Gavi 2020 multi-stakeholder dialogue: immunisation planning in light of COVID-19 Republic of Yemen- April 19-21, 2021

Introduction

2020 has been marked by the unprecedented crisis caused by COVID-19. Though the longer-term trajectory of the pandemic remains uncertain, evidence shows that immunisation services in Gavi-supported countries have been disrupted. Millions of people are expected to miss out on immunisation, likely leading to a resurgence of VPDs, further exacerbating existing inequities and putting the most marginalised and poorest communities at greater risk. Gavi-supported countries have already had the opportunity to re-allocate or re-programme[1] existing HSS and TCA support to respond to immediate needs presented by the COVID-19 pandemic. The Gavi Alliance is fully committed to assisting countries to restore immunisation services that have been scaled-back, brought off-track or otherwise affected during the pandemic response.

As an alliance, multi-stakeholder engagement remains key to Gavi's portfolio management approach. It is particularly critical in 2020 as a forum for engagement on how the Gavi Alliance partners and other stakeholders can support countries as they deal with the different phases of the COVID-19 pandemic and seek to maintain and restore primary health care, including immunisation services that have been disrupted. Civil society organisations (CSOs), in particular, will have a essential role to play in engaging communities to rebuild trust and demand, deliver services where there are gaps in government provision and in overcoming gender-related barriers.

Recognising the difficult operating environment and the rapidly evolving landscape currently faced by countries, and to ensure that Gavi's continuing support to the EPI programme is aligned with realities, countries are not requested to conduct a traditional Joint Appraisal in 2020. However, countries are encouraged to sustain the multi-stakeholder dialogue. This dialogue should review the immunisation programme performance in 2019, the impact of the COVID-19 pandemic on immunisation, discuss the needs for maintaining and restoring immunisation services in the context of primary health care, plan for short-term catch-up activities and, where needed, create a roadmap for further re-allocation/planning within the country's recovery plan.

The 2020 multi-stakeholder dialogue exercise

This 2020 multi-stakeholder dialogue exercise was tailored to the country context, taking into account current constraints in terms of travel, meetings, and workload. The process involved preparatory work on data for the review, potentially multiple exchanges with at least one event for live discussion (likely a virtual meeting), concluding with the finalisation of a report and relevant additional documents (e.g., workplan and budget for short-term response/recovery activities, roadmap for further planning). The process aimed to be inclusive and transparent, with meaningful engagement of partners and civil society.

The 2020 multi-stakeholder dialogue report is structured as follows

- Section 1: Country situation: overview of performance of vaccine support, HSS grant implementation, PEF-TCA and other Gavi support, up to end of 2019/early 2020; pre-COVID-19.
- Section 2: Update on impact of COVID-19 immunisation service delivery and immunisation coverage (in 2020) and status of the implementation of the COVID-19 recovery plan (if relevant).
- Section 3: Discussion on priorities, immediate catch-up needs, related action plan, estimated budget and technical assistance needs. Roadmap for further analysis and re-allocation/planning in the context of the country health sector recovery plan.

Much of the information contained in sections 1 and 2 on the country immunisation programme and Gavi support is pre-filled by Gavi from existing documents and completed by the country. ;

[1] This document refers generally to the reallocation of Gavi support. Changes might also be categorized as reprogramming which is used for more significant modifications and may require to be reviewed by the Independent Review Committee.

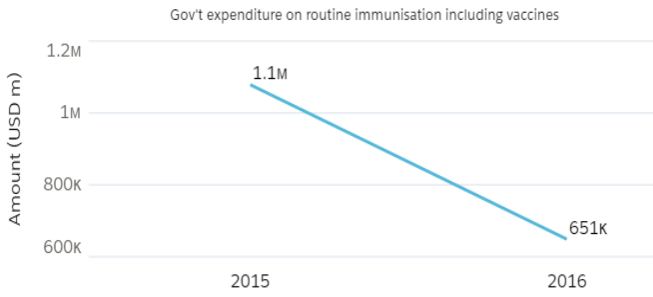
1. Country situation pre-COVID-19, based on information received by Gavi

Contextual Information

PEF Tier: Tier 2 | Fragility Status: Fragile | 1. Initial self-financing

Indicator Name	Year	Source	Value
GNI per capita	2018	World Bank	940
Health Centres per 100k population	2013	WHO - GHO	4.8
Nurses/Midwives per 1000 population	2018	WHO - GHO	7.9
Population	2020	UNPD	29,825,968
Surviving Infants	2020	UNPD	837,019
Under-5 mortality (per 1000)	2018	UNICEF	55

Health financing (and trends)



Country data (provided by the Country):

PEF Tier: Tier 2	Fragility Status: Fragile	1. Initial self-financing	
Indicator Name	Year	Source	Value
GNI per capita	2018	World Bank	940
Health Facilities per 100k population	2013	WHO-GHO	4.8
Nurses/Midwives per 10,000 populations	2020	Current report 2020 MOH	4
Population	2020	CSO	30.8 MIL.
Surviving Infants	2020	EPI Data	1,064,833
Under-5 mortality (per 1000)	2019	Current report 2020 MOH	58.8

Health financing (and trends) - Gov't expenditure on routine immunization including vaccines

Year	Value$
2015	1.1M
2016	651K

1.1. Overview of performance of vaccine support

2.1 New Vaccine Support (source: Vaccine Launch Database)

2.1.1 - Routine Introductions

Vaccine	Introduction Date	2018 Coverage (%)	2019 Coverage (%)	2019 Target	2020 Target
PENTA	01-2005	65	73	-	88
PNEUMO	01-2011	64	72	-	88
ROTA	08-2012	64	73	-	88
IPV	11-2015	59	68	-	88

2.1.2 - Forecasted routine & campaign introductions

Vaccine Name	Type	Sub-Type	Status	CP Date ↑	Phase
IPV	Routine	2nd D	Approved	2021-07-01	NA
MR	Campaign	Follow-up	Forecasted	2022-12-31	NA
MR	Campaign	Follow-up	Forecasted	2025-12-31	NA
MR	Campaign	Follow-up	Forecasted	2028-12-31	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	46	46	→
Pentavalent 3 coverage at the national level (Penta 3)	WUENIC	2019	73	65	▲
Drop-out rate between Penta1 and Penta3	WUENIC	2019	9.9	13.3	▲
Difference in Penta3 coverage between children of urban and rural residences	Survey	2012	22.9	0	▼
Difference in Penta3 coverage between the highest and lowest wealth quintiles	Survey	2017	0	0	→
Penta3 coverage difference between the children of educated and uneducated mothers/care-takers	Survey	2017	0	0	→
EVM	EVM	2013	82.8	0	▲
# of Underimmunised Children	Calculated	2019	228390.3	294993.3	▲

Country Data (provided by the Country):

2.1 New vaccine support (source: vaccine launch database)

2.1.1 Routine introductions

Vaccine	Introduction Date	2018 Coverage (%)	2019 %	2020 %
PENTA3	_2005	80	88	87
MR 1	_2015	72	75	76
PNEUMO3	_2011	79	87	87
ROTA2	_2012	79	88	88
IPV	-2015	77	83	83

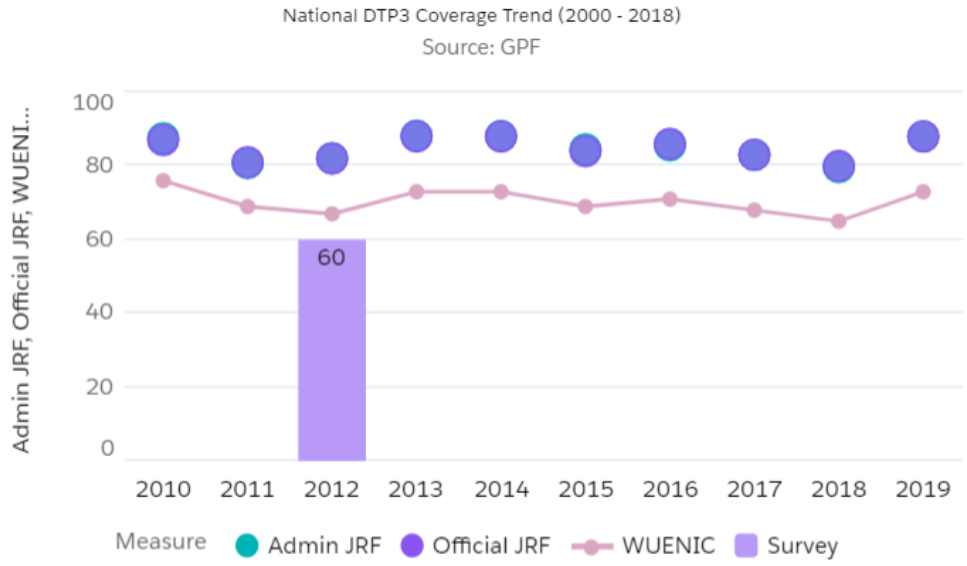
2.1.2 Forecasted routine campaign introductions

