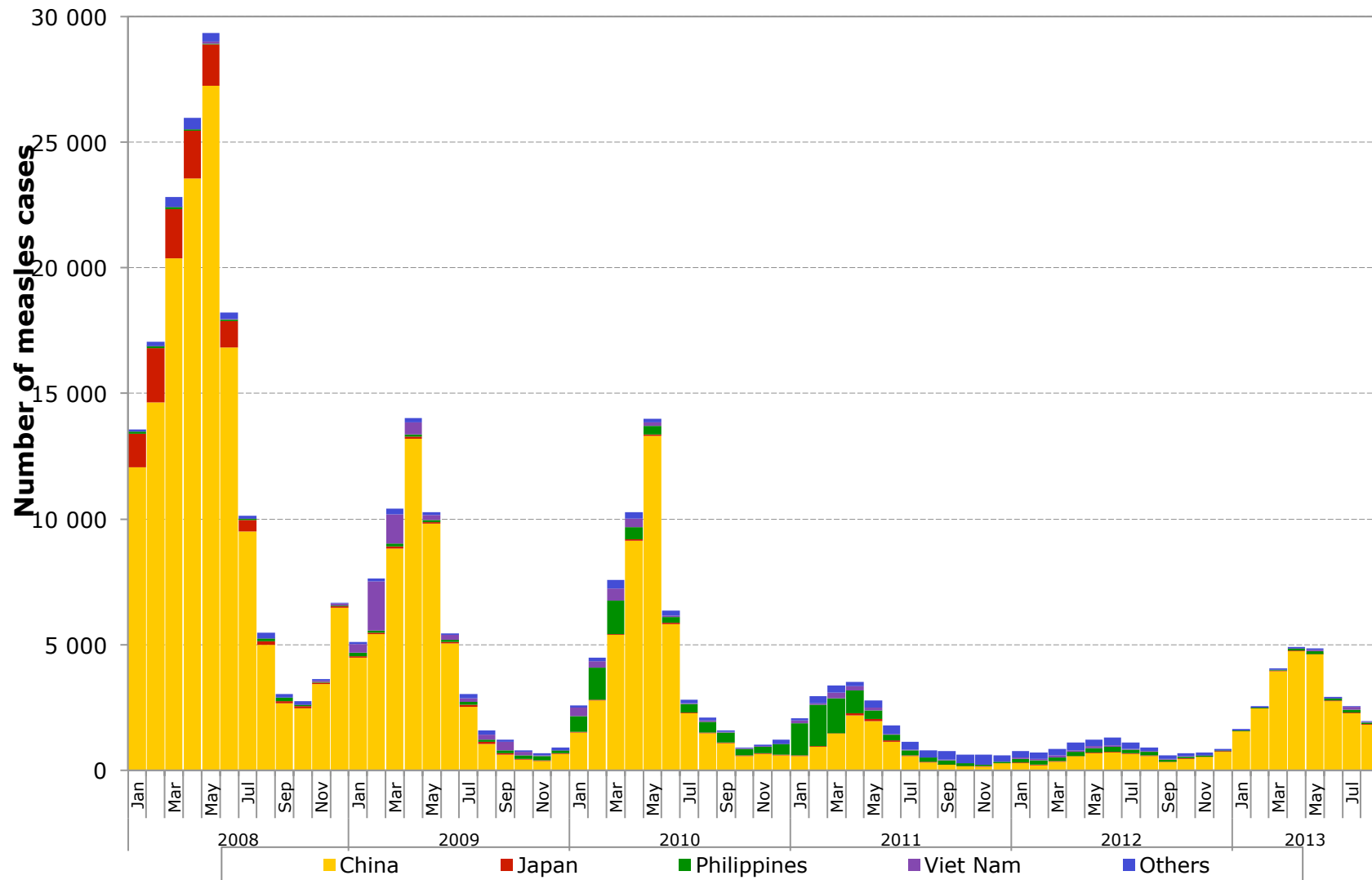
The Americas, 2012



Source: Country reports to PAHO/WHO (as of EW 3/2013) and the Global Measles Laboratory at the US Centers for Disease Control (CDC)

