Gavi 2020 multi-stakeholder dialogue: immunisation planning in light of COVID-19

Introduction

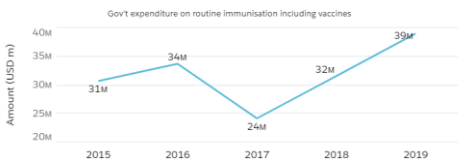
1. Country situation pre-COVID-19, based on information received by Gavi

Contextual Information

PEF Tier: Tier 3 | Fragility Status: Non-fragile | 2. Preparatory transition

Indicator Name	Year	Source	Value
GNI per capita	2019	World Bank	1,940
Health Centres per 100k population	2013	WHO - GHO	0.02
Nurses/Midwives per 1000 population	2018	WHO - GHO	4.1
Population	2020	UNPD	164,689,383
Surviving Infants	2020	UNPD	2,820,623
Under-5 mortality (per 1000)	2018	UNICEF	30

Health financing (and trends)



1.1. Overview of performance of vaccine support (end of 2019/early 2020; pre-COVID-19)

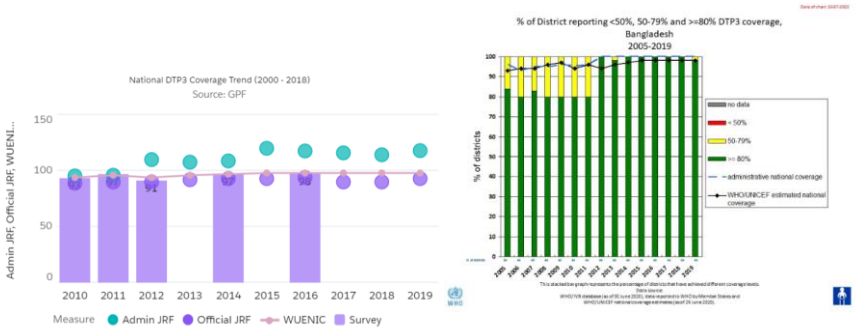
Vaccine	Introduction Date	2017 Coverage (%)	2018 Coverage (%)	2019 Target
PENTA	12-2009	98	98	0
MEASLES	09-2012	97	97	0
IPV	03-2015	17	75	-
PNEUMO	03-2015	97	97	-

Vaccine Name	Type	Sub-Type	Status	CP Date ↑	Phase
ROTA	Routine	-	Approved	2020-07-01	NA
MR	Campaign	Follow-up	Approved	2020-09-30	NA
TYPHOID	Campaign	-	Forecasted	2022-07-01	NA
TYPHOID	Routine	-	Forecasted	2022-07-01	NA
JE	Campaign	-	Forecasted	2022-12-31	NA
JE	Routine	-	Forecasted	2022-12-31	NA
HPV	Routine	-	Forecasted	2023-04-30	NA
HPV	Campaign	MAC	Forecasted	2023-04-30	NA
MR	Campaign	Follow-up	Forecasted	2025-12-31	NA
MR	Campaign	Follow-up	Forecasted	2030-12-31	NA

Performance against Alliance KPIs

Indicator	Source Name	Year	Value	Previous Value	Trend
Measles containing vaccine (second dose) coverage at the national level (MCV2)	WUENIC	2019	95	93	▲
Pentavalent 3 coverage at the national level (Penta 3)	WUENIC	2019	98	98	→
Drop-out rate between Penta1 and Penta3	WUENIC	2019	1	1	→
Difference in Penta3 coverage between children of urban and rural residences	Survey	2013	3.2	0.7	▼
Difference in Penta3 coverage between the highest and lowest wealth quintiles	Survey	2016	0	0	→
Penta3 coverage difference between the children of educated and uneducated mothers/care-takers	Survey	2016	0	0	→
EVM	EVM	2014	80.6	70.6	▲
# of Underimmunised Children	Calculated	2019	56809.94	57165.86	▲

Trends and district equity



Progress against indicators and targets achievement

Table provided by CMM

Vaccine Programme	*Source (2019)*	*Intermediate results Indicator*	*Reported actuals*	*Rel. % change*
PNEUMO	*Admin (JRF)*	*Number of surviving infants who received the first recommended dose of PCV vaccine (PCV1)*	*3,911,731*	*3%*
	Admin (JRF)	*Number of surviving infants who received the third recommended dose of PCV vaccine (PCV3)*	*3,844,455*	*4%*
PENTA	*Admin (JRF)*	*Number of surviving infants who received the first recommended dose of pentavalent vaccine (Penta1)*	*3,923,449*	*4%*
	Admin (JRF)	*Number of surviving infants who received the third recommended dose of pentavalent vaccine (Penta3)*	*3,848,029*	*4%*
MCV	*Admin (JRF)*	*Number of children in the target population who received the second recommended dose of measles containing vaccine (routine) (MCV 2)*	*3,745,124*	*3%*
	Admin (JRF)	*Number of surviving infants who received the first recommended dose of measles containing vaccine (MCV1)*	*3,823,144*	*3%*
IPV	*Admin (JRF)*	*Number of surviving infants who received the first recommended dose of IPV*	*NA*	*NA*
All others	*EVMA Reports*	*Effective Vaccine Management Score (composite score)*	*NA*	*NA*
	JRF	*Occurrence of stock-out at national or district level for any Gavi-supported vaccine*	*No*	*NA*
	Admin (JRF) & Survey	*Percentage point difference between Penta 3 national administrative coverage and survey point estimate*	*NA*	*NA*

Relative % change refers to the percentage increase/decrease of the reported value from the year prior. The cell is green when the relative change increased, yellow when it remained the same and red when the relative change decreased.

	Process Indicators			Intermediate Results		
	Indicator name	Value	Rel. % change	Indicator name	Value	Rel. % change
OBJ-1	% of districts using agreed denominator	50	NA	% of city corporations providing surveillance reports on time	99	--, 0%
				% of districts providing surveillance reports on time	99	--, 0%
				% of health facilities submitting EPI coverage on time	90	--, 0%
				% of health facilities submitting VPD surveillance data on time	99	--, 0%
OBJ-2	Increase in total volume of central storage capacity	NA	NA	Proportion of districts utilizing web-based system for reporting timely complete vaccine stock management (DHIS2)	85	↑, 6%
	Number of district level cold rooms functioning	29	↑, 93%	Proportion of health facilities (both urban and rural) with no stock out of vaccines for the past 6 months	98	↑, 9%
				Proportion of outreach sites using freeze-tag during vaccine transportation for vaccination session	98	↑, 22%
				Proportion of service providers trained on revised SOP on vaccine and cold chain management	98	↑, 390%
OBJ-3	Number of LCG meetings where Gavi-HSS grant implementation is reviewed	1	NA			
OBJ-NA	(FDMN) Number of Upazila review meetings planned versus conducted	10	NA	(FDMN) Number of EPI session conducted versus planned per year	98	NA
				Rate of health facilities dashboard use, timely analysis and use for decision making	NA	NA

Relative % change refers to the percentage increase/decrease of the reported value from the year prior.
Value cell color is green if target has been >= 90% met, yellow if 70-90% met, and red < 70% met. There is no color when no target is set in GPF.

1.2. Overview of HSS grant implementation (end of 2019/early 2020; pre-COVID-19)

HSS2 (Jul 2016 – 31 Jul 2021) implementation summary (as of January 2021)

Recipient	Grant Amount (US$)	Funds Disbursed (US$)	Expenditure (US$)	Country cash balance (US$)
MoH	352,000	168,000		18,562 (transferred back to Gavi for HSS3)
WHO	13,175,274	13,175,274	13,175,274	0 (as of January 2021)
UNICEF	20,395,457	20,395,457	20,093,048	302,409 (at January 2021)
Total	**33,922,731**	33738731	33570731	

HSS3 (FDMN2) implementation summary (as of [insert date])

Recipient	Grant Amount (US$)	Funds Disbursed (US$)	Expenditure (US$)	Country cash balance (US$)
WHO	1,183,598	1,124,775	1,113,598 (includes PSC)	70,000 (as of 10 March 2021)
UNICEF	1,010,929,	1,010,929,	581,538.61	429,390.39 (as November 2020)
Total	**3,422,930**	2135704	1695136.61	

HSS3 (MDTF) implementation summary (as of [insert date])

Recipient	Grant Amount (US$)	Funds Disbursed (US$)	Expenditure (US$)	Country cash balance (US$)
World Bank	50,000,000 (commitment)	14,286,000		
Total	**50,000,000**	**14,286,000**		

CCEOP implementation summary (as of Jan 2021)

Commented [M1]: Kindly update the cash balance if more recent information is available. Same for the other programmes.

