Measles Rubella Vaccination Experience Bangladesh



Dr. Rajib Sarkar Bangladesh

Vaccination Schedule

- Measles Rubella Vaccine (1st Dose) After 09 month of age
- Measles Rubella Vaccine (2nd Dose) After 15
 Months of age

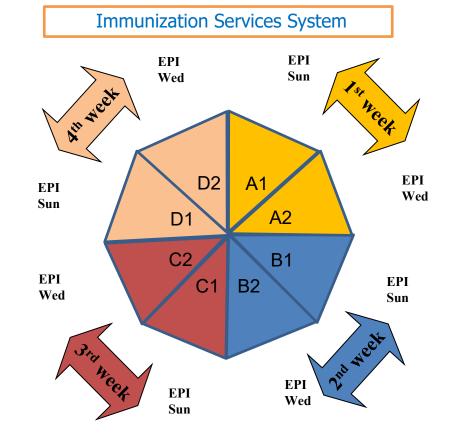
Key Highlights

- 1979 : <u>Introduced MCV-1</u>
- 2003 : Laboratory supported measles surveillance initiated
- 2005/2006, 2010: Conducted nationwide MCV catchup and follow-up campaign
- 2008 : Laboratory backed Case-based suspected measles surveillance initiated
- 2012 : MRCV-1 and MCV-2 introduced
- 2012 : Case-based Congenital Rubella Syndrome (CRS) surveillance with laboratory support started
- 2014: Nationwide MR catchup campaign
- 2015: MRCV-2 introduced (replacing MCV-2)
- 2018: Rubella & CRS controlled certification
- 2020 : Significant impact of COVID-19 on measles and rubella activities
- 2020: MR follow-up campaign conducted from 12 December 2020 -08 February 2021 (vaccinated 36 million children)
- 2021: Adopted Fever rash definition for suspected measles in June 2021
- 2022: Introduced 5-doses MR vials

Schema of Immunization Service Delivery System

Ward Level

- The immunization service is provided mainly through outreach sites.
- In rural areas, immunization services are delivered by Health Assistants & Family Welfare Assistants
- In Urban areas, immunization services are provided by MOLGRD and NGOs
- There is supervision and monitoring system of quality service delivery.



Service delivery in Rural Area

EPI HQ
District (64)
Upazila (491)

Union (4,598)

Ward (13,794)

Vaccination

Service Delivery

Point

Two sessions in 2 sub-blocks per week in each of the rural wards covering all 8 sub-blocks in a month. The cycle repeats in each of the months

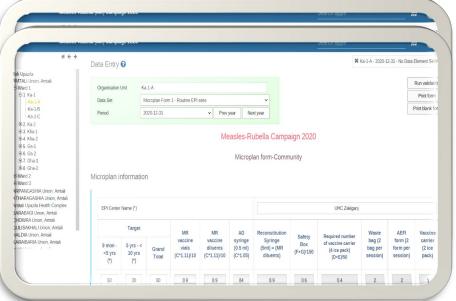
Data collection and Reporting Mechanism – MR Vaccine

- Web-based Dhis-2 System
- Online Micro-Planning
- Daily and Monthly Vaccine and Logistic distribution
- Daily reporting of Vaccination

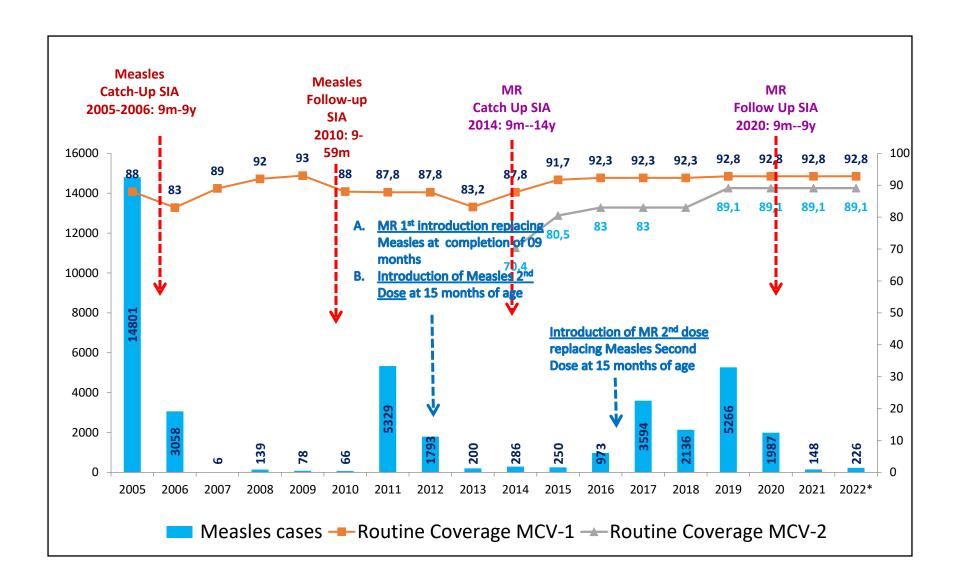
DHIS-2 Android App
GPS Co-ordinates for
Supervision app, Household Visit &
RCM