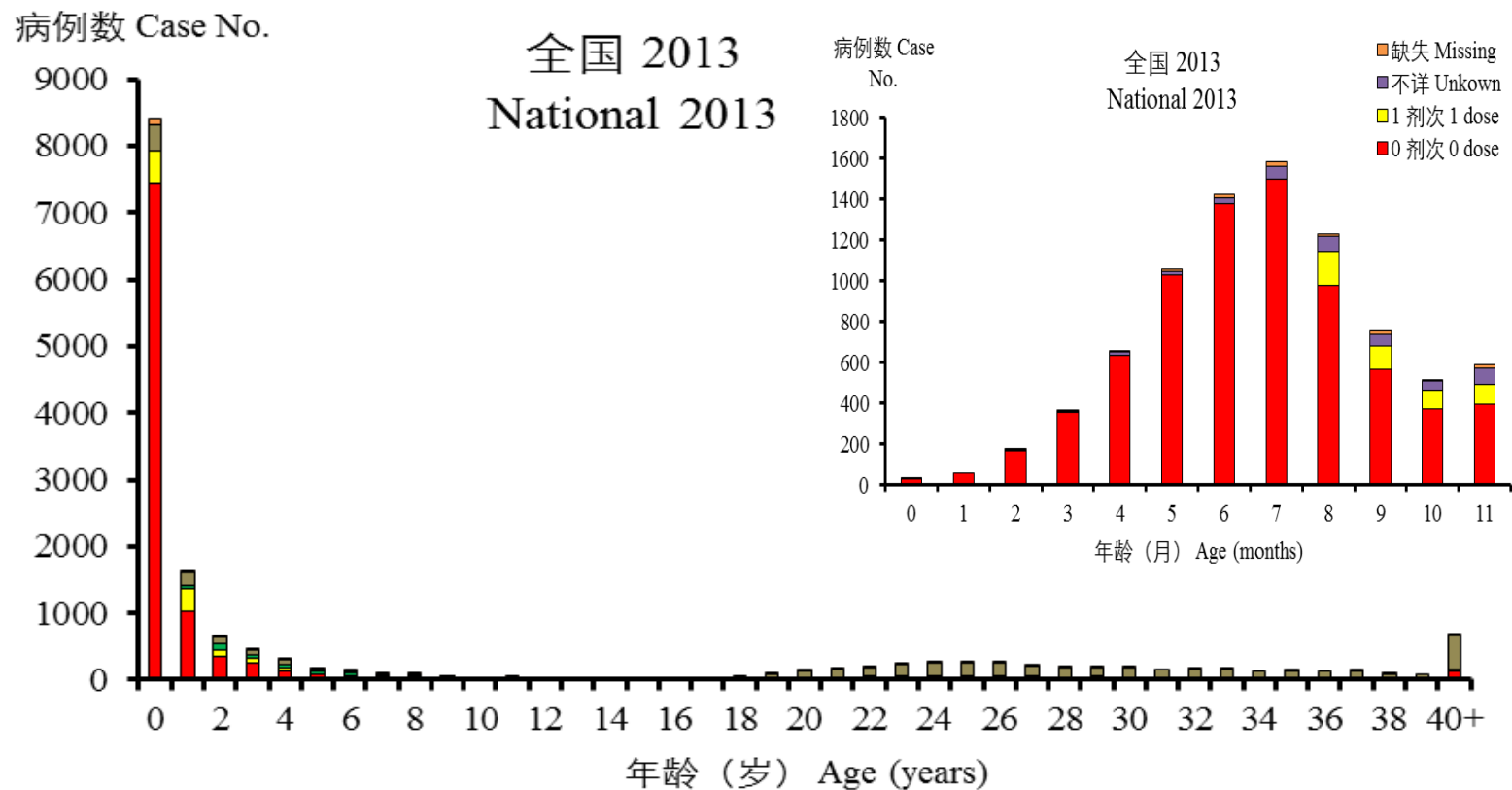
Western Pacific Region

Measles Cases by Month and Country, 2008-August 2013



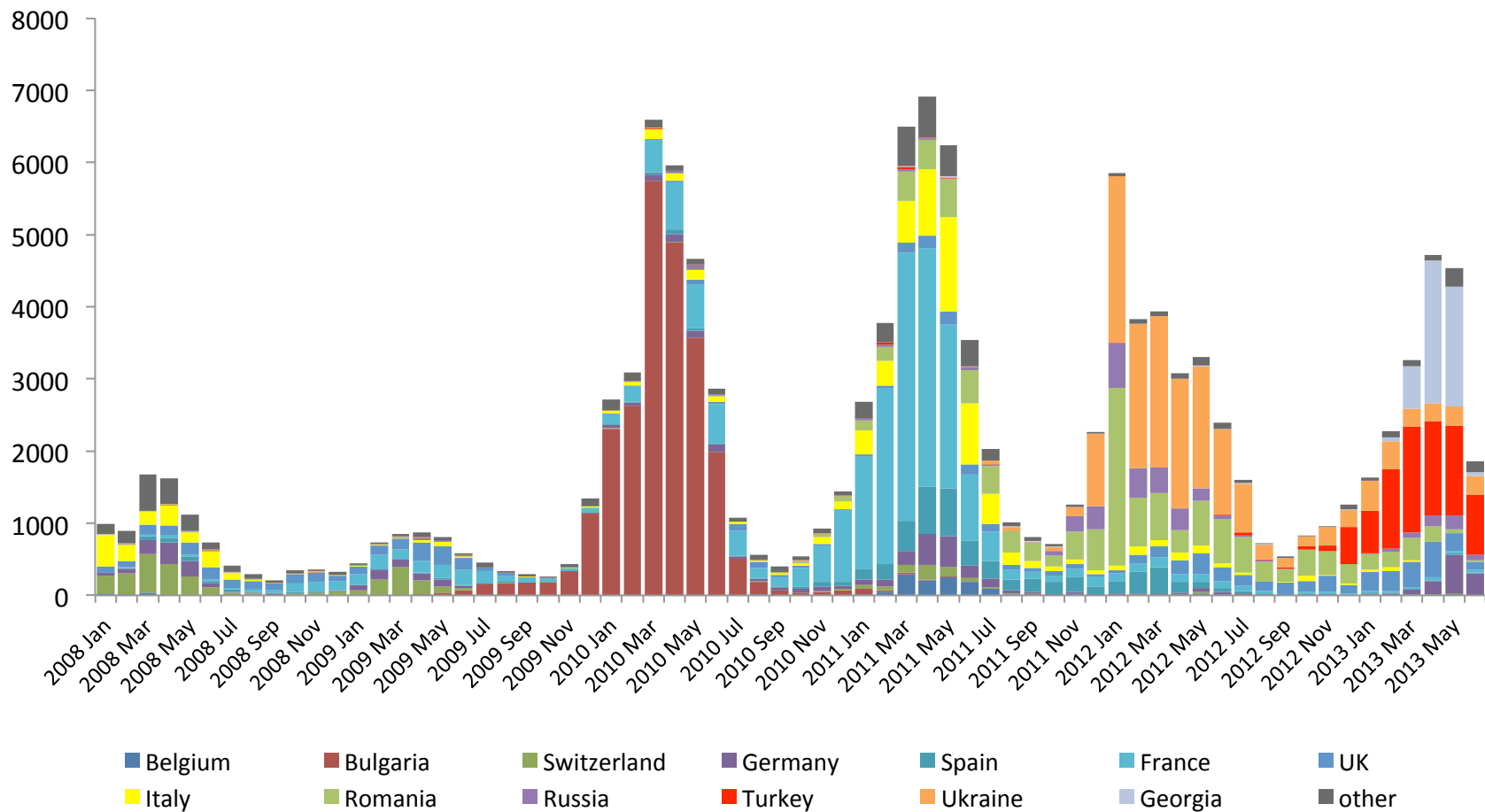
China

Measles cases by age group and vaccination status, January - May 2013



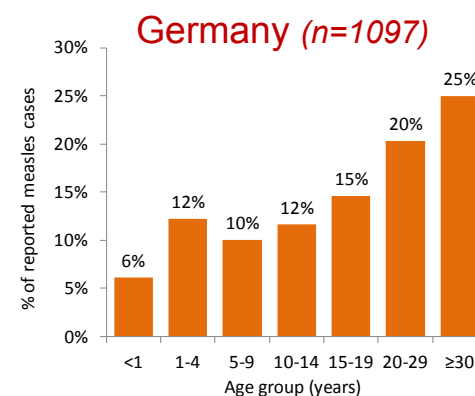
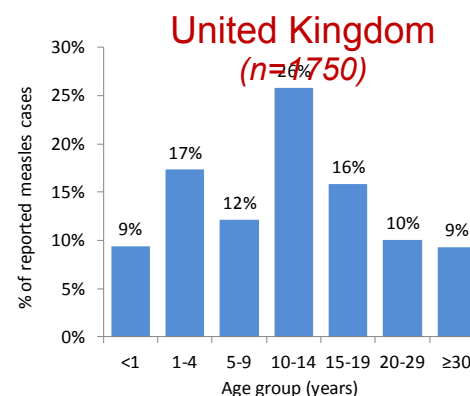
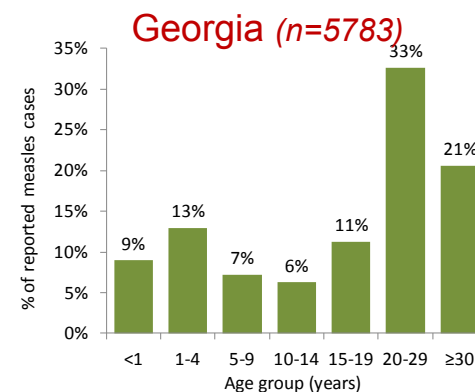
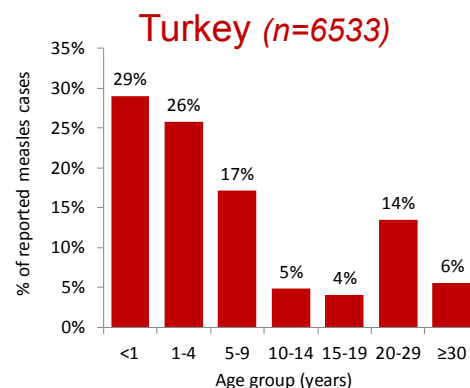
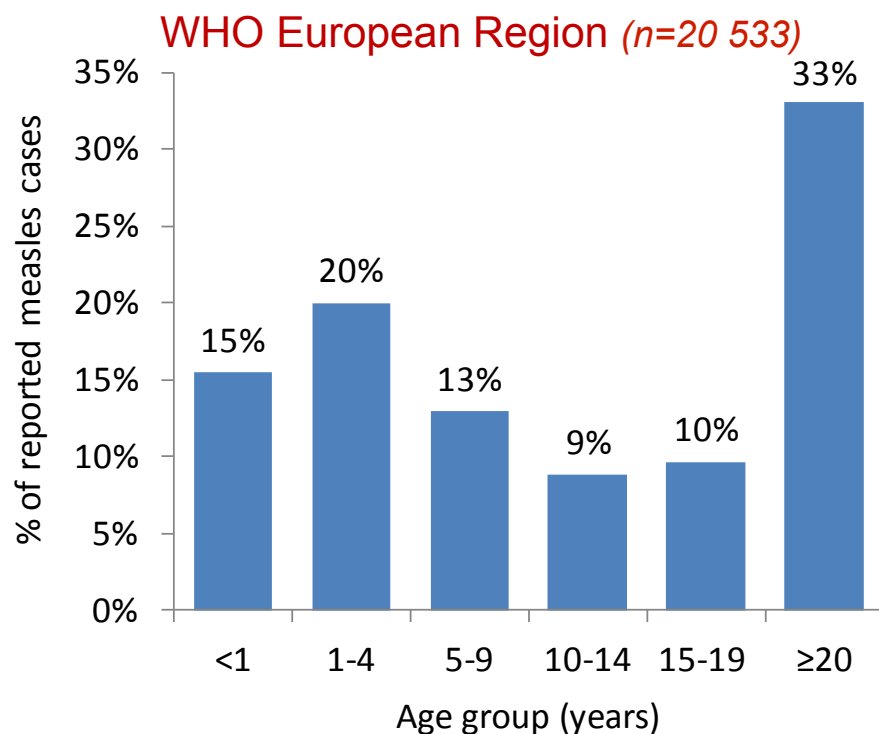
European Region