Commented [DC2R1]: Responded

Commented [NA3]: Can we get update on this? We are aware that it is late disbursement but still it should be reflected/

Recipient	Grant Amount (US$)	Funds Disbursed (US$)	Expenditure (US$)	Country cash balance (US$)
UNICEF SD	2,870,656	1,283,592.16		n/a
Total	**2,870,656**			

HSS key milestones achieved in 2019

*Structured based on grant objectives or GPF indicators (**graph prepopulated by the CMM team**)*

Commented [DC4R3]: UNICEF responded

1.3. Overview of other Gavi support, such as VIGs, OPS, PBF, switch grants, transition grants etc. (as applicable)

				In US$				
	Start Date	End Date	Recipient	Grant Value	Disbursed	Expenditure	Cash balance	Status Update
HPV VIG								IRC recommended approval –approval process ongoing
HPV Op Cost								IRC recommended approval –approval process ongoing
Rota VIG								confirmation of introduction. The committee formed is yet to provide recommendation Govt is following up on this.
MR follow up campaign Op Cost	14 Aug 2019 28 Aug 2019	14 Aug 2021 28 Aug 2021	UNICEF WHO	UNICEF: 4,227,743 WHO: 4,383,275 Total: 8,611,116	UNICEF: 4,227,743 WHO: 4,383,275 Total: 8,611,116			Campaign finalized (Dec 20 – Jan 21); No Cost Extension granted until 14/28 Aug 2021
PCV Product Switch Grant	2 Aug 2018	1 Aug 2019	UNICEF	UNICEF: 279,715	UNICEF: 279,715	UNICEF: 279,715	0	Completed; to be closed
HPV Demo cash support	Jun 2015	Jun 2017	MOHFW	333,500	333,500		154,556 (at May 2019)	Balance returned to Gavi for transfer to HSS3
IPV VIG	2014	Jun 2018	MOHFW	2,498,000	2,498,000		1,128,779 (at May 2019)	Balance returned to Gavi for transfer to HSS3
PCV VIG	Jul 2014	Jul 2015	MOHFW	3,233,500	3,233,500		1,825,492 (at May 2019)	Balance returned to Gavi for transfer to HSS3
MR Op Cost	May 2013	May 2014	MOHFW	33,586,500	33,586,500		15,591,409 (at May 2019)	Balance returned to Gavi for transfer to HSS3
Measles VIG	Apr 2012	Apr 2013	MOHFW	1,195,500	1,195,500		9,075 (at May 2019)	Balance returned to Gavi for transfer to HSS3
HSS1	2009	30 Sept 2017	MOHFW	13,671,500	13,671,500		12,163 (at May 2019)	To close
ISS		31 Dec 2017	MOHFW	23,340,200	23,340,200		105,003 (at May 2019)	Balance returned to Gavi for transfer to HSS3

1.4. Compliance, absorption and other fiduciary risk matters

Commented [G5]: Please complete section.

- Comments on financial absorption as of [date]: As on January 2021 Government has returned residual funds from previous grants to GAVI. There was delay in implementation of targeted activities due to impact of COVID pandemic.
- Compliance with financial reporting requirements (periodic/annual financial reports, audits): It was delayed due to no allocation of fund for audit in the operational plan. Fund has now been included in the revised operation plan. Once the revised operational plan is approved, the audit will start. A consultant was recruited to support EPI with audit preparation. Government has allocated funds under OP to recruit external audit firm to complete outstanding audits. The process is delayed due to COVID pandemic and also due to fund. The revised operational yet to be approved. The tentative date to start the audit is August 2021.
- Compliance with programmatic reporting requirements (GPF):
- Other financial management and fiduciary risk comments: Country has started implementation of activities that were delayed due to COVID. It will take some time to implement planned activities in full fledge due to ongoing COVID vaccination.

Commented [G6]: Note any issues, challenges, delays, etc.

Commented [G7]: With reference to recent file shared by MM note here the outstanding reporting overdue.

Commented [GH8R7]: Please also state plan to address outstanding audits.

Commented [DC9R7]: Responded

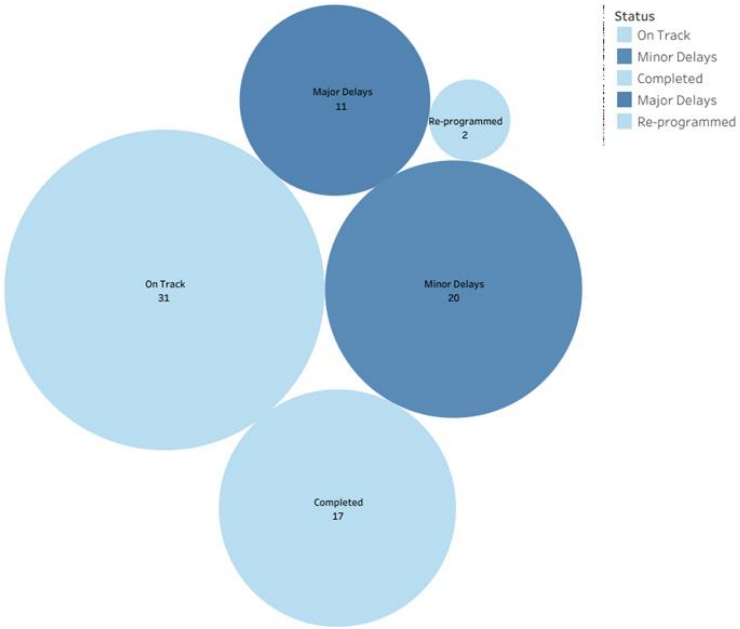
Commented [G10]: Comment on any other matters, challenges or issues with respect to financial management of the grant or operating environment in BNG.

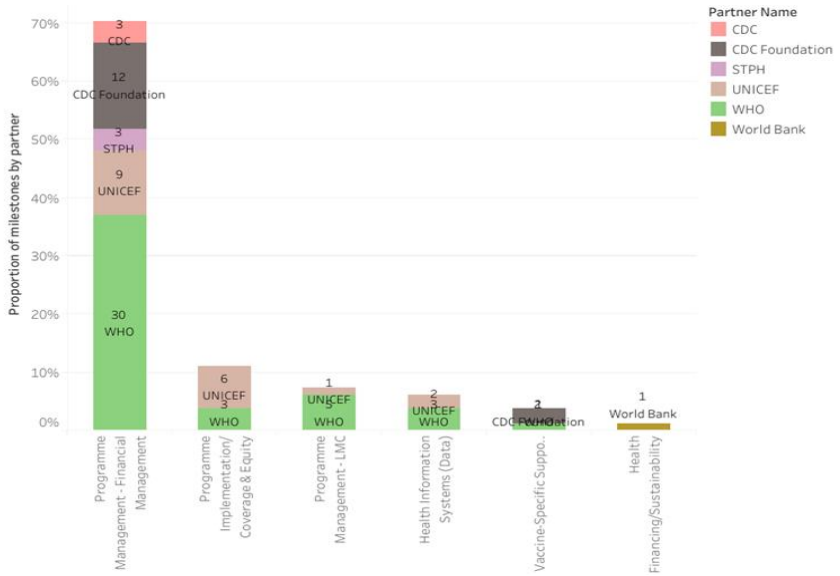
Commented [DC11R10]: Responded

1.5. Overview of PEF TCA progress (end of 2019/ early 2020)

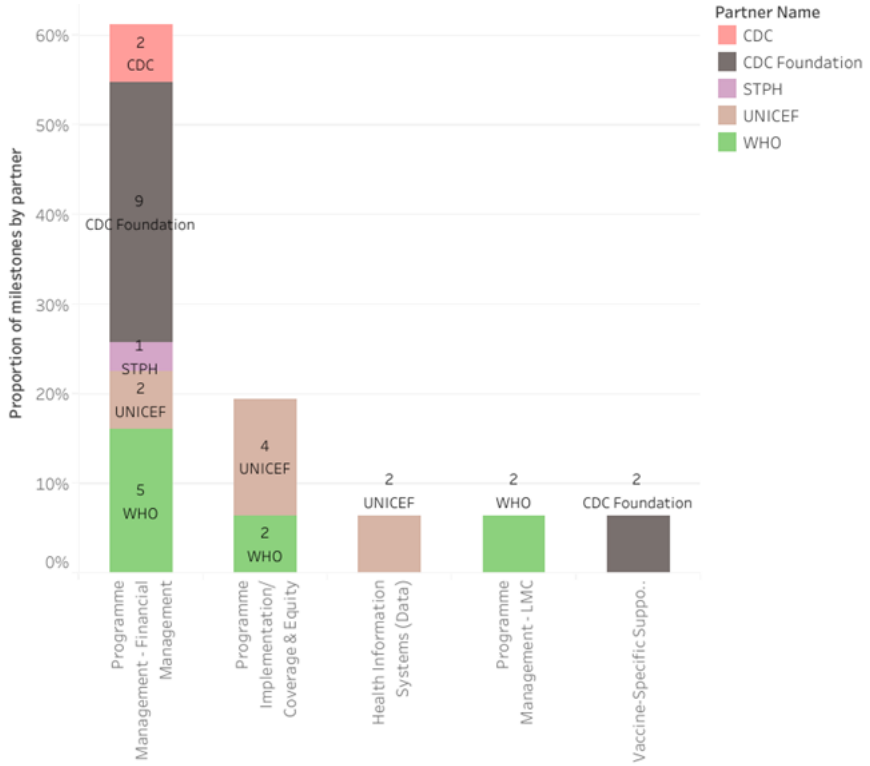
(graph provided by the PEF team)