Development of a Public Dashboard

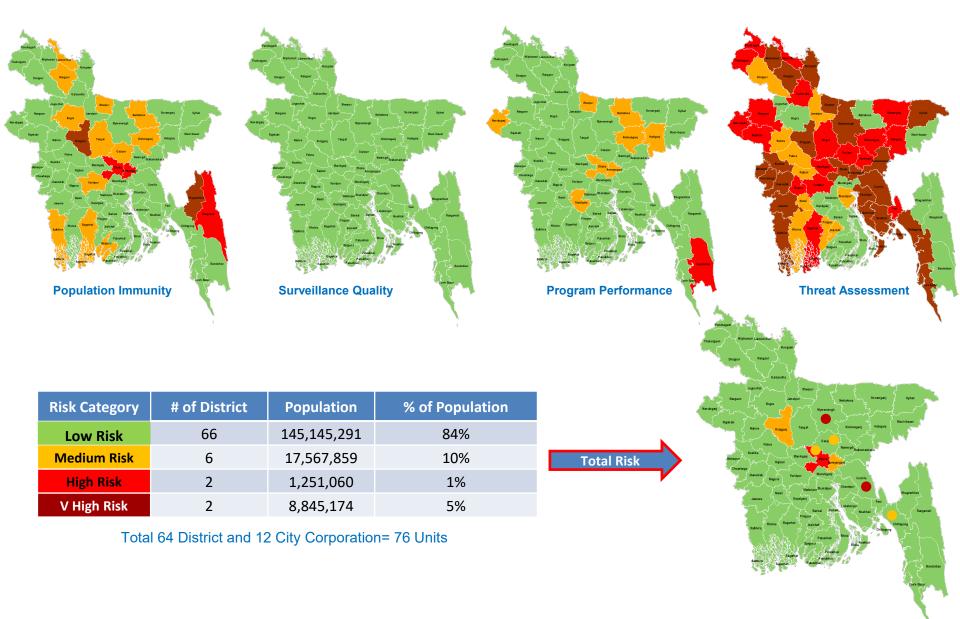




Impact of routine and supplementary vaccination on reporting of measles cases, 2005-2022*



Measles Risk Assessment for 2022 using best estimate of admin coverage (2019-2021) and CES 2019



Key Issues and Challenges

- Sustain high routine MRCV coverage (2 doses of MRCV ≥95% at subdistrict (upazila) within country
- Early detection suspected measles case and reinforcing CRS surveillance
- Throat swab samples coupled with serum samples (≤5 days of rash onset)
- Expansion and establishing measles lab network under National Lab
- Capacity of national lab personal for genotyping
- Availability of genotype result for tested samples within stipulated time
- COVID-19 pandemic

Key efforts made

- MR follow-up campaign conducted in 2020-'21 (36 million children vaccinated); high coverage achieved
- EPI & surveillance review 2021 conducted (WHO and Govt) in high priority districts and City Corporation
- During World Immunization week, missed children identified and listed
 - MR 1 : >120,000 children vaccinated
 - MR-2: >54,000 children vaccinated
- Quarterly MR bulletin Developed, printed and circulated to all level
- App based real time monitoring of routine EPI session and community (house-to-house) developed and initiated in Jan 2022

Way forward

- Maintain highest level political commitment
- Achieve and maintain high MR 2 doses (≥95%) through routine vaccination in all districts and sub-districts; identify and vaccinate MR zero dose children,
- Adjusting policy decision to increase MR vaccination in older age children
- Establish electronic tracking system for children missed MR vaccine
- Mapping of HTR/HR areas and implement geographically and culturally acceptable innovation to increase MR2 dose vaccination
- Analyse the trend of immunization coverage in the consistently low performing districts especially the districts with low access & low utilization (<95% coverage with MR1 and >5% drop out from MR1 to MR2)

MR campaign 2020 activities





Vaccination in MR campaign



RCA in MR campaign



Finger mark checking in MR campaign



Thank You