Measles Case Distribution by Month & Country, 2008-2013



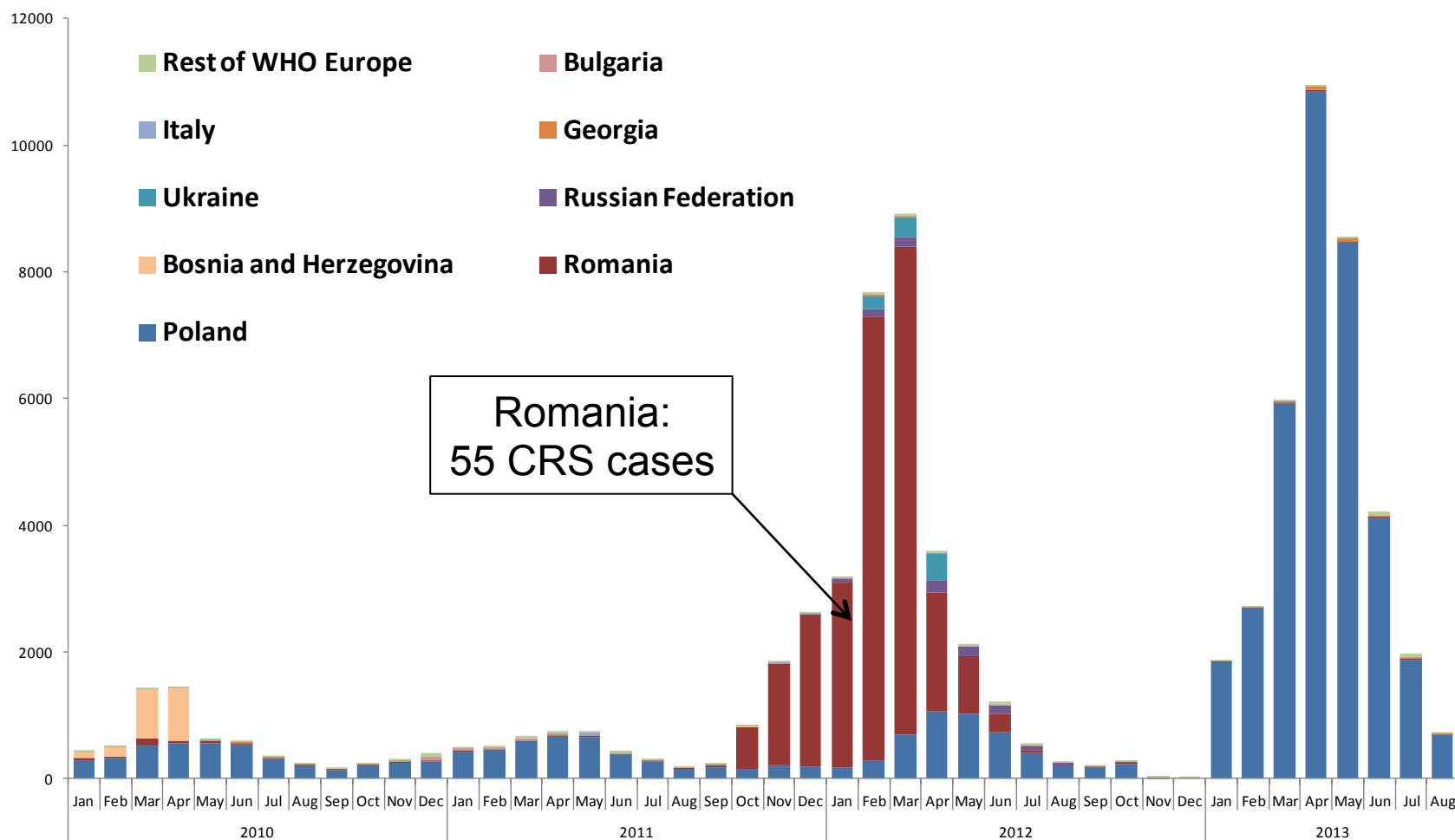
Percentage of reported measles cases by age group