June 2020: All milestones reported

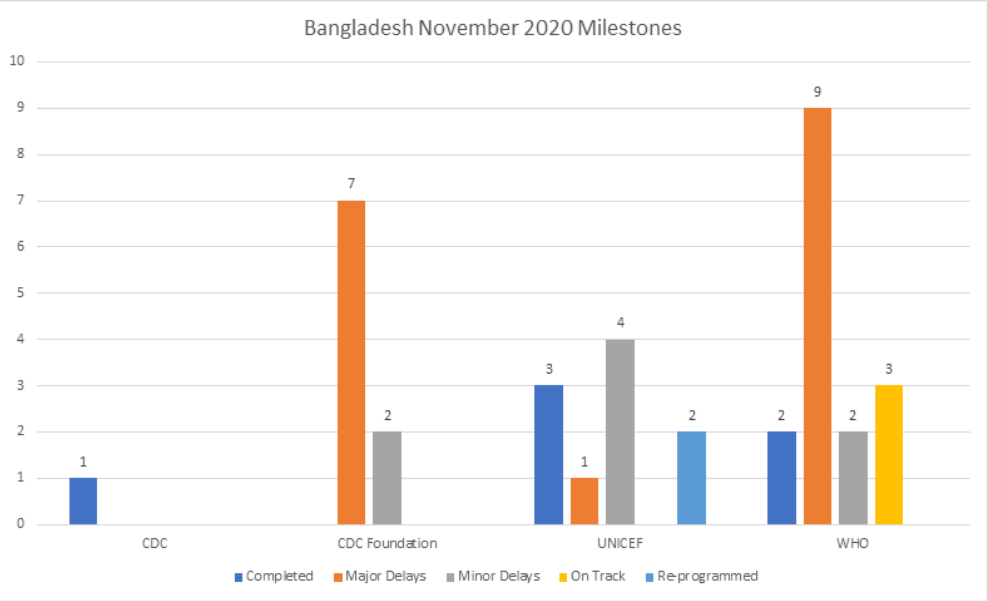




Delayed milestones:



Nov 2020: All milestones reported



	Completed	Major Delays	Minor Delays	On Track	Re-programmed	Grand Total
Bangladesh	**6**	**17**	**8**	**3**	**2**	**36**
CDC	1					1
CDC Foundation		7	2			9
UNICEF	3	1	4		2	10
WHO	2	9	2	3	0	16
Grand Total*	**6**	**17**	**8**	**3**	**2**	**36**

*Total number refers to November milestones plus the non-completed June milestones that were carried over to November reporting.

Please provide any additional comments -as relevant- on the implementation of the TCA plan
(e.g. progress in key areas, challenges, constraints, reallocations, no-cost extensions)

TCA support under UNICEF: Some of the planned activities are delayed due to Covid19 pandemic situation and some activities could not start as because of longer approval process of HSS3 tripartite agreement between GoB, Gavi and UNICEF by MOH.

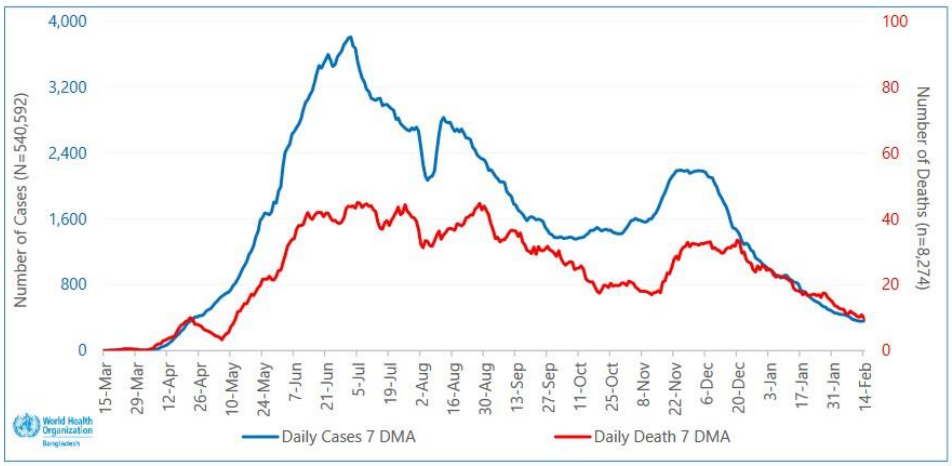
TCA support under WHO: The implementation of planned activities was delayed due to impact of COVID pandemic. The EPI staff and IVD surveillance network were repurposed to support COVID pandemic. The TCA milestone as mentioned above as of November have been changed. One of the major delays is on rota vaccine introduction. Discussion has started on possible introduction of rota, typhoid and JE vaccine in the country. Implementation plan with timeline has been developed to complete the remaining TCA/HSS3 targeted activities on due time. Challenge for timely implementation of activities remains due to requirement for considerable time dedication to COVID vaccination.

2. COVID-19 impact on immunisation (in 2020): current situation

2.1 COVID-19 cases and deaths (as of 14 February 2021)

Between 8 March 2020 and 14 February 2021, according to the DGHS press release, (https://corona.gov.bd/press-release) there were five hundred thirty-eight thousand and sixty two (538,062) COVID-19 confirmed by RT-PCR, GeneXpert and Rapid Antigen test including eight thousand two hundred five (8,205) related deaths (CFR 1.52). Out of the total 538,062 COVID-19 cases registered, 89.8% (483,372) recovered, 1.52% (8,205) died and 8.64% (46,485) were active cases.

The figures below showing trend of COVID-19 Cases and Deaths, 15 March 2020 – 14 February 2021, Bangladesh



As of 14 February 2021, among the reported cases 26.4% cases were confirmed in people between 30 and 39 years old, 19.6% in the age group of 40 to 49, 18.0% in 20 to 29 years and 16.7% in the age group between 50 and 59 years old, 13.0% in the age group 60 and above and 6.3% in the age group below 20 years. The highest death rate (32.4%) in the older age group of 70 and above, 31.8% was reported in the age group of 60 to 69 years,20.8% in 50 to 59 years, and 15.0% in the age group of below 50 years. Male represents 71% and 77% of the total reported confirmed COVID-19 cases and deaths respectively. Although majority of COVID cases are detected in younger age group but > 80% of deaths are in age 50 or above. Government has considered epidemiology of COVID disease in Bangladesh while prioritizing target population for vaccination. Vaccine availability, funding, cold chain, dose schedule, safety and efficacy and SAGE recommendation are other factors for decision making.

Commented [RS12]: It is interesting to see how the disease is distributed within the population. How is this data used to inform the COVID-19 vaccination strategy albeit there is a higher number of deaths in the older segment of the population?

Commented [DC13R12]: Responded

Bangladesh is the top 31st country in the world and accounts for 0.51% of the COVID-19 disease burden of the world.