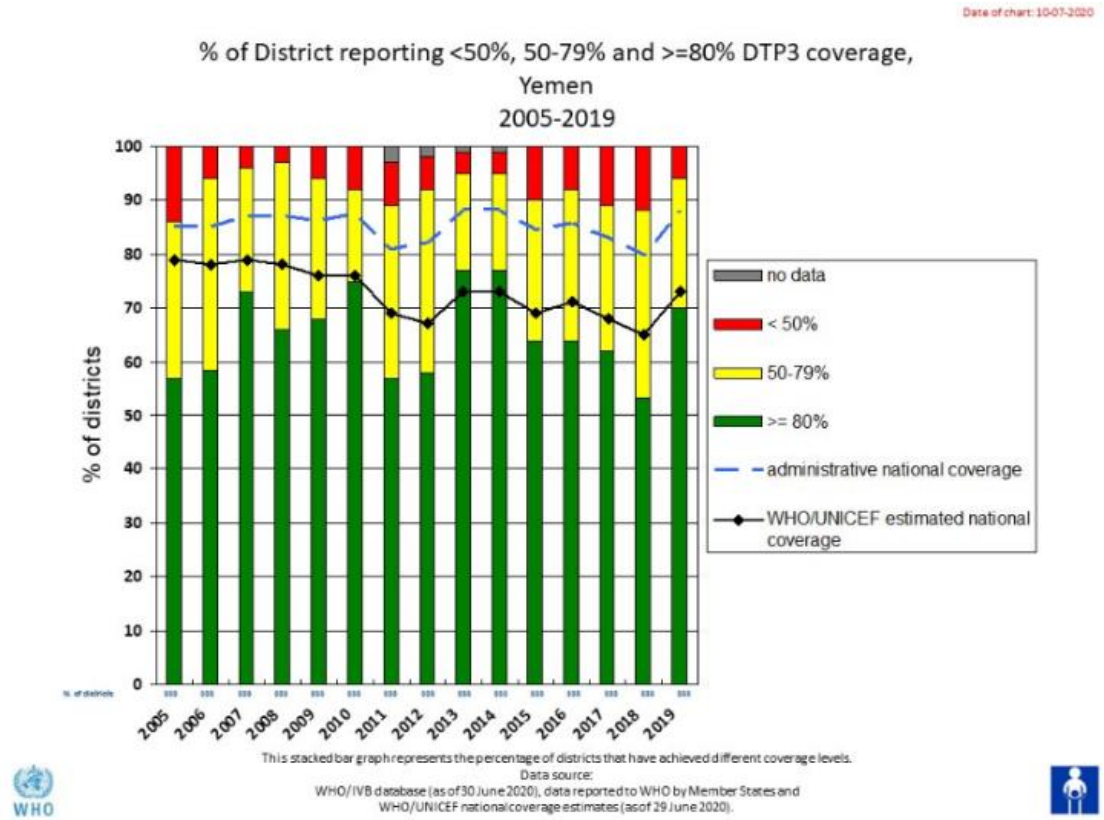
Vaccine Name	Type	Sub-Type	Status	CP Date 1	Phase
IPV	Routine	2nd	Approved	01-07-2021	NA
MR	Campaign	Follow-up	Forecasted	12/31/2021	NA
MR	Campaign	Follow-up	Forecasted	1/1/2024	NA
MR	Campaign	Follow-up	Forecasted	12/31/2027	NA

Country Data (provided by the Country)

Indicator	Source Name	Year	Value	Previous Value	Trend
Measles containing vaccine (second dose) coverage at the national level (MCV2)	Admin	2020	54	54	0
Pentavalent 3 coverage at the national level (Penta 3)	Admin	2020	87	88	-1
Drop-out rate between Penta 1 and Penta 3	Admin	2020	9	6	3
Difference in Penta3 coverage between children of urban and rural residences	Admin (urban: governorates capitals- Rural: all others)	2020	2	7	-5
Difference in Penta3 coverage between the highest and lowest wealth quintiles	N/A				
Penta3 coverage difference between the children of educated and uneducated mothers/care-takers	N/A				
EVM	EVM	2013	82.8	0	NA
# of Underimmunised Children	Calculated	2020	140,944	127,944	13000

Trends and district equity





Progress against indicators and targets achievement

a- Vaccine programme performance tables

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)	972,612	11%
	Admin (JRF)	Number of surviving infants who received the third recommended dose of PCV vaccine (PCV3)	915,109	13%
PENTA	Admin (JRF)	Number of surviving infants who received the first recommended dose of pentavalent vaccine (Penta1)	975,840	10%
	Admin (JRF)	Number of surviving infants who received the third recommended dose of pentavalent vaccine (Penta3)	919,113	14%
MCV	Admin (JRF)	Number of surviving infants who received the first recommended dose of measles containing vaccine (MCV1)	781,154	7%
IPV	Admin (JRF)	Number of surviving infants who received the first recommended dose of IPV	867,598	15%
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.

Country data (provided by the Country)

Vaccine Programme	Source (2020)	Intermediate results Indicator	Reported actuals	Rel. % change

PNEUMO	Admin (JRF)	Number of surviving infants who received the first recommended dose of PCV vaccine (PCV1)	1,012,097	2%
	Admin (JRF)	Number of surviving infants who received the third recommended dose of PCV vaccine (PCV3)	922,087	1%
PENTA	Admin (JRF)	Number of surviving infants who received the first recommended dose of pentavalent vaccine (Penta 1)	1,013,692	2%
	Admin (JRF)	Number of surviving infants who received the third recommended dose of pentavalent vaccine (Penta 3)	923,889	1%
MCV	Admin (JRF)	Number of surviving infants who received the first recommended dose of measles containing vaccine (MCV1)	805,463	0%
IPV	Admin (JRF)	Number of surviving infants who received the first recommended dose of IPV	879,273	3%
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	0	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.				

b- intermediate results

	Process Indicators			Intermediate Results		
	Indicator name	Value	Rel. % change	Indicator name	Value	Rel. % change
OBJ-1	% of EPI district supervisors trained in VM	16	NA	% age of districts implemented at least 4 rounds of Outreach activities	89	NA
	% of EPI staff recieved basic/refresher training	10	NA	% of health facilities with functional vaccine storage	68	NA
	% of health facilities reporting the wastage rate of PCV on monthly basis	81	NA	Data Verification factor (DVF) identified through DQS.	NA	NA
	% of health facilities with annual plan including outreach microplans in place	89	NA			
	% of health facilities providing immunization services	81	NA			
	% of planned outreach rounds implemented	80	NA			
OBJ-2	% of surveillance officers trained at all levels	40	NA	% of GHOs submiting completed Integrated reports of all planned activities	94	NA
				% of weekly Integrated disease surveillance reports received at central level	95	NA
OBJ-3	% of CHVs trained in Integragted Health Services package	25	NA	% of caretakers aware of benefits of immunization for their children	87	NA
				% of Governorates having community communication and social mobilization plan in place	100	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 grants implementation.**

HSS 2 implementation summary (as of 30 June 2020), US$

Recipient	Funds Disbursed	Expenditure (incl. commitments)
MoH (2014)	**4,200,000**	**3,976,000[2] (95%)**
WHO	**5,401,251**	**4,251,953 (79%)**
Tranche 1	1,639,641	1,180,842[3]
Tranche 2	1,747,194	1,153,349[4]
Tranche 3	1,331,080[5]	1,173,177
Tranche 4	1,292,502	744,585
Return of funds	(1,054,282)[6]	
Tranche 5- NCE	445,116	
UNICEF	**8,037,983**	**6,401,355.93 (80%)[7]**
Tranche 1	1,720,359	1,684,182.27[8]
Tranche 2	1,612,764	1,597,583.37[9]
Tranche 3	2,028,274	2,028,238.29[10]
Tranche 4	1,477,062	1,091,352[11]
Tranche 5	1,199,524	
Total	**17,639,234**	**14,629,308.93**

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

	Start Date	End Date	Recipient	Grant Value US$	Disbursed	Expenditure	Cash balance	Status Update
VIG IPV2	2021	Not known	UNICEF	278,749	278,749	0	278,749	To be yet implemented
MR FU Ops	2018	Tbc	WHO	2,977,987	2,977,987	tbc	tbc	To be closed upon reception of closure report
PCV VIG	2009	Tbc	MOH	257,000	257,000	tbc	tbc	To be closed upon reception of closure report
IPV VIG	2014	tbc	MOH	614,000	614,000	tbc	tbc	To be closed upon reception of closure report
MR VIG	2014	tbc	MOH	767,500	767,500	tbc	tbc	To e closed upon reception of closure report
RV VIG	2021	tbc	MOH	270,500	270,500	tbc	tbc	To be closed upon reception of closure report

1.4. Compliance, absorption and other fiduciary risk matters

Since 2016, Gavi has disbursed US$ 17,639,234 which is a full HSS2 grant value. As per the information available, at the time of the last reporting on 30 June 2020 (11 months before the end of HSS2 programme in end May 2021), overall programme absorption rate as per mid-2020 is 83%. WHO and UNICEF's respective absorption rates were 79% and 80%.

[2] As per JA 2019 data

[3] To be confirmed

[4] Interim Financial statement as of 31 December 2017 (Award number 65995)

[5] Need to clarify referencing of US$ 1,331,080 tranche in WHO certified report (sits under HSS reference and not HSS2).

[6] Return of funds in two payments made by WHO in June and Sept 2019

[7] Need to confirm once certified financial statement as of June 30, 2020 is received

[8] Certified statement of account as of 31 December 2017 (SC160093)

[9] Certified statement of account as of 31 December 2018 (SC160541)

[10] Certified statement of account as of 31 December 2018 (SC170246)

[11] As per uncertified report as of June 20, 2020 (SC180720)

- *Compliance with financial reporting requirements (periodic/annual financial reports, audits):*

The following programmatic and financial reports are pending submission to Gavi:

1) MR FU Ops (WHO)
2) PCV VIG (MOH)
3) IPV VIG (MOH)
4) MR VIG (MOH)
5) RV VIG (MOH)
6) HSS 1 (MOH, UNICEF, WHO)– Consolidated programmatic closure report and individual financial closure reports (pending since 2018)
7) HSS 2 – Interim Financial Reports for semester ending 30 June 2020 (WHO and UNICEF)
8) HSS 2- Financial report for the tranche transferred to the Government: US$ 4,200,000 (MOH)