January-June 2013



European Region

Rubella Cases by Month & Country, 2008- August 2013

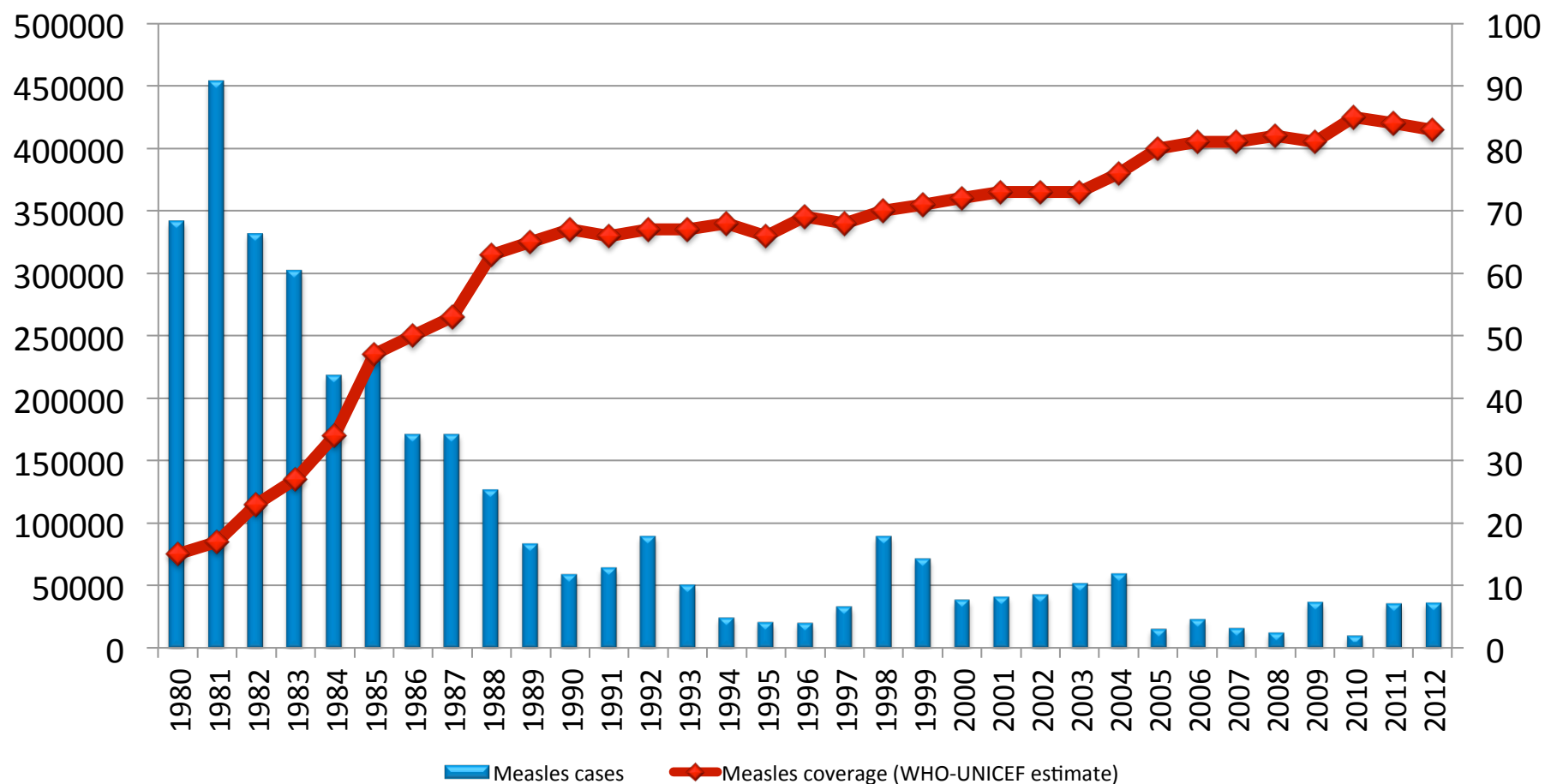


**World Health
Organization**
REGIONAL OFFICE FOR
Europe

*Monthly reported cases to the CISID, WHO Europe

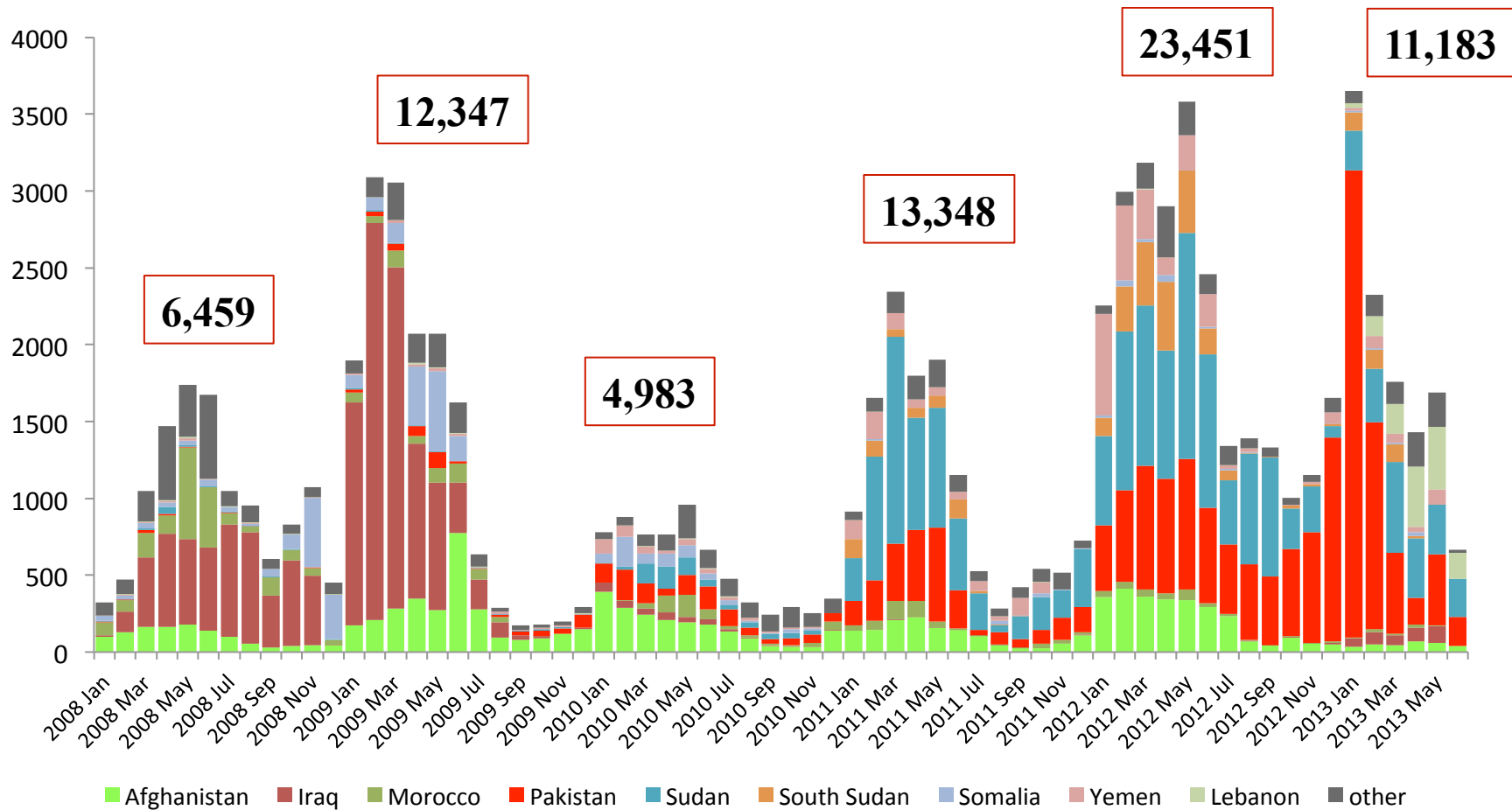
Eastern Mediterranean Region

Reported measles cases and MCV1 coverage, 1980-2012



Eastern Mediterranean Region

Measles Cases by Month and Country, 2008-2013



Data source: monthly measles surveillance DEF file
Data in HQ as of 5 Aug 2013

Measles elimination and rubella control

Measles remains a significant cause of morbidity and mortality worldwide, with the South-East Asia Region accounting for about half of the estimated 158 000 global measles deaths in 2011. Measles and rubella can be eliminated, as shown by the WHO Region of the Americas. All other regions, except South-East Asia, have a measles elimination target and some regions have rubella elimination or control targets. Through a regional consultative process, Member States in the South-East Asia Region have agreed that measles elimination and rubella congenital rubella syndrome (CRS) control are technically, biologically and programmatically feasible by 2020.