2.2 Disease Surveillance and Incidence

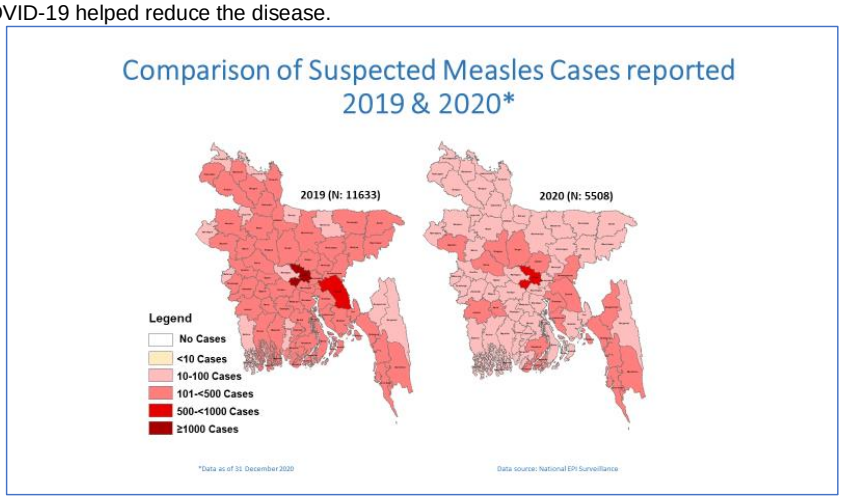
[Information from CCM team and/or https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-update/coronavirus-disease-(covid-2019)-bangladesh-situation-reports

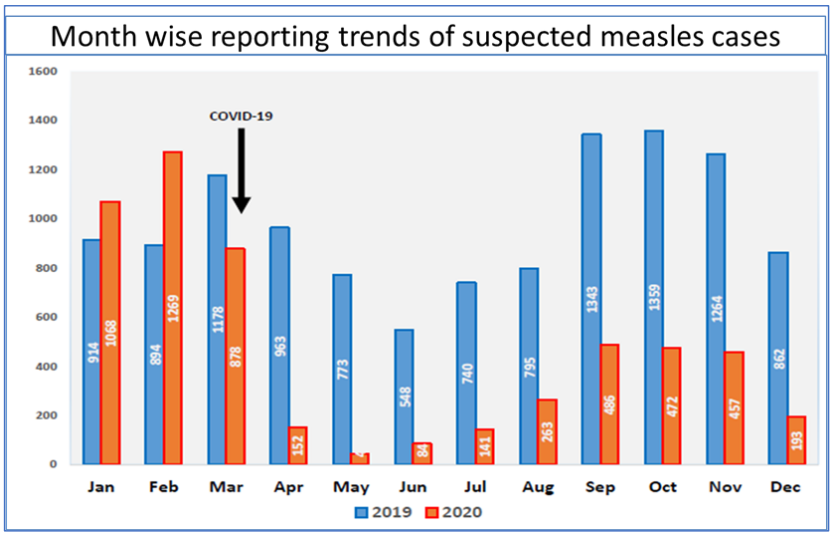
Impact of COVID-19 on disease surveillance

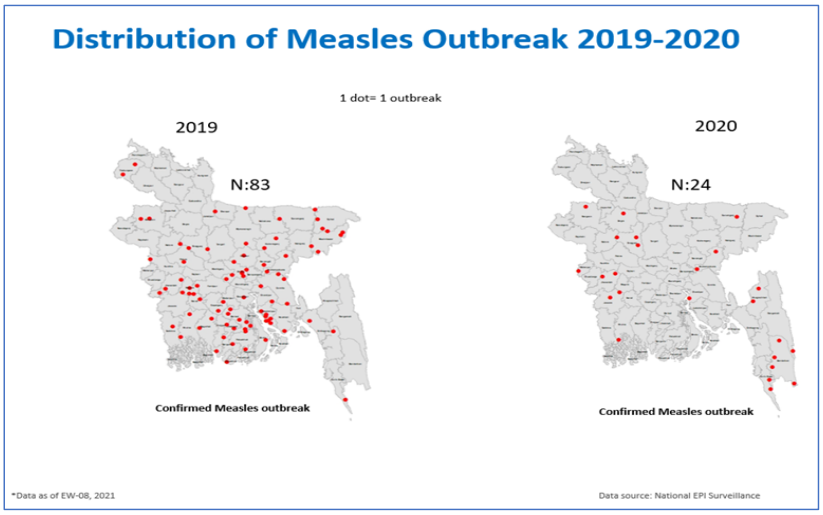
- Changes in the number of reported suspected measles cases

Due to lockdowns, repurposing of the health staff, fear of people to visit health facilities, transportation issues there was reduction in the no of cases reported. Visits as part of active surveillance was also affected for 2-3 months. Only 5,508 suspected measles cases were reported in 2020 whereas in 2018 and 2019 the reported suspected cases were 6,662 and 11,633 respectively. Monthly case reporting rate was also low from April 2020 as compared to the corresponding period in the last few years. (Refer to below maps related to suspected measles cases and outbreaks in 2019 and 2020).

Overall disease reduction could also be due to measures taken to reduce COVID-19 as physical distancing, masking, hand-hygiene, ventilation etc. Without any substantial evidence it will be difficult to say if COVID-19 helped reduce the disease.







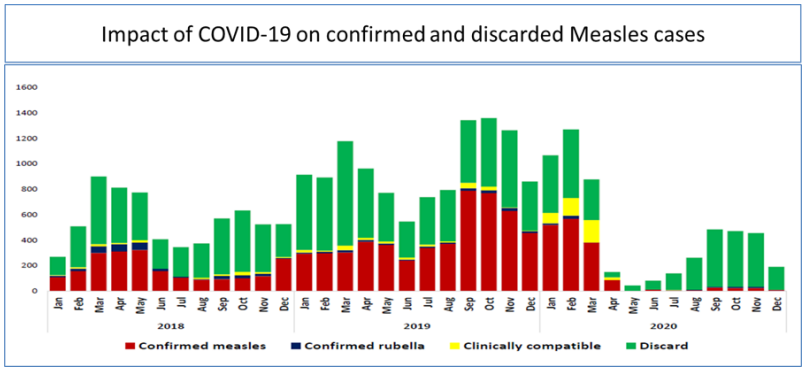
- Changes in the number or rate of discarded suspected measles cases

In 2020 the rate of discarded suspected measles case was only 1.96 per 100,000 population which was lowest in the last 4 years and the country could achieve the targeted indicator in only 47% second administrative units which is also lowest the last 4 years.

- Changes in the proportion of suspected measles cases that undergo laboratory testing

Surveillance data from other diseases can be used as well to highlight key areas of impact

In respect of previous two years in 2020 proportion of laboratory testing is less (81%) which was 85% in 2018 & 2019. Besides this only 46% of the serum samples result were provided within 4 days which was 93% & 80% respectively in 2018 & 2019. The main reason for this was firstly samples reaching lab late due to locked-down and secondly shortage of testing kits due to problem with shipping.



- 2020 the number and rate of confirmed measles case (number 1675 & incidence 9.8 per million) was less than previous two years. In 2018 and 2019 the number of confirmed cases were 2136 (incidence 12.9 per 1 million and in 2019 number is 5253 (incidence 31.3 per million)
- The sensitivity of measles surveillance reduced due COVID-19 as there was restriction in facility based and community-based surveillance. Facility based measles notification was reduced mostly due to physician's extensive involvement in COVID-19 activity, reluctance of patient to come to facility and low admission in inpatient department. Community based surveillance was also hampered due to limitation in conducting household visit by workers. Restriction due to social gathering and closing of educational institutes, might have been a reason for reduced spreading of measles case.

Commented [RS14]: We appreciate fully the challenges and effects on COVID-19 onto the performance of the surveillance system. Were they any specific strategies that were put in place to restore the surveillance system to the levels it was at prior to the COVID-19 pandemic?

Commented [DC15R14]: Responded

Strategies to restore surveillance system:

- Enhanced efforts were made to orient medical officers on reporting VPD cases as per national guidelines.
- WHO surveillance immunization medical officers' network across the country sensitized the MO and other cadre of health workers on strengthening reporting of VPD cases
- In 2020 more than 400 VPD surveillance workshops were conducted and over 5200. (active surveillance) and over 6450 (passive surveillance) visits were made at districts and sub districts level.
- During Infection prevention control (IPC) measures training more than 26,000 health workers across the country were also sensitized on reporting of VPD cases.
- HWs involved in contact tracing were also instructed to collect information on VPDs

2.3 Impact of COVID-19 on immunization

- Constraints on routine immunisation services (e.g. are health workers still carrying out immunisation services? What barriers do health workers face?)

The Covid19 pandemic disrupted the immunization services in the month of April and May 2020 because of restricted, lockdown, the repurposing of front-line health workers, and increasing incidence and fear of COVID-19 among health workers, however vaccination coverage started improving from June 2020. Government took extra measures with support of partners to revive the immunization services. The measures included using revised SOP, periodic instruction from national level as for example- listing of dropout and left out children from tally sheet and followed by vaccination, data driven monitoring, capacity building on IPC, confidence about the necessity of vaccination and continuing session in all outreach and fixed sites maintaining country's guideline to minimize risk of COVID-19 transmission.

Recent measles campaign as a way of catching up missed children:

Around 5000 children were reported to have had no dose of routine EPI in MR campaign through rapid convenient monitoring (RCM) reporting. The figures might not give the actual representation of the unvaccinated children, but efforts were made to capture the desire information. The information has been shared with vaccinators to follow up for routine immunization.