- *Compliance with programmatic reporting requirements (GPF):*

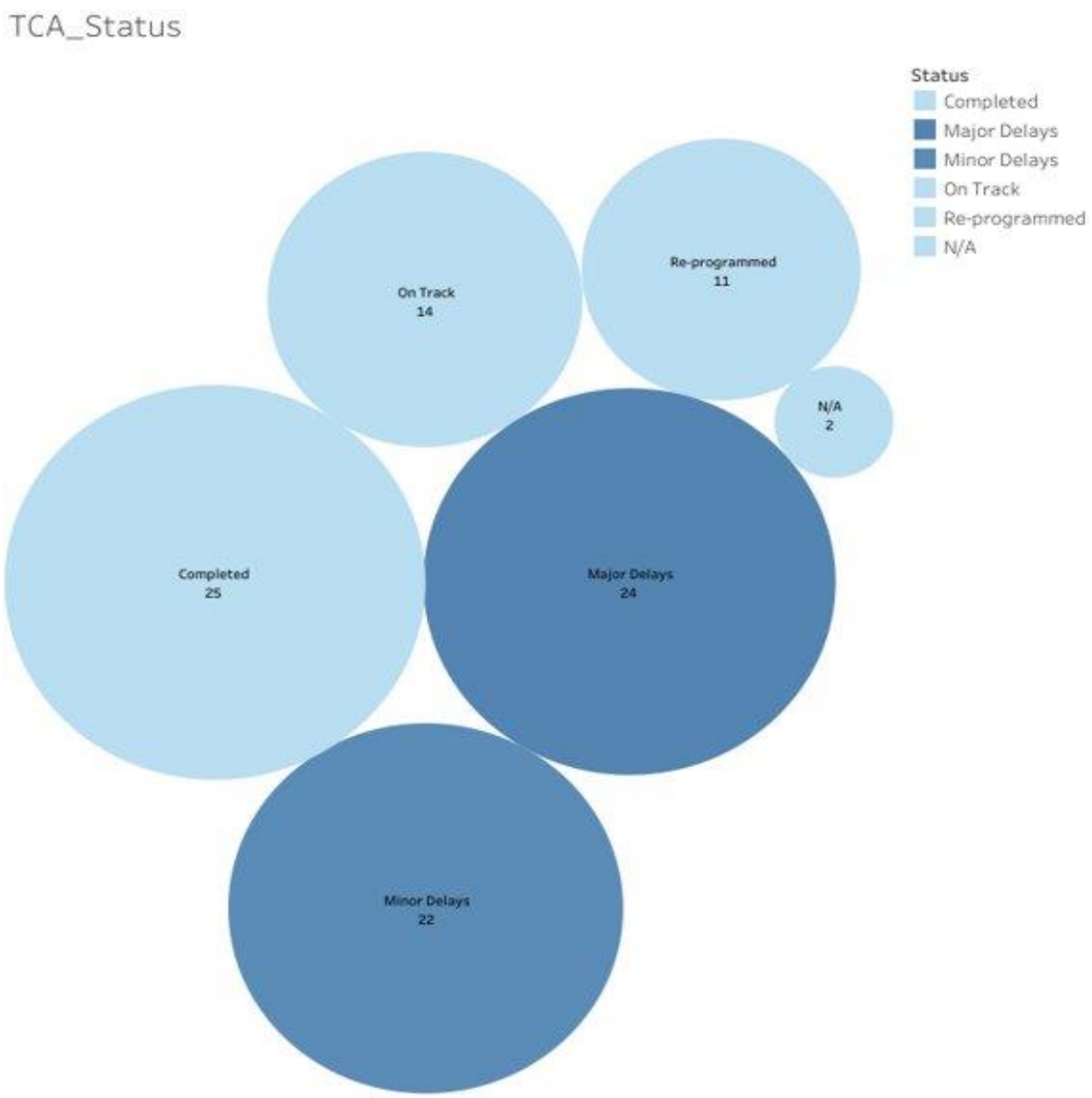
There are significant gaps in reporting (specifically against process indicators) for 2019. Reporting against 2020 indicators appears to be completed (though some remain overdue when the source for the data to report may have been delayed – e.g. survey day or EVMA data).

- *Other financial management and fiduciary risk comments:*

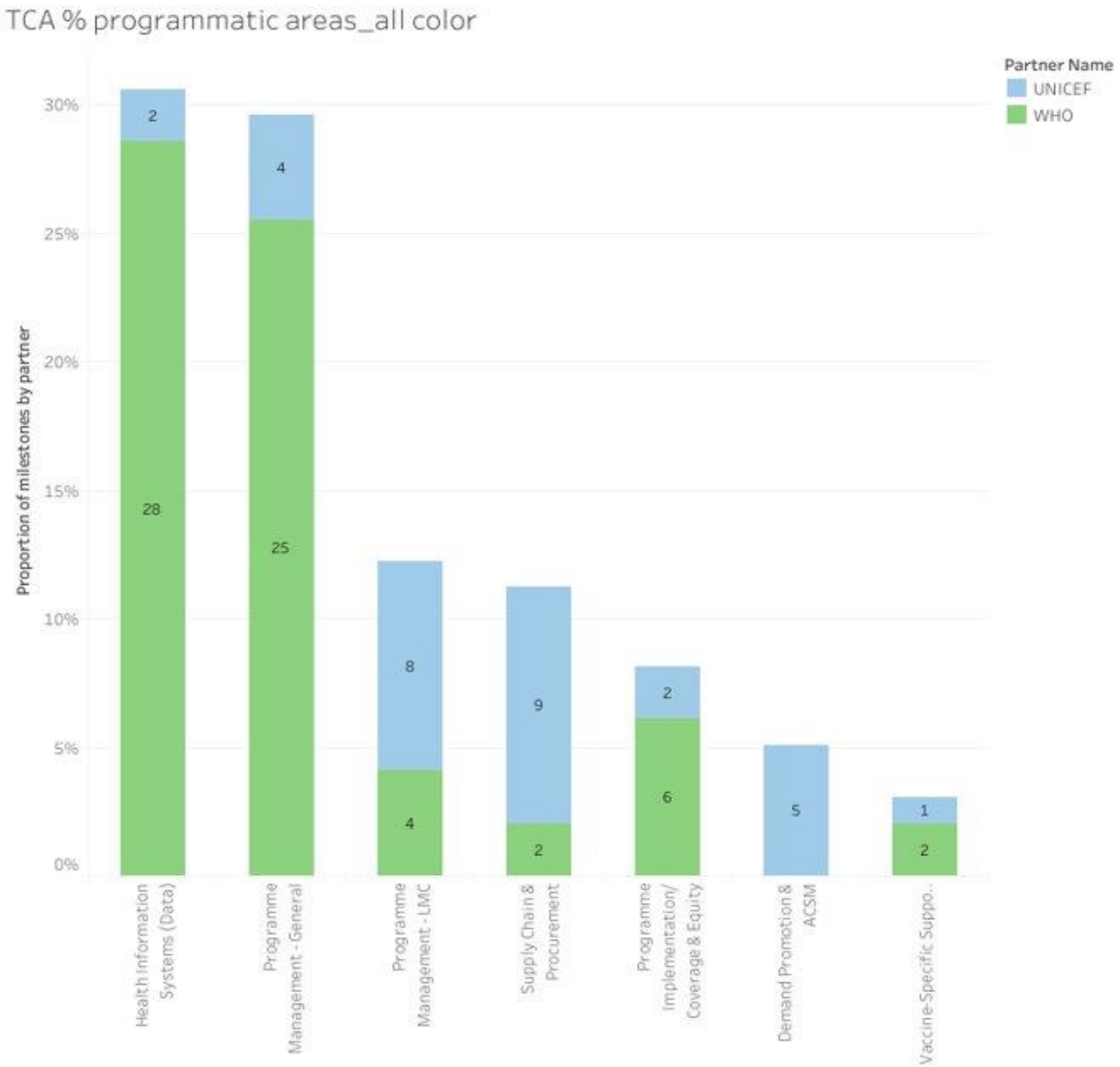
  - The Programme Capacity Assessment (PCA) concluded that the fiduciary risk in Yemen is high and recommended several mitigations measures, including the set-up of a Third-Party Monitoring (TPM) to regularly verify cash, cold chain equipment and vaccines related activities. The partners are yet to provide Gavi with the documentation for the following risk mitigation measures:
  - Standard micro-assessments for all fund recipients, Government and CSOs, with actions taken to remedy the findings.
  - A Finance and administration Policy and Procedures manual to be developed and disseminated.

1.5. **Overview of PEF TCA progress** (from June 2019 to Nov 2020**)**

Milestones status:

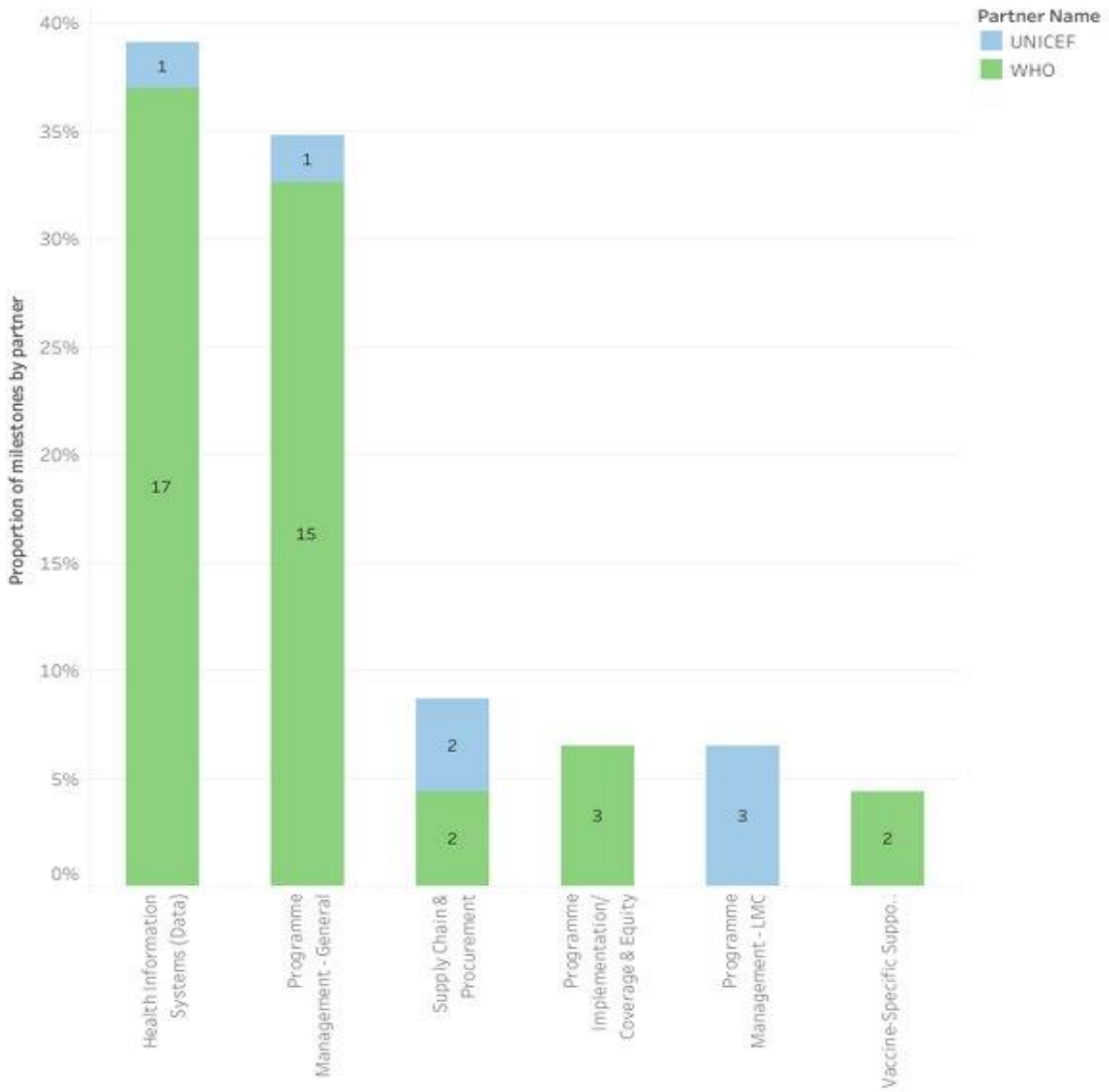


Proportion of milestones per partner:



Details on the delayed milestones (June 2019 to Nov 2020):

TCA % programmatic areas_all color



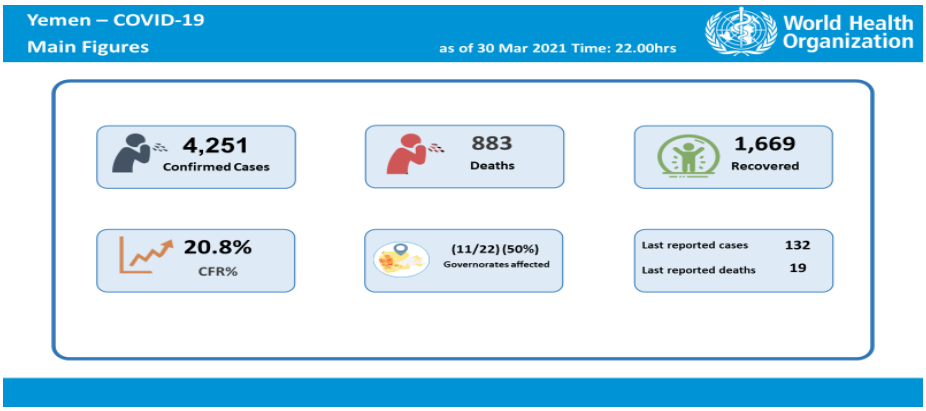
2. COVID-19 impact on immunisation (in 2020): current situation

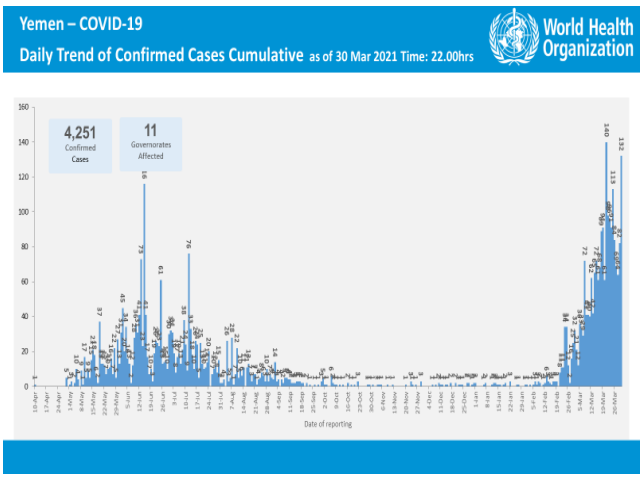
2.1 COVID-19 cases and deaths (as of 30 March 2021)

As of 30th March 2021, Yemen has 4,251 confirmed COVId-19 cases with 883 associated deaths with a CFR of 20.8%. In Yemen the first case of COVID was confirmed on 10th April 2020 and that followed the 1st wave. Off course the cases are under reported and are mainly from Southern governorates with only 4 cases and one death reported from North so far since the beginning of the outbreak. The reasons for under-reporting include a lack of surveillance coverage and testing capacity, individuals being unwilling to seek care or be tested due to fear and stigma, and political sensitivity. Modeling and research studies undertaken by academic institutions using proxy indicators, such as burials captured by satellite images, are likely to estimate more realistic figures in Yemen.

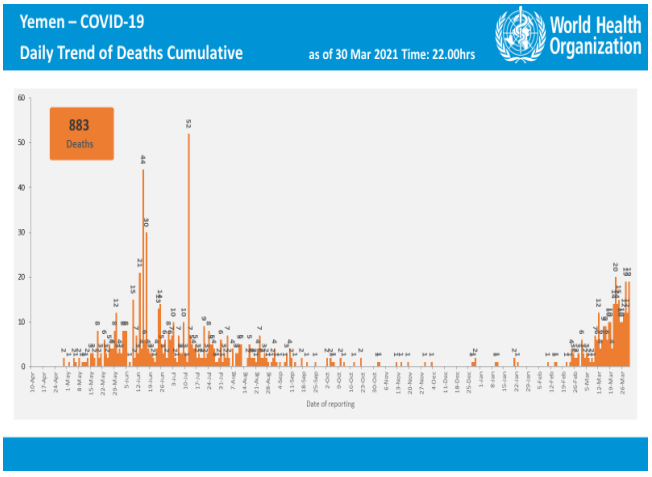
Recent reports have highlighted the socio-economic impact of COVID-19 in Yemen, and how it has amplified underlying vulnerabilities. This includes a significant reduction in remittances from overseas (Yemen's largest source of foreign currency) and possible job losses in Yemen.

The second wave has started from March 2021 and is more serious with reporting of 100 cases with 20 associated deaths each day from the south.





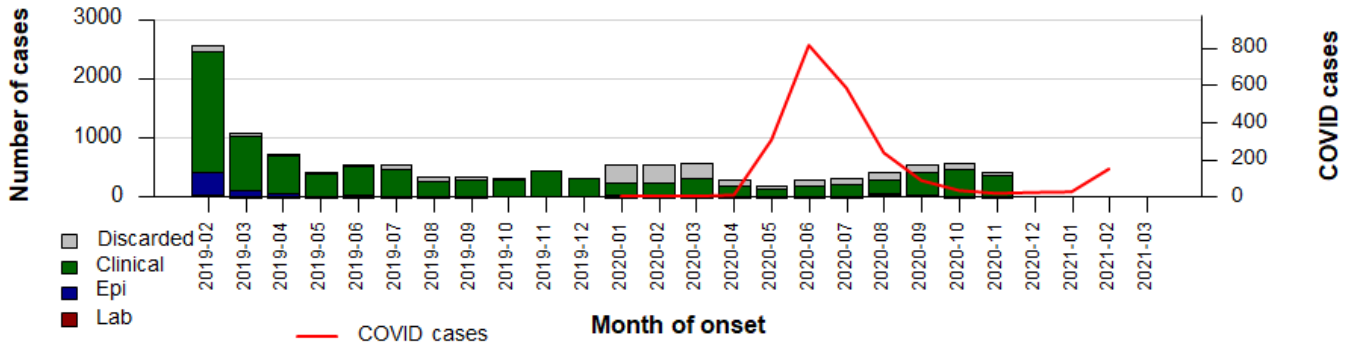
Covid cases 2020 – March 2021



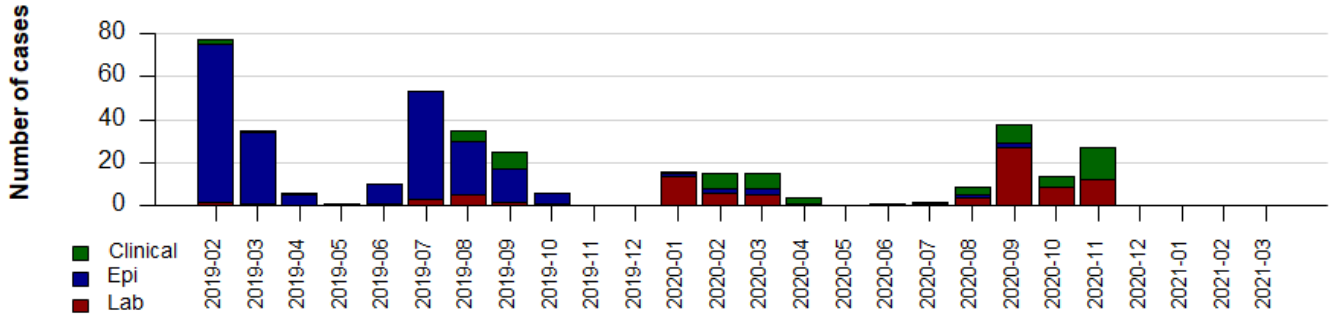
Covid associated deaths 2020 – March 2021

2.2 Disease Surveillance and Incidence

Measles Cases



Rubella Cases



Year	Confirmed Cases
2006	4989
2007	50
2008	49
2009	127
2010	372
2011	847
2012	2168
2013	571
2014	817
2015	468
2016	143
2017	2104
2018	14106
2019	9335
2020	5388

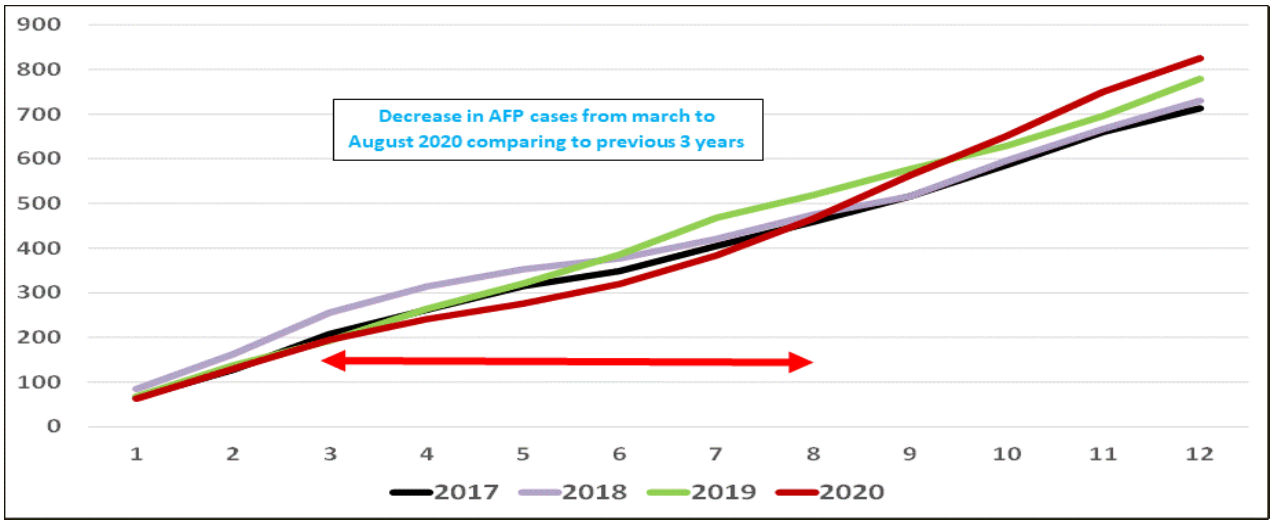
Impact of COVID-19 on disease surveillance