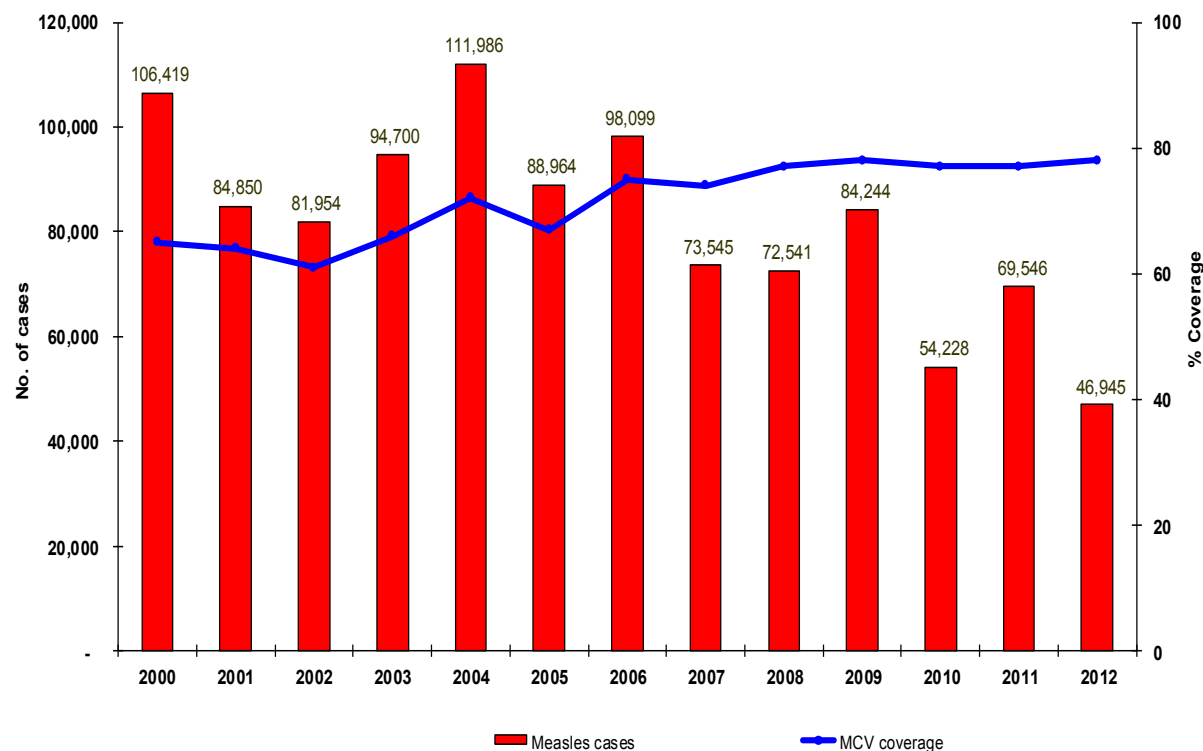
Measles and rubella elimination are defined as the absence of indigenous virus transmission in a geographical area (WHO Region/Member State) for at least 12 months in the presence of a well performing surveillance system.

The routine measles immunization coverage or measles-containing vaccine (MCV1) coverage of 75% in 2012, immunization provided through large supplementary campaigns, and improvement in surveillance backed by an accredited laboratory network have resulted in a 62% decline in the measles incidence rate and a 70% decline in measles deaths, India excluded. Seven Member States (and four union territories of India) offer rubella vaccine through routine immunization in combination with measles and/or mumps vaccine.

In 2012, Member States launched intensification of routine immunization in a drive to increase routine immunization coverage. Routine immunization is the foundation for achieving and sustaining measles elimination and rubella/CRS control. The region is therefore set for the South-East Asia Region to adopt a measles elimination and rubella/CRS control target of 2020. The challenges that must be overcome are significant but well known, and are in various stages of being addressed. Political commitment and adequate financing, national and external, will lead to successful achievement of the target by 2020.

The High-Level Preparatory (HLP) Meeting held in the Regional Office in New Delhi, India, from 1 to 3 July 2013 reviewed the attached working paper and made the following recommendations:

South East Asian Region



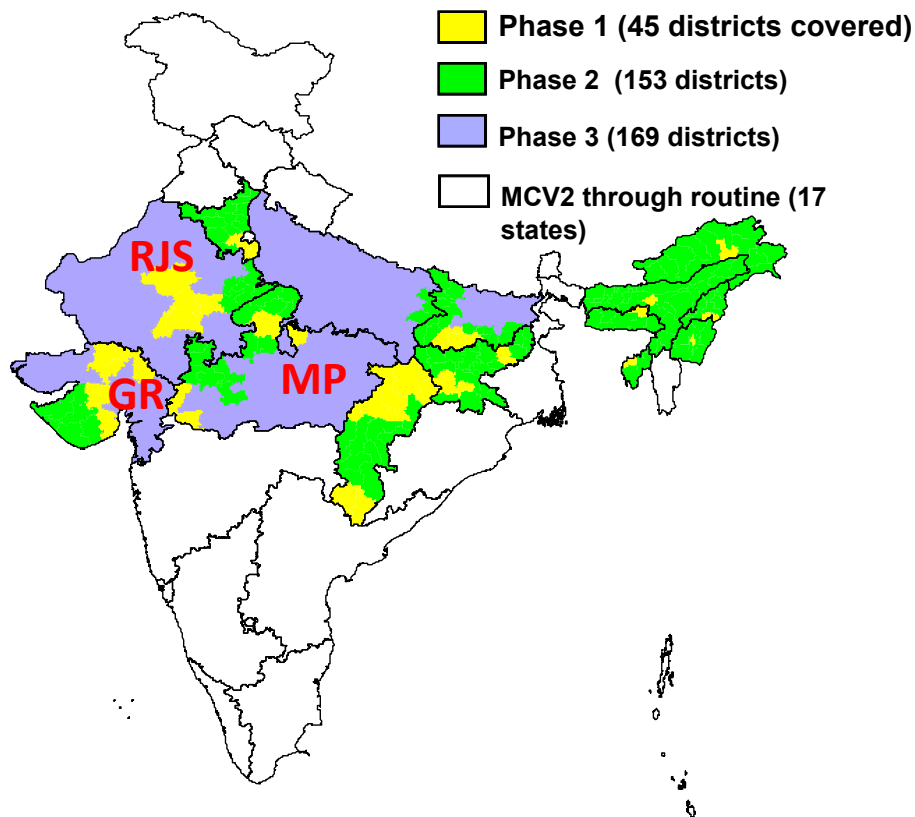
**Reported Measles Cases¹ and MCV1 Coverage²,
SEAR, 2000–2012**