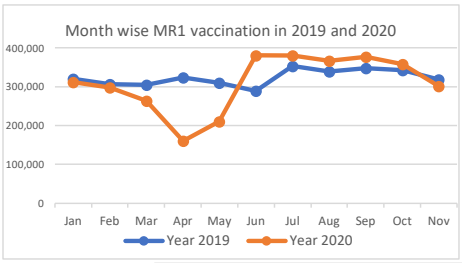
Commented [RS16]: This is very interesting. Bangladesh is also at the forefront of digital health information systems. Did the use of digital technology facilitate the identification, tracking and vaccination of defaulter children for example?

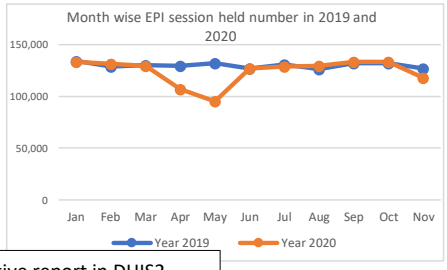
In terms of missed children, to what extent do you think you have covered them considering that the overall number of EPI sessions in 2020 was lower as compared to 2019?

Also, how did you use the recent measles campaign as a way of catching up missed children?

Commented [DC17R16]: Responded

WHO and UNICEF utilized digital tracking in their respective pilot areas (WHO in one City Corporation, UNICEF in one District & one City Corporation)?





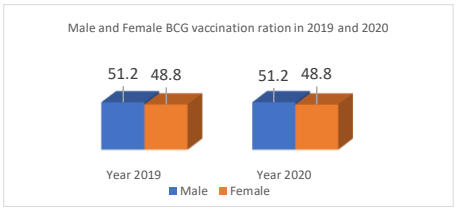
Data Source: Routine EPI Administrative report in DHIS2

At the beginning of pandemic situation, health workers had limited guidance for conducting vaccination session, lack of capacity on infection prevention & control (IPC), inadequate supply of PPE and IPC materials, including movement restriction, lockdown of areas, public transport scarcity etc.

The health workers continue to face some barriers like identifying proper place for organizing session, maintaining social distancing and IPC in regard to COVID-19 situation, some instance have been reported where house owners have denied continuation of immunization session in their premises to avoid gathering. In addition, regular supply of PPE, hand washing facilities for guardians in all session sites etc were also reported as barriers.

- Impact of the pandemic that may have exacerbated gender related barriers to immunisation experienced by caregivers, adolescents and/or health workers.

In Bangladesh difference in vaccination ratio among male and female children is very negligible and based on available data there is no gender issue for immunization which is visible in 2020 compared to 2019. The difference in terms of absolute number is less than 0.095 million.



Data Source: Routine EPI administrative report in DHIS2

As far as Immunization program is concerned, we are dealing with children under 2 years. As the numbers suggest there was not much of difference between male and female vaccination. The number of male and female children received Penta 1, Penta 3 and MR 1 doses in 2020 mentioned in below table.

Antigen	Male	Female	Total
Penta 1	1935891	1832183	3768074
Penta 3	1858768	1780954	3639722

Commented [RS18]: This is very interesting. In terms of PPE access, do you have data that could illustrate this point? For example, what is the percent of facilities reporting PPE stock-out?

Commented [DC19R18]: Getting PPE earlier during the pandemic was an issue that was faced by all countries including Bangladesh. Reportedly, vaccinators managed to arrange masks by themselves and/or local level donations.

Commented [RS20]: If mobility of women (and caregivers in general) has reduced and/or been limited, did you see this having an effect on male children being more likely to be vaccinated? The data you have shown is for BCG but what about later doses / antigens?

Commented [DC21R20]: Number of Penta1, Penta3 and MR 1 doses were given to male and female mentioned in a table.

MR1	1852397	1743641	3596038

However, TT3/Td3 vaccination reduced 14% (294,000) in 2020 compared to 2019 because of restriction of movement (going out of the house) of adolescent girl and women of childbearing age. Bangladesh is committed to sustain MNTE status.

Commented [NA22]: Any thoughts potential impact or spill over impact to HPV implementation? Maybe something to note for section 3 – for future planning?

Commented [DC23R22]: Responded

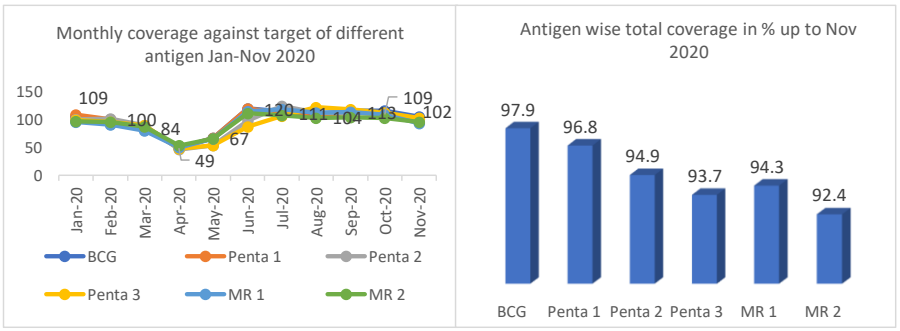
- Impact or spill over impact to HPV implementation:

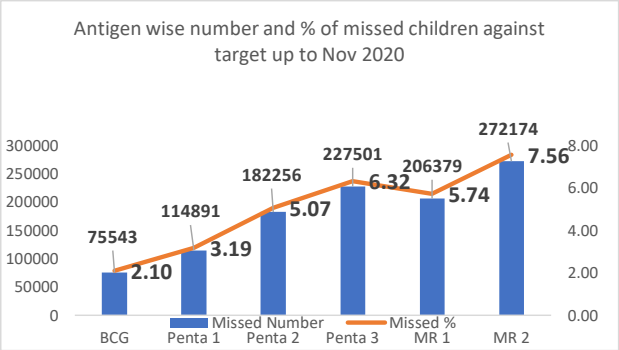
Community demand and acceptance to vaccination is huge in Bangladesh. We don't foresee any potential impact or spill over impact to HPV implementation. Communication prior to vaccination will however be the key.

- Impact on uptake, demand and community engagement (including impact of rumours or misinformation)

Like any other country Bangladesh too faced a drop-in immunization coverage. Reasons for the same have been mentioned in the constraints section above. No rumour related to routine immunization was observed. The fear of COVID-19 transmission at the level of both the health care worker and the community including lock downs etc resulted in the drop-in coverage. On getting immunization sessions restored the coverages have seen an upward trend with variability within districts. To improve the same the need is felt to restore and maintain the confidence of the community through improved and more robust communication strategy.

Though immunization services got the full pick up after initial drop off in coverage of all antigen in April and May 2020 and achieved >90%, however large number of children are missed from all antigens, e.g. MR 2 antigen is 272,174 and Penta3 dose is 227,501 in 2020.





Data source of above 3 graphs: administrative reporting in DHIS2 for 2020

Some community engagement and SBCC interventions for Hard to Reach (HTR) areas like hilly remote areas, marshy land, isolated Chor island etc and High Risk (HR) like slum children, children of working mother, too high to reach etc could not be implemented due to pandemic situation.

- Impact on any planned new vaccine introductions or campaigns

Measles Rubella vaccination campaign targeting around 34 million children of 9 month to 9 years scheduled in March 2020 was postponed due to COVID-19 pandemic. This happened at a time when all the preparedness activities had been including trainings, online micro planning, press briefing and even the official launching of the campaign by honourable Health Minister. The campaign rescheduled and implemented in December 2020 and January 2021 with a revised strategy to minimize COVID-19 transmission risk which causes additional cost of near about $4 million USD.

Commented [MM24]: Our understanding was that a catch-up vaccination was planned at the end of the MR campaign. Could you please comment of this?

Commented [DC25R24]: Responded

Due to ongoing pandemic the campaigns strategy was revised, and the period of campaign extended to 6 weeks instead of three weeks to avoid mass gathering, instead of in-person training virtual training were conducted at national and district level. However, at the upazila level the training was conducted in-person. Most of the communication activities were more focused through print, electronic and social media as compared to community engagement. Community volunteer hired to support the campaign activities. The documentation was planned for the MR campaign 2020 specially for innovative interventions like online campaign (micro plan, reporting, supervision, monitoring).

The strategy of selective vaccination planned in two identified districts initially had to be rolled back to regular strategy as in other districts.

The campaign impacted routine immunization over two months in end of year.

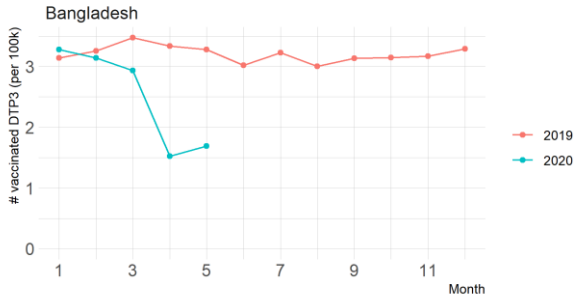
MR campaign finally concluded on 8 February 2021. The children found missed by supervisors / teams were followed by back up teams. We have 9 upazilas that have reported less than 95% coverage, and these happen to be in HTR / HRA. The support for the same will be required and the same has been jointly addressed not just for MR but for routine EPI as well. Risk assessment has captured these areas.