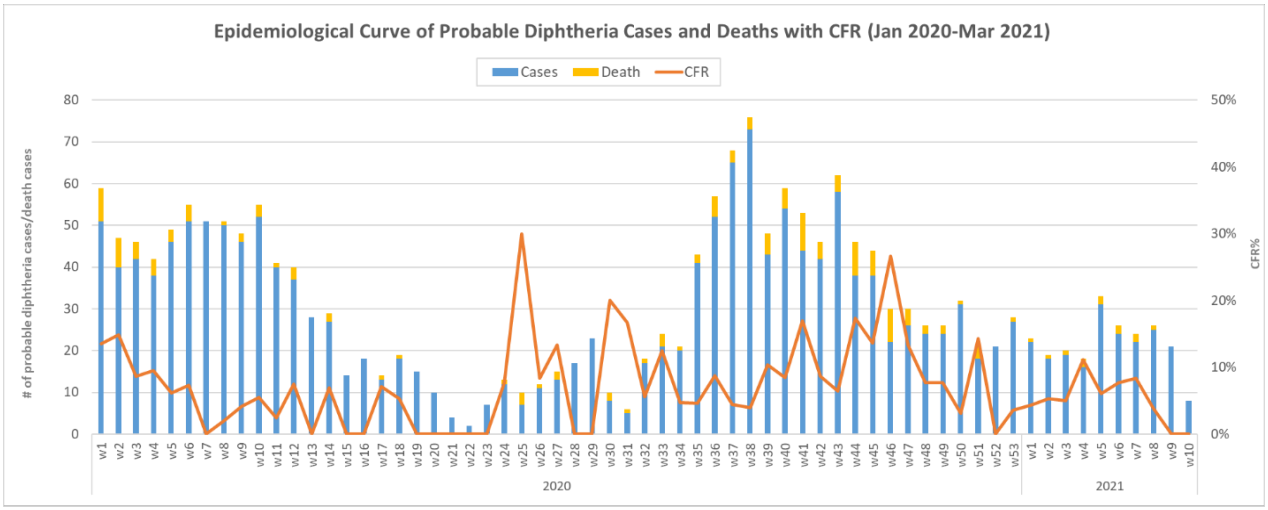
Looking at the surveillance reports for measles, Diphtheria and AFP cases, it appears that COVID-19 have somewhat impact on the country's VPDs surveillance. There are various reasons that may have attributed to that specially during the 1st wave of COVID in Yemen like:

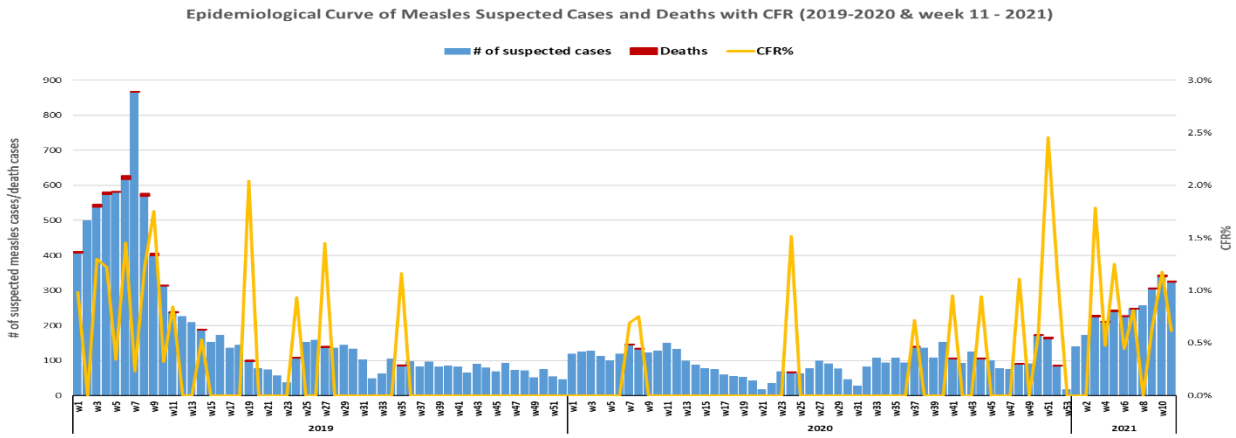
- Several Health Facilities were closed some for fear of infection, other facilities limited their services to receiving only emergency cases, and a number of hospitals were designated as centers of treatment and isolation for COVID19 patients.
- Restriction of movement that was imposed in some areas and cities that reported COVID19 outbreak for several days.
- Several coordinators got infected with the disease and underwent treatment and isolation.

- Parents were also reluctant to bring their children for minor illnesses to health facility at start of the outbreak.

Some decrease in all VPDs cases can be seen at the peak of the first wave in 2020. However, later things returned to normal and since then the VPDs cases are reported as usual rather have shown an increase due to decrease in children immunity level. The impact was mainly in South that has been reporting COVID-19 cases since the outbreaks.

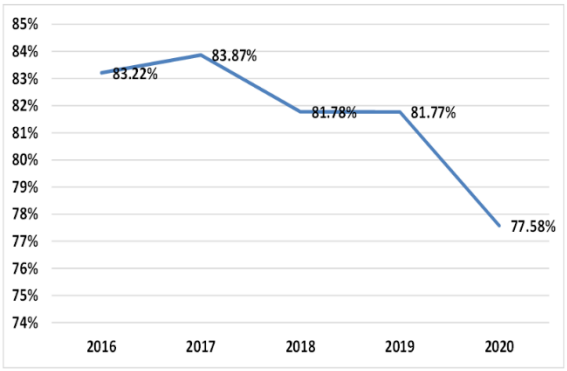




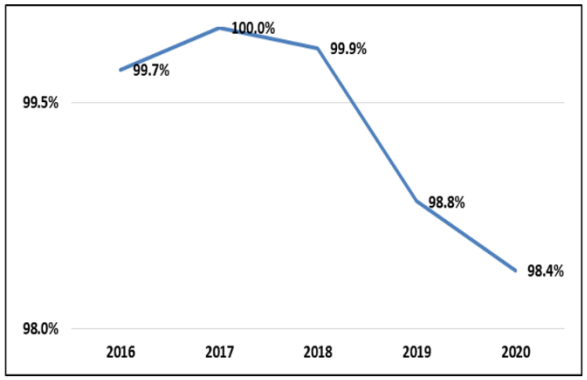


To assess the impact of COVID 19 on VPDS surveillance, it will be good to see the performance of AFP surveillance system that is an established system with a full structure and operation support available from GPEI through WHO. The various indicators indicate that COVID pandemic had an impact though not very significant and the program maintained its sensitivity. The cVDPV1 outbreak was detected during 2020

% AFP reported within 7 days of paralysis onset



% AFP cases investigated within 2 days of reported date

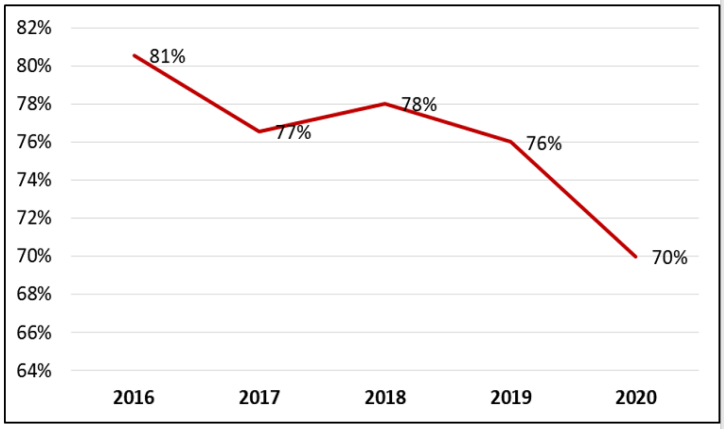


and since then 33 cases have been confirmed with 31 of these from 2020, one in 2021 and one from 2019. The case of 2019 onset was detected late as the samples could not be tested timely. All the cases except one are from 8 districts of Sa'adah governorate where no mass vaccination conducted since last more than 5 years. Even the cluster investigations conducted by the AFP surveillance staff concluded that the possibility of an outbreak can't be overruled.

If we compare the reporting of AFP cases within 7 days of onset of paralysis and AFP cases investigated with two days of onset over last 5 years (graph above), we will notice that the in 2020 both these indicators are the lowest in 2020 indicating indirect impact of COVID-19 pandemic on AFP surveillance that can be generalized for other VPDs as well.

Similarly, if we compare the arrival of stool samples at central level from the field, it is evident that there is a drop in 2020. One of the reasons was movement restriction implemented in some areas and cities for several days that reported COVID19 cases.

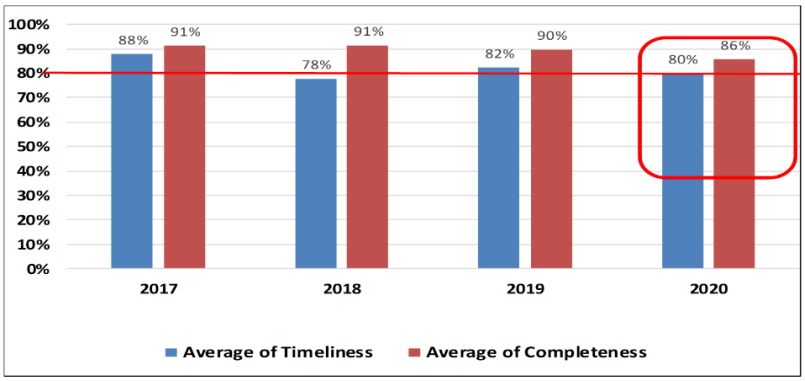
% Receiving samples in central level within 3days of collection



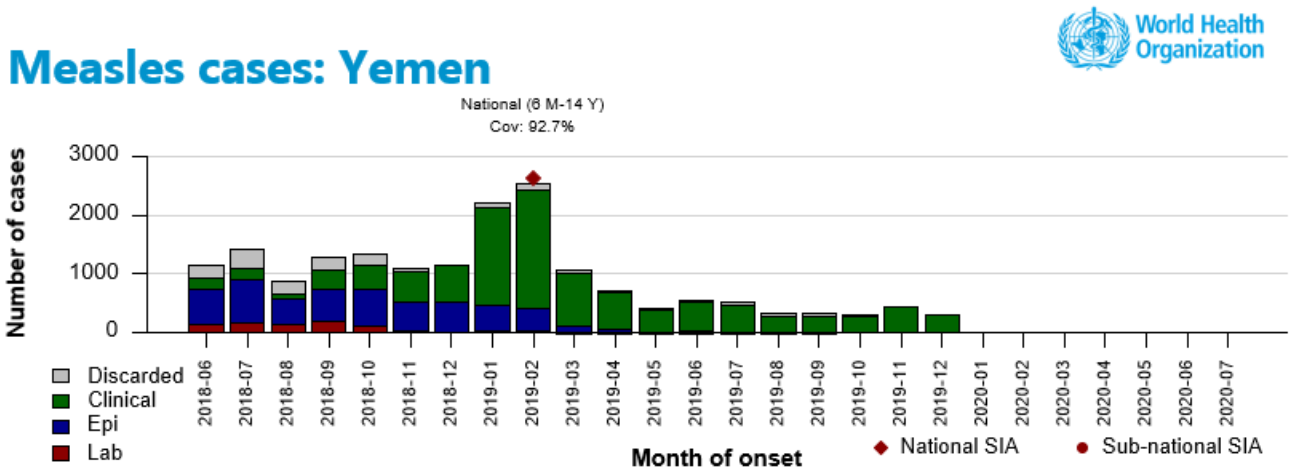
The completeness and timeliness of active site visits by the AFP surveillance coordinators also dropped in 2020 as compared to previous years.