¹ WHO/UNICEF JRF

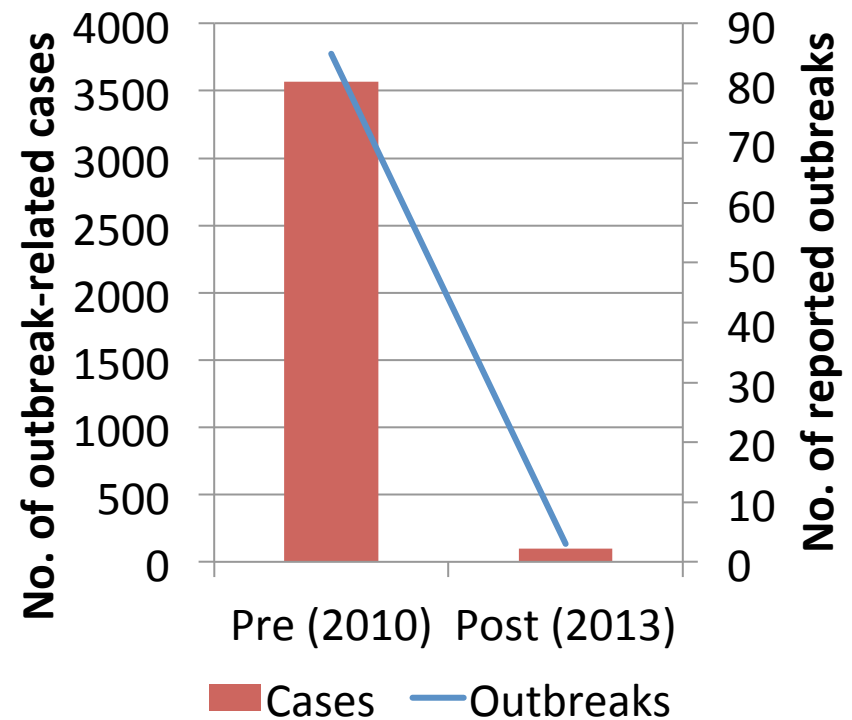
² WHO/UNICEF estimates, 2013

India: Measles 2nd dose introduction and impact of SIAs on Measles outbreaks

14 states with MCV1 <80%: through SIAs;
21 states with MCV1 ≥80%: through routine

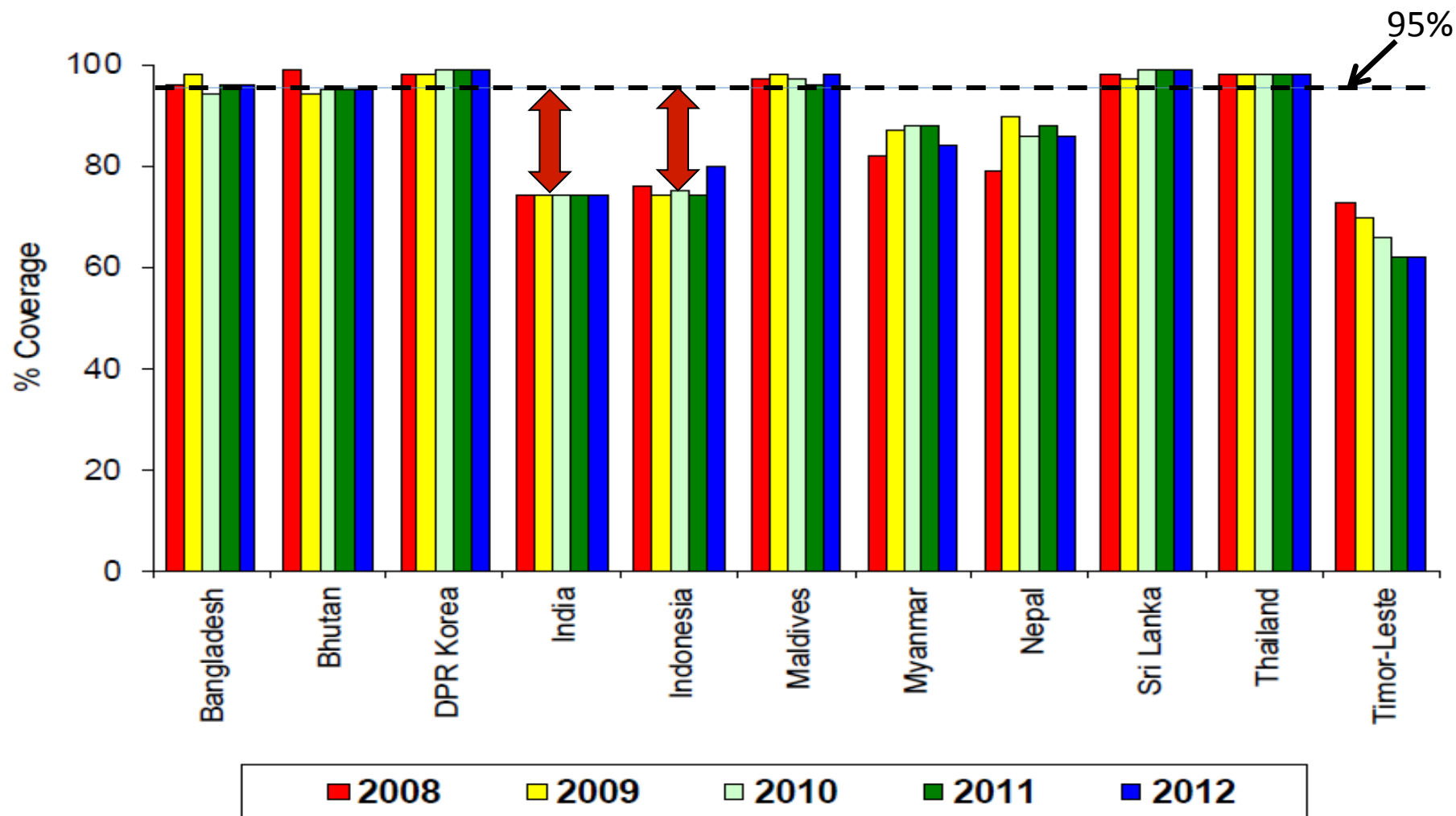


No. and size of measles outbreaks has decreased after SIAs in states in phases 1,2 & 3*



* Outbreaks and cases of Gujarat (GR), Madhya Pradesh (MP) and Rajasthan (RJS) states that had laboratory supported Measles surveillance for year 2010 and 2013