- Impact on vaccine stocks (e.g. restocking of vaccines and related supplies, risk of expiry, updating dose requirements, reallocating stocks internally within the country/districts to ensure equity of supply)

There was little impact on vaccine stock as the vaccine supply continued from central store to Lower Distribution (LD) points with special permission using EPI vehicle fleet. Gaps within the district was addressed by internal reallocation with the support of partners. The country did not face any risk of expiry or stock-out of vaccines. Regular monitoring of antigen-wise stock was conducted by national EPI and followed-up with UNICEF SD to avoid stockout of any vaccine.

The Effective Vaccine Management (EVM) assessment which was planned in the first quarter of 2020 has been postponed to 3rd quarter of 2021.

- Impact on health and immunisation (incl. vaccines) financing (e.g. repercussions on the health/ immunisation/ vaccine budget; delays in budget disbursements relating to immunisation activities; intention of other donors to make additional funding available for health/ immunisation/ vaccines)



Source: Monthly Administrative Estimates, July 2020

There was slight delayed in finalization of operational plan and fund disbursing for vaccines procurement as well as operational cost of immunization. Other health programme is also affected by pandemic situation. The co-financing payment for national immunization programme was done on time, however the FDMN co-financing was delayed. It was delayed because of confirmation of funding modality for Co-financing as well as finalization of WB new project.

Commented [NA26]: Can you comment on co-financing situation? Delays and expected time to pay?

Commented [DC27R26]: Responded

What has been the impact on the implementation of Gavi support (vaccines, HSIS, TCA, other), including financial absorption, stock management etc.?
The delivery of 23 WICs for 19 districts was delayed from the manufacturers and subsequently, the installation was delayed, similarly, delivery of 8 WICs and 2 WIFs for the EPI central Store was delayed. The construction work of the new EPI Central Store building which was practically halted in March, April, and May 2020. Delivery of CCEOP equipment such as 28 sets of SDD Equipment, 162 Refrigerators were delayed, as a result completion will also be delayed.

The implementation of EPI workplan activities like online annual micro plan, online supervision, expansion of individual tracking for immunization, urban immunization strategy, costed action plan, immunization act etc. also delayed. WHO assists the National and Sub national government authorities through its Surveillance and immunization officer (SIMO) network. This network was also repurposed to support various activities. COVID -19 also hit this network as some got COVID-19 positive, some were quarantined as contacts etc.

2.4 Already agreed budget reallocations of HSS grant for COVID-19 response (if applicable)

*[**Not applicable**]*

	COVID-19 activity	Amount reallocated	Status of implementation
Activity 1	Immunization Risk Communication Assessment		
Activity 2	Infection prevention and Control		
Activity 3	Epi Surveillance, Coordination, Points of Entry		
Activity 4	Support to COVID-19 laboratory services		

2.5 Already agreed modifications in Technical Assistance (if applicable)

*[**Not applicable**]*

2.6 Unspent funds and savings from Gavi support, available for re-allocation

The HSS2 grant has been extended to July 2021 due to delayed in implementation of central cold store construction as well as delayed in installation of district cold room.

EVM assessment and development of costed action plan for Urban immunization has been deferred to 2021.

The country has started slowly returning to its normal pace, WHO supported HSS3 activities planned from now until June 2021 have been planned in consultation with EPI.

In the revised operational plan, government included some fund which can cover part of the catch-up activities. Remaining catch up activities will be conducted following consultation with Gavi by using HSS3 reprogram or other budget.

3. Discussions on priorities, action plan and technical assistance needs; Roadmap for further re-allocation/planning

In preparation towards Multi Stakeholder Dialogue an in-person day long consultation workshop was conducted with the participation of senior officials from GoB, CSO, City Corporations, NGOs, UNICEF and WHO on 14 February 2021. All Inputs/ suggestions received have been incorporated in the plan below.

Risk Assessment to identify where are the unreached (Zero dose and under vaccinated children) For details refer to Annexure-1

Identification of District / Upazilas / City Corporations/ Municipality Prioritization

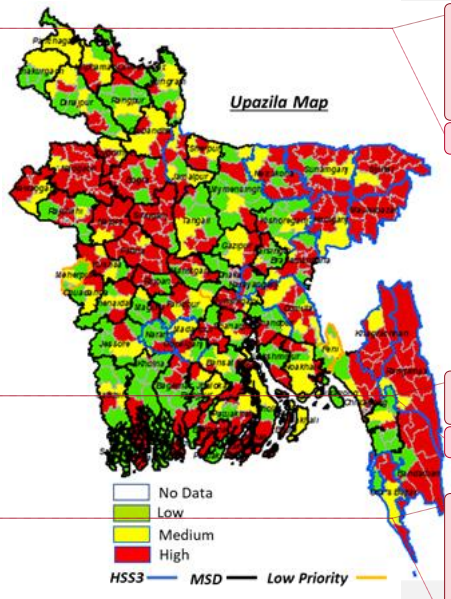
Matrix was developed using data triangulation concept to identify the priority areas. This included routine EPI coverage, declining coverage during pandemic, high incidence of vaccine preventable disease (Measles incidence)

58 /64 (91%) districts identified for intensification

- 15 /61 districts and 4 /11 city corporation are already under HSS 3 support
- Remaining 43 (in identified Upazilas) identified under multi stakeholder dialogue

In these 58 districts

- Upazilas identified for intensification 216 / 484 (45 %)
- Municipalities identified for intensification 50/79 (63%)
- Zones identified for intensification 24/36 (57%)



Commented [RS28]: To what extent did you use the CDC Triangulation analysis guidelines to help you with this exercise? This is a candid question to understand suitability of this guideline for identifying immunity gaps / missed children.

Commented [DC29R28]: Responded

Commented [RS30]: How will you manage catch-up efforts for the ones which are not covered by HSS3?

Commented [DC31R30]: Responded

Commented [RS32]: Would it be possible to provide a description of the concentration of missed children in these districts? Are there some which have more than others? How are the missed children distributed? For example, are they mostly concentrated in urban areas?

Commented [DC33R32]: Responded

Proposed activities and budget to maintain/restore routine immunisation are attached in annexure-3

Commented [RS34]: Many of the listed activities seem to be covered by HSS3 grant. Is my assumption correct?

Commented [NA35R34]: I agree. It would be useful to indicate funding source for proposed activities. One TA, HSS3, etc.

Commented [DC36R35]: Refer to Annexure 3

Annexure 1: Risk assessment Analysis

Table 1: Basis of Risk Assessment Matrix

Indicators	Justification	Data Source	Total Score	Cut of point for Scoring
1. Immunization Coverage (Total Score – 32)				
Coverage of Penta3 FY 2019-20	Low access to immunization	DHIS2	8	[>90% : 0 80-90% : 2 <80% : 4]
% of Zero dose Children (Penta1) FY 2019-20	Low access to immunization	DHIS2	8	[0% : 0 >=1% : 4]
Percent children missed MR1 doses FY 2019-20	Low uptake to immunization	DHIS2	8	[0-5% : 0 >5% : 4]
Percent children missed fIPV-1 doses FY 2019-20	Risk for VDPV type-2	DHIS2	8	
2. Difference in immunization coverage during COVID-19 pandemic (Total Score – 12)				
Difference in MR1 Coverage Jan to Nov 2019 vs 2020	COVID-19 impact on 2nd year vaccination	DHIS2	4	[0-5% : 0 6-10% : 2 >10% : 4]
Difference in OPV-3 Coverage Jan to Nov 2019 vs 2020	COVID-19 impact on 2nd year vaccination	DHIS2	4	
Difference in sessions held Jan to Nov 2019 vs 2020	Missed opportunities for vaccination	DHIS2	4	[0-50 : 0 51-100 : 2 >100 : 4]
3. High Incidence of Vaccine Preventable diseases (Total Score – 8)				
Incidence of Measles and Rubella cases per 1,000,000 population FY 2019-2020	High incidence of VPD cases in 2019 & 2020	MR surveillance	8	[0-5% : 0 6-10% : 2 >10% : 4]