In addition to that a number of activities like training of AFP surveillance coordinators, sensitization sessions with Health care providers (both public & private) could not take place that would have resulted in improved sensitivity of AFP surveillance system. The initiation of environmental samples that was supposed to start in early 2020 has also been delayed.

Comparison of completeness and timeliness of Active visits 2017-20



So, in nutshell the COVID-19 pandemic did have an impact on the VPDs surveillance system in Yemen during 2020 but not too much and the VPDs surveillance system continued to perform well by picking cases as well outbreaks of cVDPV1, Measles and Diphtheria from various part of the country.



Impact of COVID-19 on disease cases

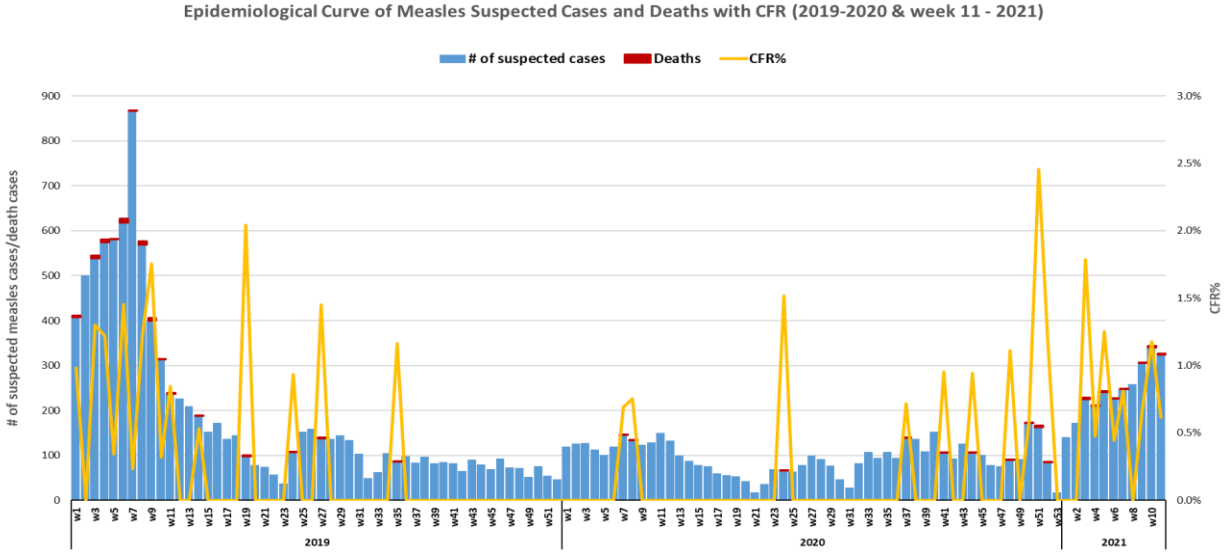
Briefly describe the impact of COVID-19 on vaccine preventable disease incidence. Since measles is the vaccine preventable disease most likely to have a rapid increase in incidence due to declines in immunisation coverage associated with COVID-19, measles data can be used to illustrate this impact, including:

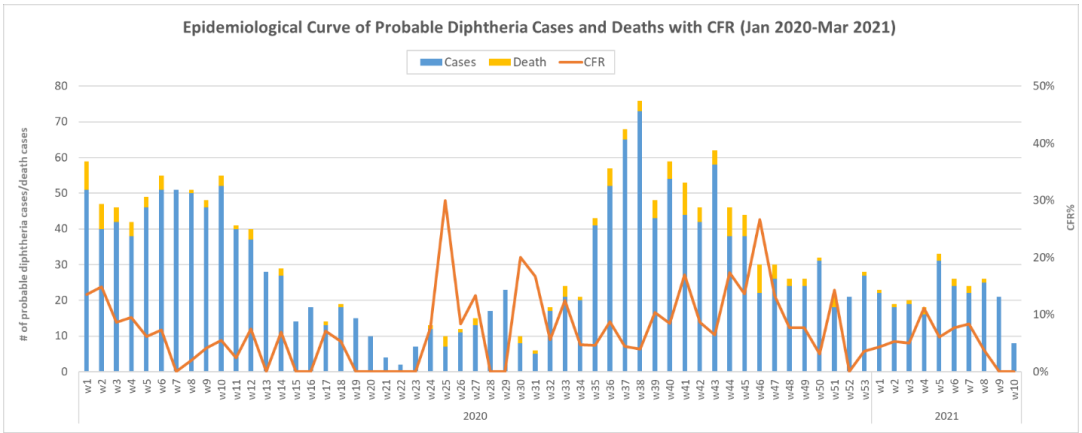
- *Changes in the number or rate of confirmed measles cases*
- *Interpretation of changes in the number or rate of confirmed measles in light of changes in surveillance performance. For example, assessment of whether decreases in measles incidence are due to actual declines or decreased sensitivity of measles surveillance.*

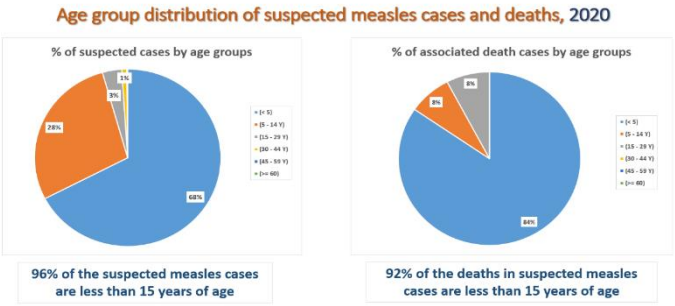
Similar data for other diseases can be used as well.

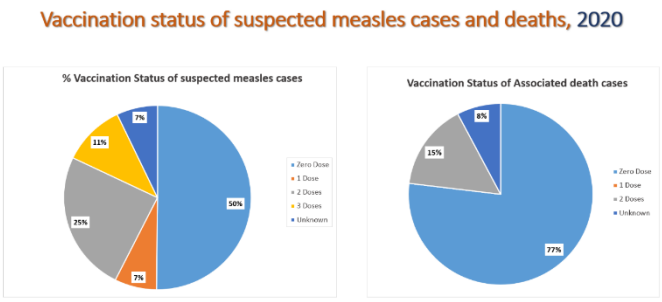
There is no significant impact of COVID on reporting of Measles and Diphtheria cases and the system has been picking up cases as well testing the samples. However, in 2020 there was a drop in the number of measles case due to nationwide MR campaign conducted in February 2019 targeting children 6 months to 14 years of age throughout Yemen except Sa'adah governorate. Similarly, in 2020 less Diphtheria cases reported due to Diphtheria vaccination campaign conducted in selected districts in 2018 (March and May) as well in 2019 (July/August and October).

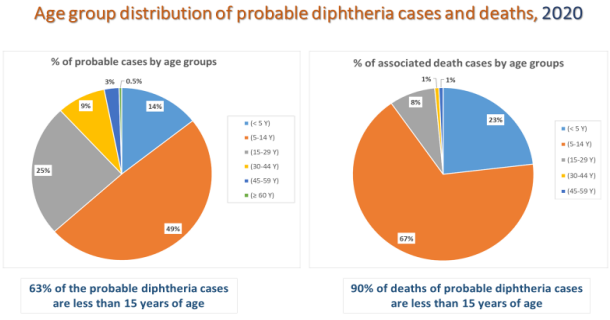
An upsurge has been noticed in Measles and Diphtheria cases as well associated deaths due to these diseases especially towards the end of 2020 and continuing through 1st quarter of 2021. The vaccination status of suspected measles cases is showing 50% without receiving any dose and 77% of the associated deaths due to measles were zero dose. Similarly, 78% of the probable Diphtheria cases were inadequately vaccinated. 96% of the suspected Measles cases are less than15 years of age with 68% less than 5 years. Whereas 63% of probable Diphtheria cases and 90% of associated deaths due to Diphtheria are less than 15 years of age.

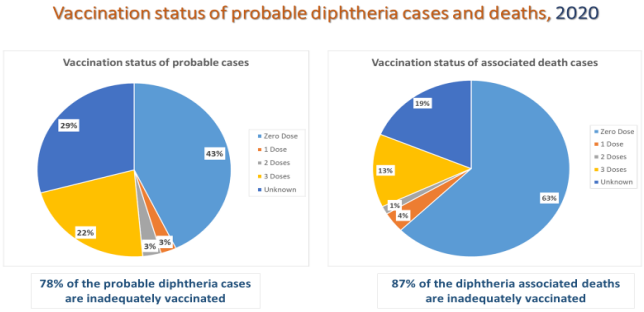












2.3 Impact of COVID-19 on immunization

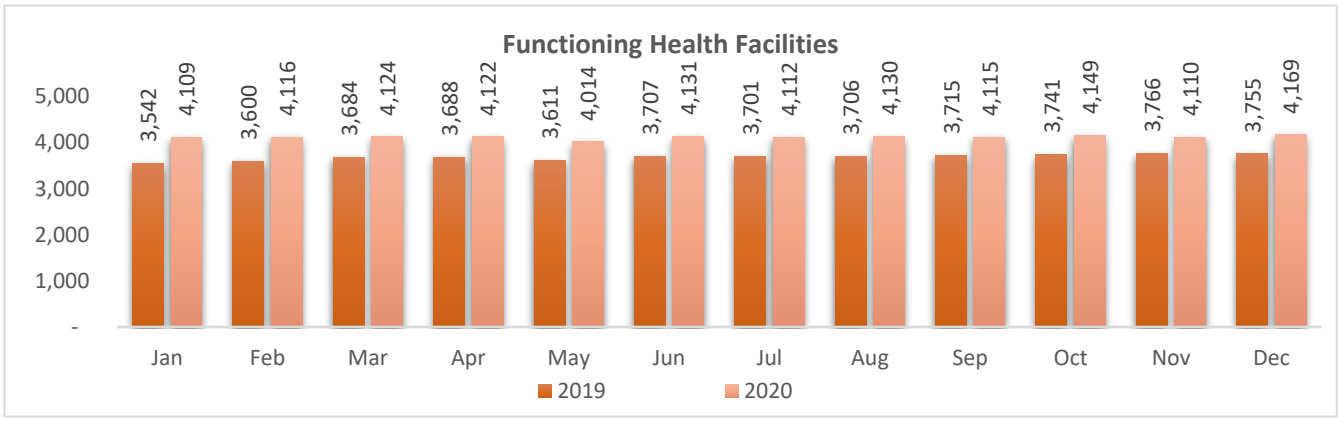
Briefly describe the impact that COVID-19 has had on your ability to effectively deliver immunisation services, including:

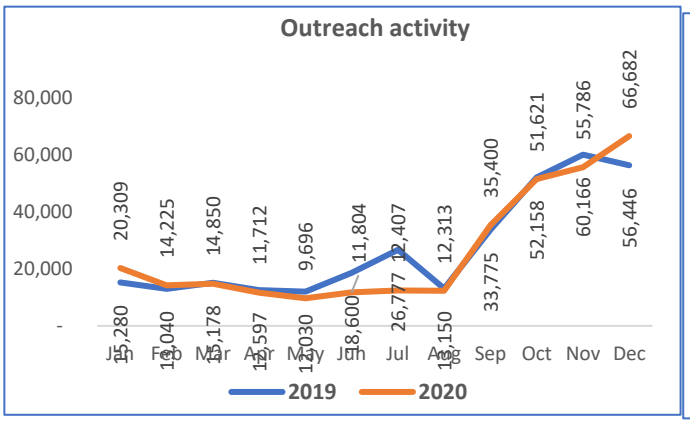
- *Constraints on routine immunisation services (e.g. are health workers still carrying out immunisation services? What barriers do health workers face?)*
- *Impact of the pandemic that may have exacerbated gender related barriers to immunisation experienced by caregivers, adolescents and/or health workers.*
- *Impact on uptake, demand and community engagement (including impact of rumours or misinformation)*
- *Impact on any planned new vaccine introductions or campaigns*
- *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)*
- *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)*

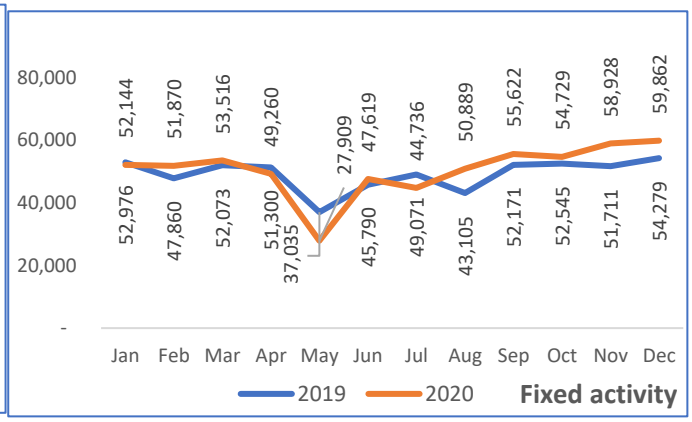
What has been the impact on the implementation of Gavi support (vaccines, HSIS, TCA, other), including financial absorption, stock management etc.?

The COVID-19 pandemic had its impact on immunization services in the country. At the beginning of the pandemic due to restrictions of movements, services at facility level were not optimal though health workers were still available at the facilities and facilities function.

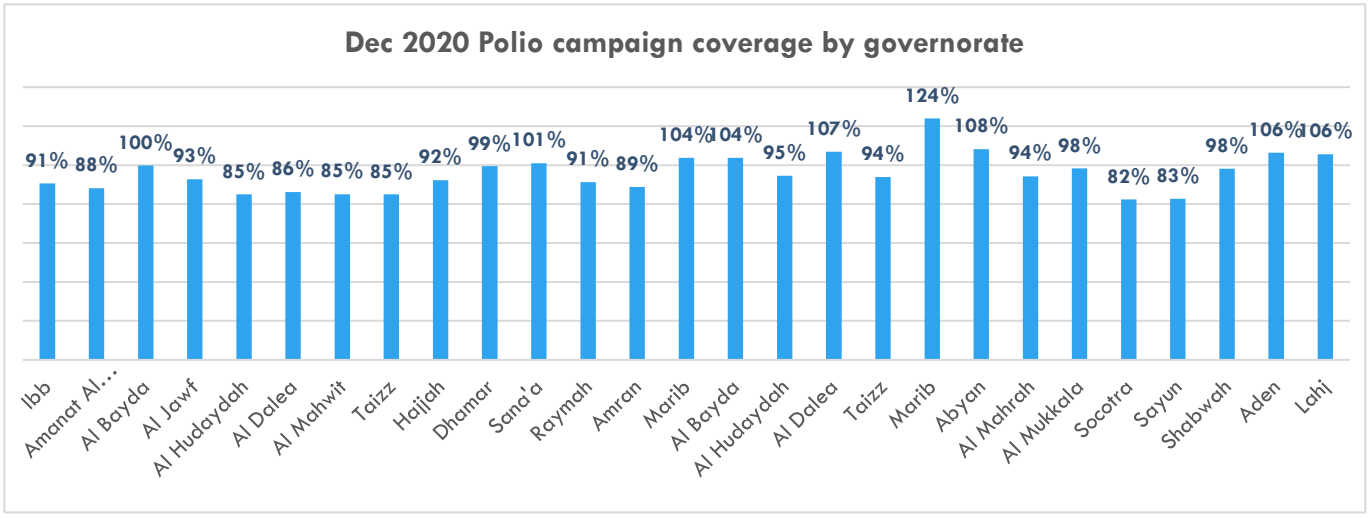
There were reduced services uptake including immunization resulting in low coverage at the beginning. Planned campaigns including Polio, diphtheria and MNTE campaigns as well as the integrated outreach activities were suspended.



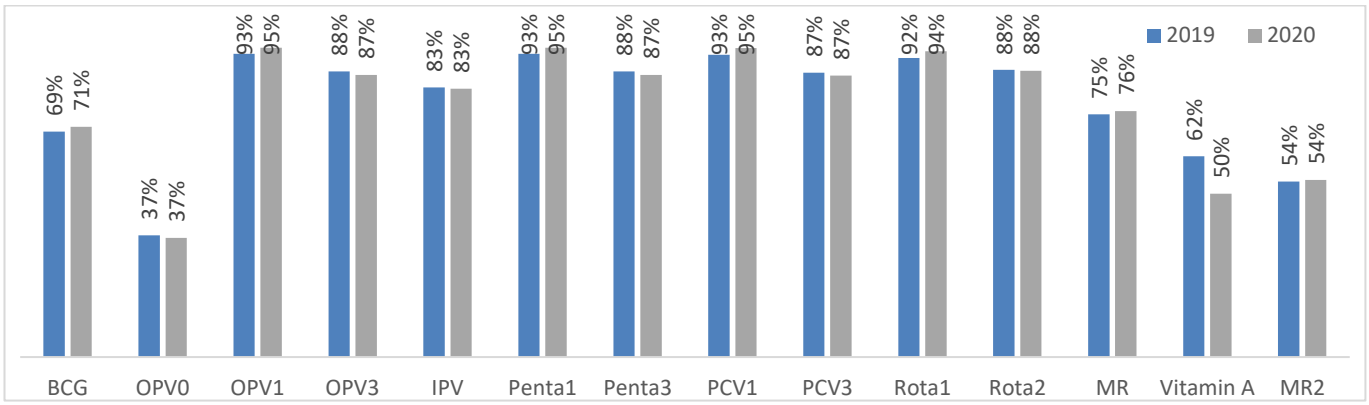




Provision of personal protective equipment including gloves, masks and hand sanitizer and adequate sensitization enabled the continuation of services at the PHC level including immunization service delivery and resumption of suspended campaigns beginning with Diphtheria campaign in five governorates in the south followed by Polio and MNTE (maternal and Neonatal Tetanus Elimination) campaign in the south and eventual nationwide polio outbreak response campaign in 22 governorates.



Four integrated outreach rounds in 11 governorates and three in the remaining were also implemented in the context of COVID-19 pandemic that brought the routine immunization coverage to almost the same coverage in 2019 with Penta3 coverage of 87%.



On demand generation activities, the three-phase RCCE strategy on the COVID-19 response adopted multi-channel communication approaches to educate communities on the new pandemic to prevent fear and panic, prevent community transmission and in Phase 3 recognizing that populations may have to live with the specter of COVID-19 for a while, promote demand and utilization of available essential services.

Since the beginning of the epidemic, health authorities and related sectors have taken many different precautionary measures, including closing halls and mass gatherings, as well as closing shops at peak times, Commitment to spacing out in the mosques, closing restaurants and keeping take away, as well as giving the elderly and people with chronic diseases work leave.

Adhering to physical/social distancing rules. To support these, a mix of approaches and communication channels were utilized including extensive mass media and social media / digital media engagement to reach and engage with communities.

Employing innovative approaches including integrating COVID-19 messages into existing interventions ensured that the planned RCCE interventions could continue. The initial reluctance to use existing health facilities and services driven by rumours and misconceptions circulating in the community were addressed through these approaches. Community level Intervention in respect to COVID-19 protocols were conducted, while Face-to-face interventions such as trainings and groups sessions were conducted applying social distance and where possible conducted outdoors or in a room with adequate ventilation. Many training sessions were also conducted using ZOOM and Skype to engage and motivate for vaccination with limited direct contact. Use of mobile/roaming vehicles mounted with public address systems and megaphones especially in hard-to-reach and media dark areas as well as announcements/broadcast of radio flashes through megaphones mounted on in rural communities and IDP settlements, and Mosques PA system announcements after the five daily calls to prayers ensured continuous promotion on key prevention practices and existing services. Dissemination of communication materials including posters, leaflets, billboards, brochures, banners, and stickers in public places, on public transport and in markets, as well as branding of commodities/groceries with COVID-19 messages facilitated another level of engagement.

Complaints and feedback mechanisms plus a system to track and respond to rumours were key features of the COVID-19 RCCE Strategy which helped to address the issues impacting demand generation and use of available services. The evolving nature and novelty of the COVID-19 Pandemic, the lack of official communication on the epidemiology of COVID-19 in Yemen, also gave rise to the circulation of various rumours and misconceptions in the communities and impacted adoption and sustained practice of the prevention behaviours as well as demand for services as many people were wary about visiting health facilities for fear of being intentionally

infected with COVID-19. The approaches adopted for tracking rumours included monitoring the MoPHP/HEC managed telephone hotlines, phone-in on district-level radio programmes as well as a telephone-based Rumor Tracking Tool managed directly by the C4D Section.