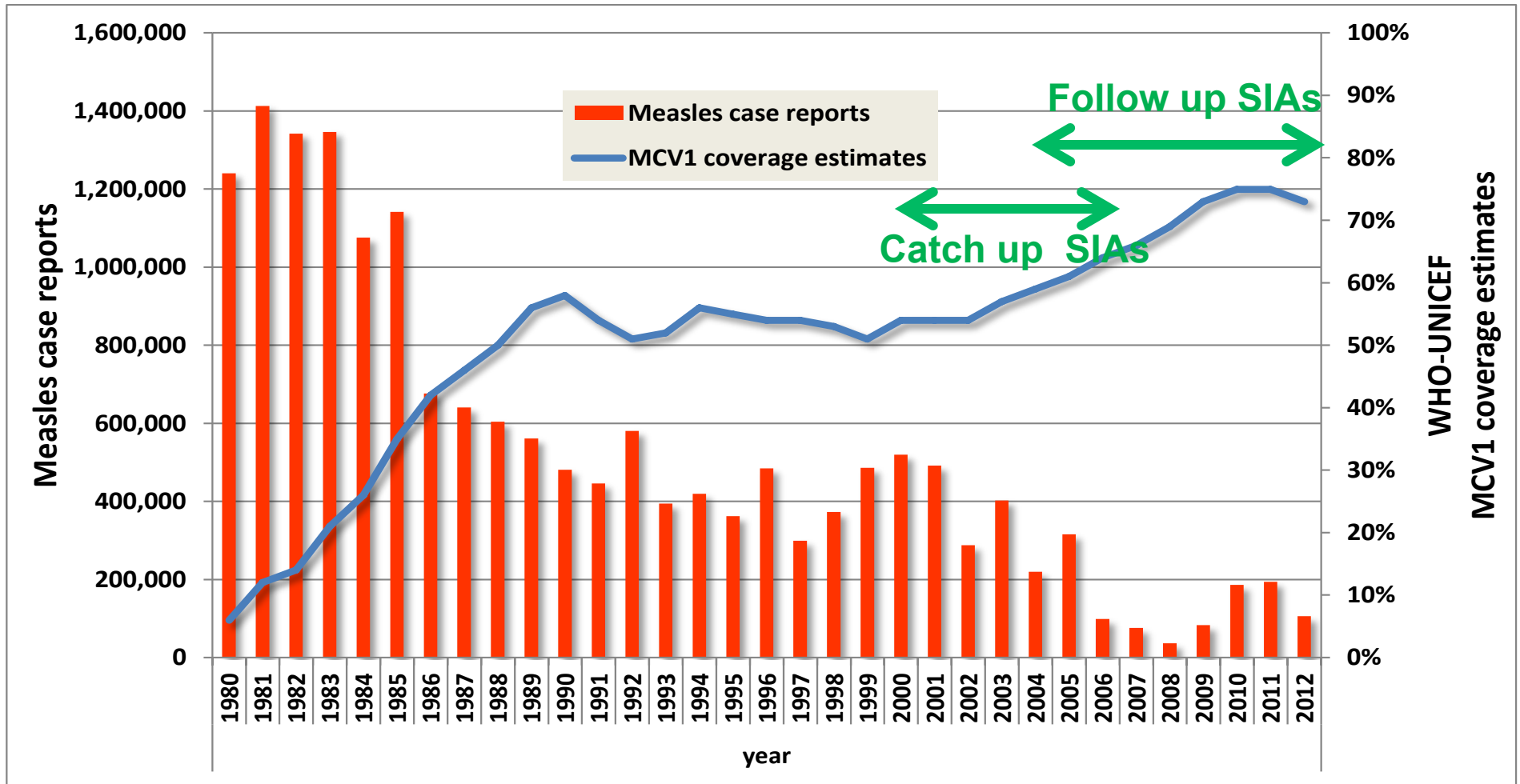
MCV1 Coverage for SEAR countries.