Table 2: List of high priority Districts/ City Corporations

Sl. No	Division	District/CC

1	Mymensingh	Sherpur
2	Sylhet	Sunamganj
3	Chattogram	Cox’s bazar
4	Rajshahi	Sirajganj
5	Chattogram	Cumilla
6	Chattogram	Chattogram
7	Chattogram	Bandarban
8	Mymensingh	Netrokona
9	Dhaka	Tangail
10	Rajshahi	Pabna
11	Barishal	Barguna
12	Rajshahi	Natore
13	Rajshahi	Rajshahi
14	Chattogram	Noakhali
15	Chattogram	Chattogram City Corp
16	Dhaka	Dhaka South City Corp
17	Dhaka	Gazipur
18	Chattogram	Chandpur
19	Sylhet	Habiganj
20	Dhaka	Dhaka
21	Khulna	Khulna
22	Khulna	Bagerhat
23	Chattogram	Rangamati
24	Dhaka	Faridpur
25	Chattogram	Laksmipur
26	Rangpur	Nilphamari
27	Rajshahi	Naogaon
28	Rangpur	Rangpur City Corp
29	Khulna	Narail
30	Rajshahi	Bogura
31	Sylhet	Moulvibazar
32	Khulna	Jashore
33	Rangpur	Rangpur
34	Mymensingh	Jamalapur
35	Dhaka	Gopalganj
36	Khulna	Jhenaidah
37	Barishal	Patuakhali
38	Chattogram	Brahmanbaria
39	Dhaka	Narsingdi
40	Dhaka	Rajbari
41	Rajshahi	Chapai Nawabganj
42	Rangpur	Gaibandha
43	Rangpur	Lalmonirhat
44	Dhaka	Dhaka North City Corp
45	Dhaka	Kishoreganj
46	Dhaka	Manikganj

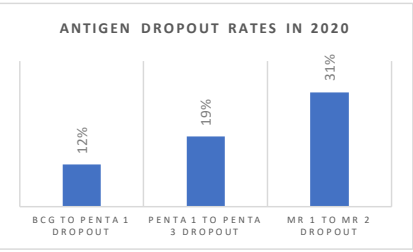
47	Barishal	Barishal
48	Dhaka	Narayanganj
49	Khulna	Chaudanga
50	Barishal	Barishal City Corp
51	Chattogram	Khagrachari
52	Mymensingh	Mymensingh
53	Dhaka	Shariatpur
54	Rangpur	Dinajpur
55	Barishal	Pirojpur
56	Sylhet	Sylhet
57	Barishal	Jhalokati
58	Rajshahi	Joypurhat
59	Barishal	Bhola
60	Dhaka	Madaripur
61	Rangpur	Kurigram
62	Rajshahi	Rajshahi City Corp

Annexure 2: Routine Immunization in FDMN camps, Cox's Bazar during COVID-19

In the FDMN camps, Cox's Bazar despite all efforts, routine immunization coverage remains low. This has further declined in COVID-19 pandemic. Complex public health issues of concern—including poor sanitation, malnutrition, overcrowding, and lack of access to safe water and healthcare—increase susceptibility to infectious diseases, particularly among children.

Impact of COVID-19 on Routine Immunization Services

Due to COVID-19, since mid-April immunization services were withheld in the FDMN camps. Almost all outreach services were suspended and the few immunization fixed sites that continued their activities experienced a very low number of beneficiary visits. Access to camps was affected and vaccinators saw their work disrupted. Social mobilization, awareness on vaccination got affected due to social rumors, superstitions and religious myths.



In response, authorities with support of WHO, Unicef and other partners developed a health facility based transitional strategy to resume the routine immunization services. The outreach sessions which were previously continued in the community is now be carried out in the health facilities apart from the running fixed sites. Fixed site sessions have been increased to four-six days from two-three days a week and the health facility-based sessions (previously known as outreach sessions) are now conducted four days a week.

Routine Immunization Achievement

Disruption of Routine Immunization form mid-April 2020 due to COVID-19 pandemic, the health facility

based transitional strategy with a newly developed micro plan to resume the routine immunization services from July 2020 increasing >1000 session number in a month with 59 fixed sites and 76 outreach teams to conduct routine immunization sessions. Despite fear of COVID-19 in the camps, the revised immunization strategy saw a greater number of vaccine doses being administered in Jul-Dec 2020 (~ 48,000 per month) as compared to January to June 2020 (~23,000 vaccine doses). Coverage data shows an increasing trend, but lack of tracking and follow-up of due beneficiaries remains an issue especially with Measles and Diphtheria doses. 25,323 children could not receive Penta 1 and 35,861 children did not receive MR1.

Community engagement and mobilization efforts are being strengthened, which began with capacity building efforts for more than 120 CHWs and their supervisors on the implementation of the Micro Plan, as well as on the functioning of the Expanded Programme on Immunization (EPI) and the VPD surveillance system. CHWs are involved in the revised micro plan for social mobilization and helping vaccinators in updating the line listing.

An online ODK and Kobo tool for immunization session monitoring and house to house monitoring respectively is developed by WHO in September 2020 to be used by supervisors and health field monitors to get real time information of immunization program for timely corrective action. So far in 2020, around 2270 sessions were monitored, 2,602 caregivers and 1,228 CHWs were interviewed and their tasks were observed. 14,725 eligible children household was visited for house-to-house monitoring. FDMN Community Religious leaders around 1,492 Imams were interviewed and mobilized for RI awareness.

Antigen	Target (0-23 month)	Total dose given (0-23 month)	Missed Children
BCG	62,484	42,025	20,459
Penta 1	62,484	37,161	25,323
Penta 2	62,484	33,667	28,817
Penta 3	62,484	30,023	32,461
PCV 1	62,484	37,217	25,267
PCV 2	62,484	34,651	27,833
PCV 3	62,484	30,407	32,077
OPV 1	62,484	36,389	26,095
OPV 2	62,484	32,780	29,704
OPV 3	62,484	28,739	33,745
fIPV 1	62,484	31,019	31,465
fIPV 2	62,484	29,337	33,147
MR 1	62,484	26,623	35,861
MR 2	62,484	18,261	44,223

Current challenges

Despite the resumption of routine immunization activities since July 2020, the coverage remains low. Additionally, there are needs requiring immediate attention including a vaccine transportation plan from Upazila health complexes to different points in the camps. To improve access to immunization services outside health facilities, WHO and its partners are considering alternatives to deliver immunization services in learning centers and women friendly spaces.

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Because Community Health Workers (CHWs) are currently supporting COVID-19 related tasks, the partners are considering engaging site management volunteers or community mobilizers. More involvement of CHWs in social mobilization and coordination with vaccinators should be further improved as most of the CHWs are not literate enough in updating of line listings properly. The provision of facial masks and hand sanitizer for all vaccinators is expected to be key to prevent the spread of COVID-19.

Support required

1. Support immunization bimonthly (once every two months) review meeting in every camp under the leadership of Camp Commander / Dy Camp Commander.
2. Revise the immunization card (local language) and make provision for mentioning date of next vaccination (when to come next)
3. Reaching the unreached. Intensified catch-up immunization strategy to cover up the gaps of some vaccines e.g. Measles, Diphtheria can be initiated for certain time.

4. Increasing the age limit for vaccination for those that started but could not complete subsequent vaccination. Already proposed by health sector, technical consultation with MSF and other technical partners in presence of government. Will require some additional vaccine and syringes support.
5. Once a month meeting Support for CHW supervisors, WHO Health Field Monitors and camp specific communication focal point (Unicef). This will help share coverage / surveillance / communication/ monitoring data for action
6. In the current scenario, the program needs a strategic communication plan to engage with community for better acceptance and behavioral change.
7. Establish at least 2 cold chain points in the existing govt / partner health facility (MSF/ UNHCR / IOM supported) with no compromise on the national guidelines and specification of cold chain equipment.
8. Quarterly engagement through RRRC/ CICs with Imam Sahab, Majhee, and other key stakeholders will be critical for the success of immunization activities in the present context.