There was no planned introduction of new vaccine in 2020. The second IPV second dose introduction into the routine Immunization schedule is planned for July 2021 and the country is working towards ensuring the implementation.

The COVID-19 pandemic resulted in global supply challenge with restriction of flights across the globe. Fortunately, this did not affect the availability of vaccines in 2020 for routine immunization and campaign. UNICEF coordinated with the MoPHP monitoring the in-country stock to inform shipment of vaccine into the country that enabled availability throughout the year. However, there were some vaccine in the country for campaign that were at risk of expiry including OPV and Td vaccines meant for campaigns. Part of these vaccines were diverted to routine services and the remaining doses of OPV were utilized for the Polio campaign while the Td was not fully utilized for the MNTE campaign in the south with some. 97,700 doses of Td worth 14,650 USD expired by the end of November 2020.

Regarding financing for immunization, there were support from other donors including WB, USAID and KSA for procurement of supplies including OPV for campaign, PPEs for continuity of services at PHC level and for campaigns in the country during the period of 2020. Resources were mobilized by UNICEF particularly through FCDO to support the 2020 co-financing obligation of the country and for the procurement of traditional vaccine for routine immunization service delivery.

2.4 Already agreed budget reallocations of HSS grant for COVID-19 response

Not applicable.

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

Not applicable to HSS2 grant.

HSS3 grant- yet under approval by Gavi/potential reallocation to be discussed.

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

Based on the analysis of the current programmatic and financing status of your immunisation programme (captured in Sections 1 and 2), the questions below provide guidance for a multi-stakeholder dialogue.

This should result in an outline of your plans to reinforce/re-establish routine immunisation activities, catch-up on missed children, and potentially re-activate some of the planned new introductions and/or campaigns, in the context of the country epidemic response/recovery plans while taking into account the guidance provided by the Alliance.

The country is expected to:

- *Define short/medium-term activities to maintain/restore routine immunisation and catch-up on coverage as needed. For these, a workplan and budget will be required.*

To increase the coverage and catchment on site-based strategy by supporting HFs to continue immunization services at regular bases for all tiers:

1- Refunctioning all health facilities (100%)

2- Provision of integrated outreach to the 3rd tier arising from HFs at least 6 rounds a year

3- Ensuring effective supportive supervision from different levels (central, governorate and peripheral) to enhance and increase effectiveness of outcomes and ensuring IPCs measures at the HFs and Communities are taken.

4- Increase the community demand on health services especially for vaccination through a high-quality communication plan.

5- Improve the supply for the HF to enhance trust and encourage the service demand (especially in context of COVID19 and possibly movement restrictions).

6- Essential health services (ESP) package to be provided be HFs ensuring availability and accessibility for community at all levels.

Medium and long-term:

1- Reinforce integrated health services through establishment of health posts in lacking health services and crowded areas far away from health facilities that will result in decreased need for IO activities.

2- Integrate the community-based health programs belonging the MOPHP to effectively increase the awareness and health services demand.

- *Define a roadmap for further re-allocating/planning of activities not captured here, considering the medium/long-term country recovery plan, domestic resources and those available from other development partners, lessons learned and innovative approaches used to cope with the epidemic, and synergies with all relevant stakeholders, including CSOs, with the vision of "building back better".*

To be written with WHO and UNICEF

Short/medium-term activities to maintain/restore routine immunisation

- *COVID-19 recovery plan: does the country have a recovery plan which includes restoring essential health services including immunisation?*
  NO
  - *If not, is the recovery plan being developed? Please give a brief overview of the process and timelines for its completion.*

MOPHP developed the plan of the second phase of the national Yemen vision-2021 and the matrix of achieving strategic objectives for primary health care. The plan includes 2 objectives:

1. Developing systems and mechanisms for managing and coordinating primary health care services and enhancing them, monitoring their efficiency, effectiveness and quality at all levels of the health system in each directorate, and stimulating community participation in the development of services.
2. Expanding and strengthening health services for all citizens everywhere, and supporting emergency services, in a way that accommodates the nature, circumstances and developments of the stage.

- *Immunisation services: What strategies have been implemented at the service delivery points to re-activate immunisation services and to address any immunisation gaps resulting from COVID-19?*
  - *Are any additional strategies/delivery mechanisms planned (e.g. updated demand strategies, community outreach, PIRIs, new campaigns, etc.)?*
  - Mentioned above (short—long term)
  - Health Facility based Integrated outreach (IO) activities
  - Health posts
  - Ensuring the availability and stability of health services providing staff
  - If so, how are these measures incorporated into broader primary healthcare considerations and are they in line with WHO guidelines?

  IO as an agreed strategy between MOPHP and partners since years ago, as temporary solution to reach unreached populations
  - *What plans exist regarding risk communication and community engagement in the response?*

  MOPHP is developing a primary health care strategy including communication and community parts
  - What lessons learned and/or innovative approaches to immunisation service delivery that were used to cope with the epidemic are worth broader adoption and scaling-up?
  - Vaccine distribution plan has been revised based on weekly inventory of stock at health facilities, governorates and districts level.
  - Follow up HFs to avoid closures and service interruption.
  - Instruct heath offices and HFs to continue providing EPI services.
  - Develop and disseminate IPC guidelines at all services delivery levels.
  - Progressive communication from EPI program to follow up provision of services.
  - The country policy was to react for the pandemic of COVID 19 through no over reacting as well as not under reacting (no panic policy).
- *Equity approach: What are the plans to ensure that underserved and missed communities, including zero-dose children, are prioritised within the country's recovery plan?*
  - Does the plan consider any additional cohort of children or any new communities that might have missed immunisation due to COVID-19 and have strategies to address them?

  3-4 Integrated outreach conducted to reach the missed children, increase the routine coverage and reduce equity gap.
  - *Does the plan consider disproportionate impacts of the pandemic on women and girls or other vulnerable groups (including migrant, disabled, HIV+, LGBTQI communities) and propose gender responsive/transformative strategies to mitigate them?*[12]

  The IORs target both children and women with special focus on IDPs and hard to reach communities.
  - *Does the plan consider new or strengthened partnerships to reach underserved communities, including CSOs?*

[12] Gavi's revised gender policy was launched on July 1, 2020 and can be downloaded here https://www.gavi.org/programmes-impact/programmatic-policies/gender-policy

- the MOPH&P is able in the current time to reach most of the areas better than the CSOs, *What are the gaps in immunisation data and information that will limit the ability to identify missed children, track reaching those children, and monitor the effect of recovery strategies/service delivery mechanisms?*

- Lack of specified electronic system for immunization from the HFs to EPI program.
- Central operation room is not appropriately equipped.
- Lack of operational cost including fuel; incentives and for the collection of the information
- Lack of lab testing reagents to follow up the confirmation for VPDs especially for Measles and diphtheria
- Difficulties in receiving the data, information and report from all governorates in time within the same period.

- *Does the recovery plan include activities to improve known gaps in immunisation data?*

- *Immunisation financing: Has sufficient funding been secured to ensure availability of vaccines, including the co-financing portion, and to enable continuous immunisation service delivery going forward? Please give a brief overview of the funding landscape for the immunisation program[13] and highlight any gaps in support. Describe efforts underway to close any financing gaps.*

- GAVI: Penta-Pneumo-Rota-IPV
- UNICEF: Tetanus-MR-Td-BCG-bOPV
- No co-financing portion in current situation
- MOPHP and partners will work together to ensure service delivery forward.
- MOPHP is not able to pay for the operational cost for EPI including salaries for vaccinators and program staff.

What support is required from Gavi for the planned short/medium-term response efforts?

- *What are the key technical assistance needs to be funded through PEF TCA[14]?*
  1- All technical assistants under TCA support including EPI consultants by health partners (WHO & UNICEF) to be part of EPI program for maximum benefits;
  2- Strengthening and support the PIT (project implementation team) in the MOPH&P and national EPI staff;
  3- Technical support for the under development National Centre for Vaccine and Immunization Researches (NCVIR).

- *Does the country anticipate requiring additional HSS flexibilities or support?*
  Yes
- *Do any planned new vaccine introductions or campaigns need to be adjusted in light of the current situation? (Please confirm or indicate any changes in assumptions from section 1.1)*
  No
- *Is the country intending to apply for new vaccine support or a product/presentation switch[15] in next 6-24 months? If so, please mention for which vaccines/support.*
  - Hepatitis-B for new-borns medical and paramedical students, health workers and health related personnel
  - COVID-19 for health workers and high-risk groups.
  - 2 Polio campaigns
  - IO activities arising from the HFs, planned and supervised centrally, to optimally reach the EPI targets especially in hard-to-reach areas and for under-immunized children.
  - IOR in targeted areas based on epidemiological situations.

[13] Including sources of funding.
[14] The TA needs mentioned in this report are a key input into the process to classify Gavi TA support (PEF TCA). The TA plan will however be subject to follow-up discussions and a separate approval process, which may require supplementary information to be provided.
[15] For information on available products/presentations, please refer to: https://www.gavi.org/news/document-library/detailed-product-profiles

- *Is the country interested in innovation initiatives[16] from the innovation catalogue[17] available to countries?*
  Yes

Roadmap for further medium/long-term planning

Please briefly outline your roadmap for developing a more detailed medium/long-term recovery plan to restore immunisation services and address any immunity gaps created by the COVID-19 pandemic. In your response, you can consider the following:

- *Is there a need to conduct an assessment of the COVID-19 pandemic impact on immunisation services in order to best facilitate the development of a longer-term response plan?*
  Yes; with assessment for other outbreaks impact.

- *What is the envisioned planning process, including efforts to engage communities in the development of the plans, to join broader health sector planning exercises, and to ensure harmonisation of support with all relevant bi-lateral and multi-lateral development partners?*

MOPHP adopted the district health system including the community participation.
Establishment of health posts with community participation.

- *Will a technical assistance plan be developed alongside the recovery plan? Will it be holistic and ensure support from all TA partners is harmonised?*
  Yes, need more coordination

- *Finally, please note whether planning has already begun for a potential introduction of a COVID-19 vaccine if/when such vaccine becomes available?*
  Yes, April 2020..

[16] Definition of innovation: new products, practices or services that unlock more efficient and effective ways to accelerate Gavi mission.
[17] An innovation catalogue will be made available to countries in the coming weeks.