Source: WHO/UNICEF estimates, 2013

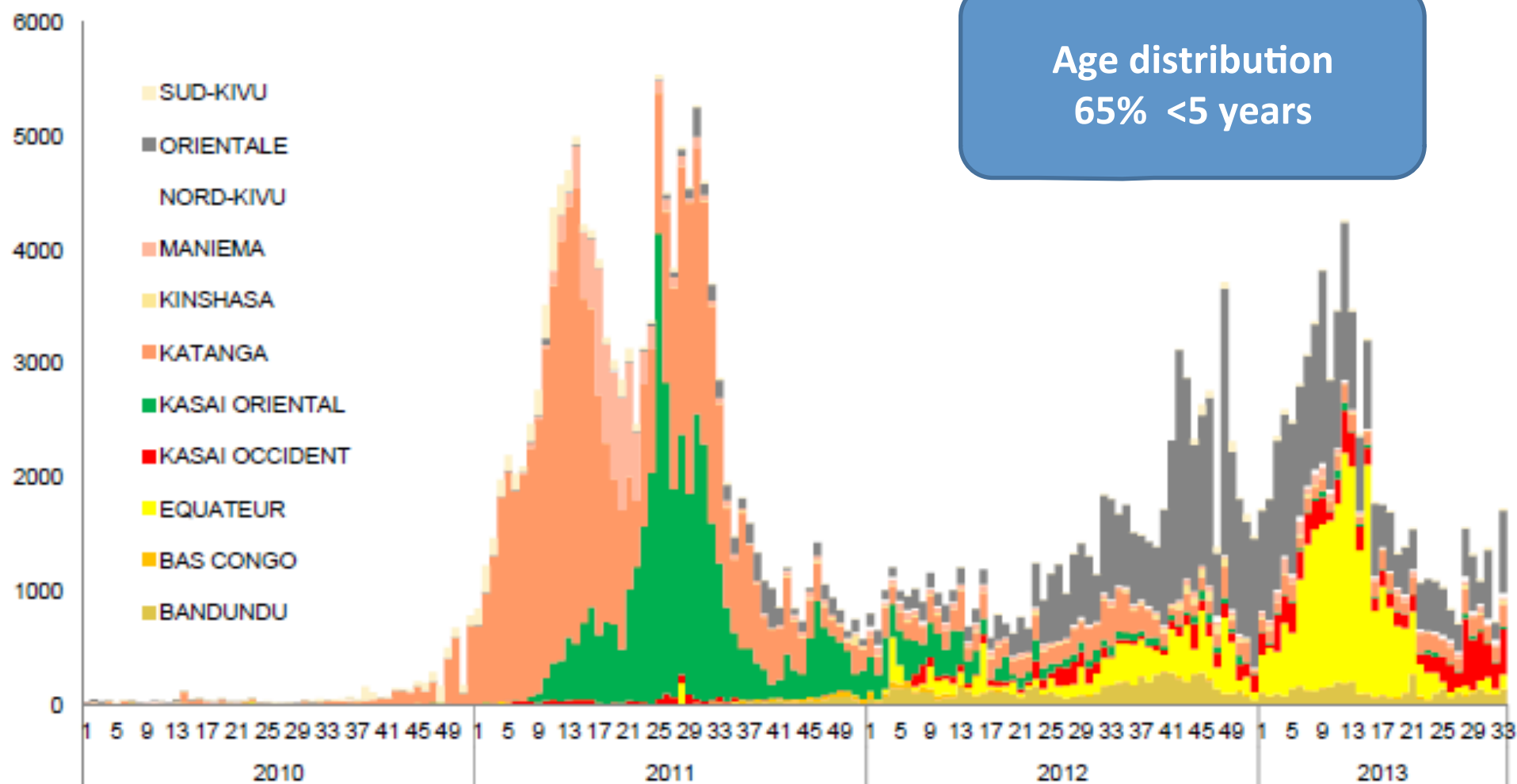
African Region

Measles case reports & MCV1 coverage, 1980 - 2012



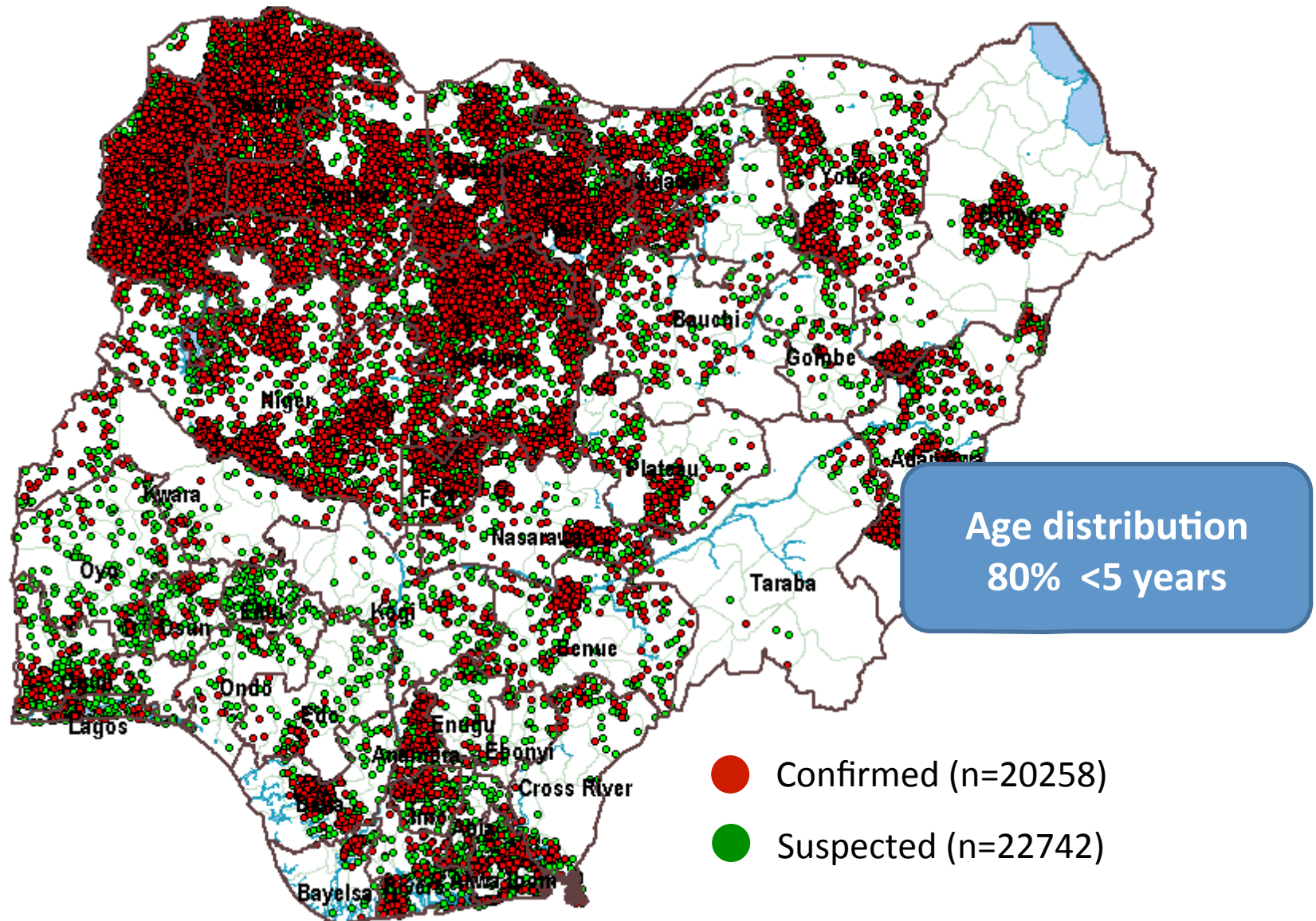
Democratic Republic of Congo (DRC)

Weekly trends of measles reporting by province, 2010 – 2013



Nigeria

Suspected and Confirmed Measles Cases, Weeks 1-17, 2013

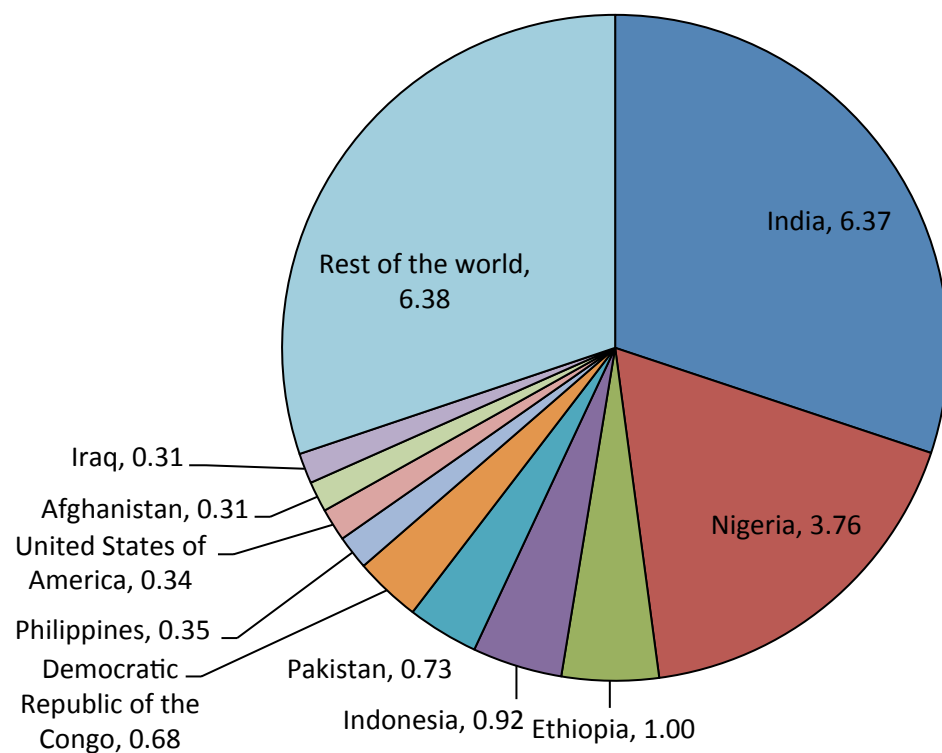


Source: Measles case based database as of 26 Apr 2013

Summary

Assessment by the SAGE Working Group on
Measles and Rubella

Major global challenge – weak immunization systems



- 21 million infants missed MCV1 in 2012
- 2/3 live in
 - India
 - Nigeria
 - Ethiopia
 - Indonesia
 - Pakistan
 - DRC

21 million infants not immunized (MCV1), 2012

Key Challenges by WHO Region

- Americas – risk of importations
- W. Pacific – completing measles elimination in China
- Europe – competing priorities, susceptible adults
- E. Med – security limiting access
- SE Asia – heterogeneous coverage in large countries (e.g. India, Indonesia)
- Africa – weak immunization & health systems

Global Scorecard

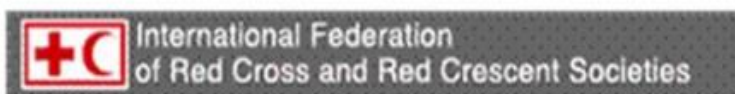
Indicator	2015 Target	2012	Comment
MCV1 coverage	90%	84%	No progress since 2009
Measles incidence (per million)	<5 /million	33.3	Rate of decrease too slow
Measles mortality reduction	95%	78% (provisional)	Rate of decrease too slow

Regional Scorecard

WHO Region	Elimination Target	2012		Comment
		MCV1 coverage	Measles/Rubella incidence (/million)	
AMR	2000 – measles 2010 – rubella	94%	0.2 0.015	On track
WPR	2012 – measles	97%	5.9	On track
EUR	2015 – measles 2015 – rubella	94%	31.0 32.8	Off track
EMR	2015 – measles	83%	59.2	Off track
SEAR	2020 – measles	78%	25.3	New target
AFR	2020 – measles	73%	123.5	Off track

Draft Recommendations

- SAGE commends countries and Regions for progress being made. However, based on current performance, the global 2015 measles control targets as well as elimination targets in EUR, EMR and AFR will not be met on time
- 4 Regions still need to establish rubella elimination targets. SAGE urges the AFR, EMR, EUR and SEAR to work towards establishing rubella elimination targets
- The GVAP coverage targets of 90% nationally and 80% in every district are insufficient to achieve measles elimination. This coverage target should be raised to 95% at both national and district level



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Questions for SAGE

- Does SAGE agree with the assessments of the working group?
- Does SAGE endorse the 3 draft recommendations?
- What additional strategies, tactics, and/or innovations are needed to get back on track, or remain on track?