Annexure 3: Activities and estimated budget

Short term: Duration: 6 months

Activities	Estimated budget	Funding source	Funding gap
1. Identify, enlist, track, mobilize, vaccinate, report and follow up for subsequent vaccination (Intensify listing of missed children and ensure vaccination in identified high priority upazilas, municipalities and city corporations in age group up to three years).			
a. Develop SoP with microplanning tool and support for line listing and ensure vaccination of missed children (Upazila Ward-13800, Mun Ward-1054, City Corporation Ward-415)	359271		359271
b. Printing of info kits and other technical materials	5882		5882
c. Travel cost for extreme HTR only in select areas (2200 areas/community/settlement/sub block, 2% of total sub block/sites) for line listing and ensure vaccination (Definition of extreme hard to reach: multiple modes of travel land/ water/ long distance walking	51765		51765
Total	416918		416918

Medium Term: Duration: 6-12 months

Activities	Estimated budget	Funding source	Funding gap

2. Review and update routine microplan guideline, develop HTR/HR strategy for immunization to reach the un-reach, incorporate GIS micro-plan, mapping of HTR areas and partners mapping			
a. Develop Immunization Action Plan and budget for 16 Districts by using DEPB and BNA tool	115200	HSS3	
b. Develop Immunization Action Plan and budget for 40 Districts by using DEPB and BNA tool	288000		288000
c. Travel for HTR area only in selected Ward (Outsource the local transport for whole day for each session in partnership with local government (Union Parishad) for vaccination) for 16 Districts	451765	HSS3	
d. Travel for HTR area only in select Ward (Outsource the local transport for whole day for each session in partnership with local government (Union Parishad) for vaccination) for 40 Districts	254118		254118
e. Vaccination services in 360 hard-to-reach wards - (1) Recruitment of additional 360 vaccinators from local community and (2) organize 16 session (8 vaccination session and 8 pre session visit) per month per ward by these 360 new vaccinators.	406588	HSS3	
f. Vaccination services in 200 hard-to-reach wards - (1) Recruitment of additional 200 vaccinators from local community and (2) organize 16 session (8 vaccination session and 8 per session visit) per month per ward by these 200 new vaccinators.	225882		225882
g. Training of newly recruited 360 vaccinators in 360 wards of 16 target districts	75240	HSS3	
h. Training of newly recruited 200 vaccinators in 200 wards of 40 target districts	41800		41800
i. Implementation, supervision, monitoring for 128 Upazillas	103002	HSS3	
j. Enhance supervision visits in identified hard to reach areas / high risk areas in 200 Upaizlas/Municipality/City Corporation zone	160941		160941
3.Technical Assistance for incorporation of GIS microplanning and mapping of HTR areas	140000		140000
4.Review and update routine EPI micro-plan guideline: basic information, session plan, HTR/HR plan to reach the un-reach, supervision plan			
a. Conduct National workshop/meeting to review and update routine micro-plan guideline, develop HTR/HR strategy for immunization to reach the un reach	35765		35765
b. Technical Assistance for developing online routine micro-plan and customization of session supervision APPs	24000		24000
c. Field testing of online micro-plan	588		588
d. National ToT for City Corporation, Division and Development partners	28000		28000
e. Divisional and City Corporation training for selected person (Statistician, MT EPI, IT Focal person)	142941		142941

5. Nationwide refresher training of routine EPI basic training including IPC and updated microplanning to reach the un reach			
a. Developed/update training packages and tools on routine immunization refresher training including IPC and updated microplanning to reach the un reach	10000		10000
b. National level ToTs on routine immunization refresher training including IPC and updated microplanning to reach the un reach	68329		68329
c. District level ToTs on routine immunization refresher training including IPC and updated microplanning to reach the un reach	427059		427059
d. Upazila, City Corporation and Municipality level Training on routine immunization refresher training including IPC and updated microplanning to reach the un reach	1270588		1270588
e. Printing of refresher training modules and updated micro-plan guideline	45882		45882
f. Printing of different forms and cards	35294		35294
6.Develop costed action plan of urban immunization based on approved strategy including COVID-19 situation			
a. Technical assistance to develop costed action plan based on approved urban immunization strategy	25000	HSS3	
b. National level workshop to finalize costed urban immunization workplan	30000		30000
7. Mapping of partners and involvement of CSO/Local NGOs for registering and vaccinating all eligible children due to scarcity of HR	147059		147059
8. Conduct human resource capacity and gap analysis in urban area and develop HR rolling plan for advocacy	40000		40000
9.Organize qualitative assessment with community data (the care givers of unvaccinated and vaccinated children) and key informant interview (KII) with key stakeholders (elected local leader, teacher, religious leader etc.) for SBCC action plan	24000		24000
10. Comparison of the factors influencing vaccine acceptance between the urban and rural inhabitants of Bangladesh	11765		11765
11. To assess the routine immunization coverage of Bangladeshi children of 12 months age in the hard to reach area (Haor, Chor, chabagan, plain tribal, hill tribal area)	50000		50000
12. Introduction of true coverage software for mapping the hard to reach and high-risk areas using GIS mapping in selected areas	74118		74118
13. Piloting of passive vaccine carrier with high cold life (35 days) in Hard to Reach areas	37941		37941
14. Training for responsible personnel maintaining cold chain	40000		40000
15. National EPI review meeting/workshop (National EPI/Divisional Director/CS/UNICEF/WHO)	40941		40941
16. National City Corporation review meeting/workshop (National EPI/Mayor/ MoLGD/ Divisional Director Health/ CEO/CHO/UNICEF/WHO)	30824		30824

17. Multi-stakeholder review meeting/workshop involving all partners/stakeholders at Divisional level	36329		36329
18. Support identified districts / Corporations with immunization facilitators in selected high priority districts and City Corporation (15 for priority Districts and 5 for City Corporations)	225882		225882
19. Immunization training for newly recruited medical officers	143059		143059
20. Community based mobilization and ownership model towards achieving full immunization in selected Upazilas/Municipalities/Zone	70000		70000
21. Technical support to strengthen data quality using data triangulation exercise (customized to national context).	120000	TCA	
22. Update Effective Vaccine Management (EVM) SoP (Last version was updated in 2017)			
a. Technical assistance to revise EVM SoP	20000	HSS3	
b. Workshop to review and finalize revised EVM SoP	14353	HSS3	
c. Design and printing of revised EVM SoP	11765	HSS3	
23. Cold chain equipment specific User guideline development			
a. Technical assistance to develop equipment specific User guideline	20000	HSS3	
b. Workshop to review and finalize the guideline	14353	HSS3	
c. Design and printing of user guideline	11765	HSS3	
24. Develop handbook on immunization including SBCC for mid-level managers (medical officers at different levels)			
a. Technical assistance to develop handbook on immunization including SBCC	20000		20000
b. Workshop to review and finalize the guideline	14353		14353
c. Design and printing handbook on immunization including SBCC	11765		11765
25. AEFI Surveillance guideline			
a. Update AEFI surveillance guideline	1176		1176
b. Printing of updated AEFI surveillance guideline for medical officers at national, District and sub districts	17647		17647
26.Capacity building of the AEFI committees on AEFI investigation and Causality Assessment at different levels.	34941		34941
27. Technical assistance for immunization waste management assessment and development action plan	72471		72471
28. Develop demand generation materials and interventions according to the endorsed SBCC strategy and recent findings for different participant groups who include ethnic communities, tea garden labors, garments worker, slum dwellers, too-hard-to-reach and too-high-to-reach communities.	70000		70000
29. Mid-level manager training on EPI			
a. TOT for MLM on EPI	8000	HSS3	

b. MLM (Mid-level managers) Training on EPI using available standard WHO training modules: 5 days national level training of health managers in EPI reporting (Mid-level managers). 20 person per batch in total 6 batches.	40871	HSS3	
30. Strengthening suspected measles notification from community by informal health care giver (traditional healer, kabiraj, drug vendor etc.)	45176		45176
31. Strengthening routine EPI MIS including VLMIS, cold chain information, VPDs surveillance and AEFI reporting	100,000		100,000
32. Technical Assistance to finalize draft vaccination act	20,000		20,000
Total	5,974,065	1,437,902	4,536,163
Total (Short and Mid Term)	6,390,983	1,437,902	4,953,081

Long term: Duration 1-2 years

Activity
1. Follow up of EVM recommendation and explore feasibility of establish two to three regional vaccine and logistics store to further strengthen vaccine and logistics throughout the country. Currently there is only one National vaccine store to cater all 64 Districts and 12 City Corporations in the Country.
2. AEFI management at session site is being strengthened. NITAG is being approached to explore recommendation for use of adrenaline by trained health workers at session site. Subject to approval approx. 26000 health workers (vaccinators and supervisors) will need to be trained on identifying and using adrenaline.
3. Budget for implementation of SBCC capacity building of the relevant health managers and workers
4. Strengthening community health system through social accountability, transparency & community engagement to identify missed children and enhance demand in selected areas

5. Conduct public expenditure review for immunization services and develop investment case for immunization for policy advocacy
6. PIE for COVID-19 vaccination
7. Assessment of existing regional workshop/District electromedical workshop (NEMEW&TC) to see the feasibility of maintaining EPI cold chain equipment by them
8. Implementation of special plan in low performing (high risk) areas identified through BNA tool in Districts not covered by HSS3
9. Introduction of foam pad in routine EPI session through logistic supply, one pager SOP development and nationwide orientation for all field workers, supervisor and managers
10. Strengthening cold chain system in large City Corporations through expansion/establishment of cold room (WIC), advocacy for required HR, furniture, training etc.
11. Expansion of District cold and dry store including establishment of WIC- 5 Districts (Kusthia, Feni, Barishal, Pirojpur etc.)
12. Expansion of District cold and dry store including establishment of WIC- 2 Districts (Khulna, Munshiganj)