

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

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-programme¹ 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 vital role to play in engaging communities to rebuild trust and demand, deliver services where there are gaps in government provision or as an implementing partner of the government, 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 was 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 on 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

EPI achieved high antigen coverage rates across the country at the start of 2020. Before the outbreak of COVID-19, in February 2020, BCG coverage was 92%. Penta 3 coverage was 85% and MCV 1 coverage was 82% (admin data). To further enhance the EPI services and improve vaccination coverage, EPI planned to complete Year 2 of CCEOP through deployment of 4,475 CCE, carry out refurbishment of around 1,500 health facilities across the country, submit the application to introduce the second dose of IPV and develop a city specific costed action plan based on slums profiling and immunization coverage.

The program also identified some key challenges.

Human resource gaps:

Several key positions in Federal EPI remained unfilled, including the post of the National Program Manager. Existing government officers were given additional roles to fill the gap and technical assistance from partners was also used to temporarily support available staff. However, these stop gap arrangements were not sustainable and this meant that the government’s capacity was not being developed, specifically in technical areas such as cold chain, surveillance and data management. Provinces also struggled to fill key HR positions.

CSO/NGO engagement:

The engagement of civil service organizations (CSOs) and non-government organizations (NGOs) for demand generation activities has remained a challenge for EPI. In the past, limited government funds were allocated for this purpose. However, expanded partners are now supporting EPI in improving engagement of CSOs and NGOs for demand generation activities.

Sustainability of the program:

Although the program budget has been shifted to the recurrent side, the financial sustainability of the program still remains a challenge. EPI is constantly engaging in advocacy with the Finance department to apprise them of the expected increase in funds which would be required for vaccine procurement as Pakistan’s co-financing share for vaccines increases and new vaccines are added to the routine immunization schedule.

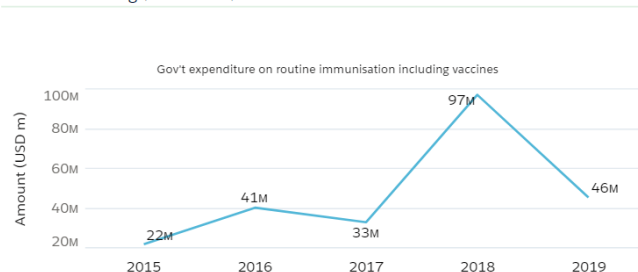
PEI-EPI synergy:

The Polio program continues to hold multiple campaigns annually through the support of thousands of staff. PEI-EPI synergy is currently a priority for EPI so both programs can support each other in various activities. These include reporting of zero dose children, demand generation activities, as well as surveillance activities. However, synergy efforts remain challenging in some Provinces/areas.

Contextual Information

PEF Tier: Tier 1	Fragility Status: Non-fragile	2. Preparatory transition	
Indicator Name	Year	Source	Value
GNI per capita	2019	World Bank	1,530
Health Centres per 100k population	2013	WHO - GHO	0.83
Nurses/Midwives per 1000 population	2018	WHO - GHO	6.7
Population	2020	UNPD	220,892,331
Surviving Infants	2020	UNPD	5,691,818
Under-5 mortality (per 1000)	2018	UNICEF	69

Health financing (and trends)



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

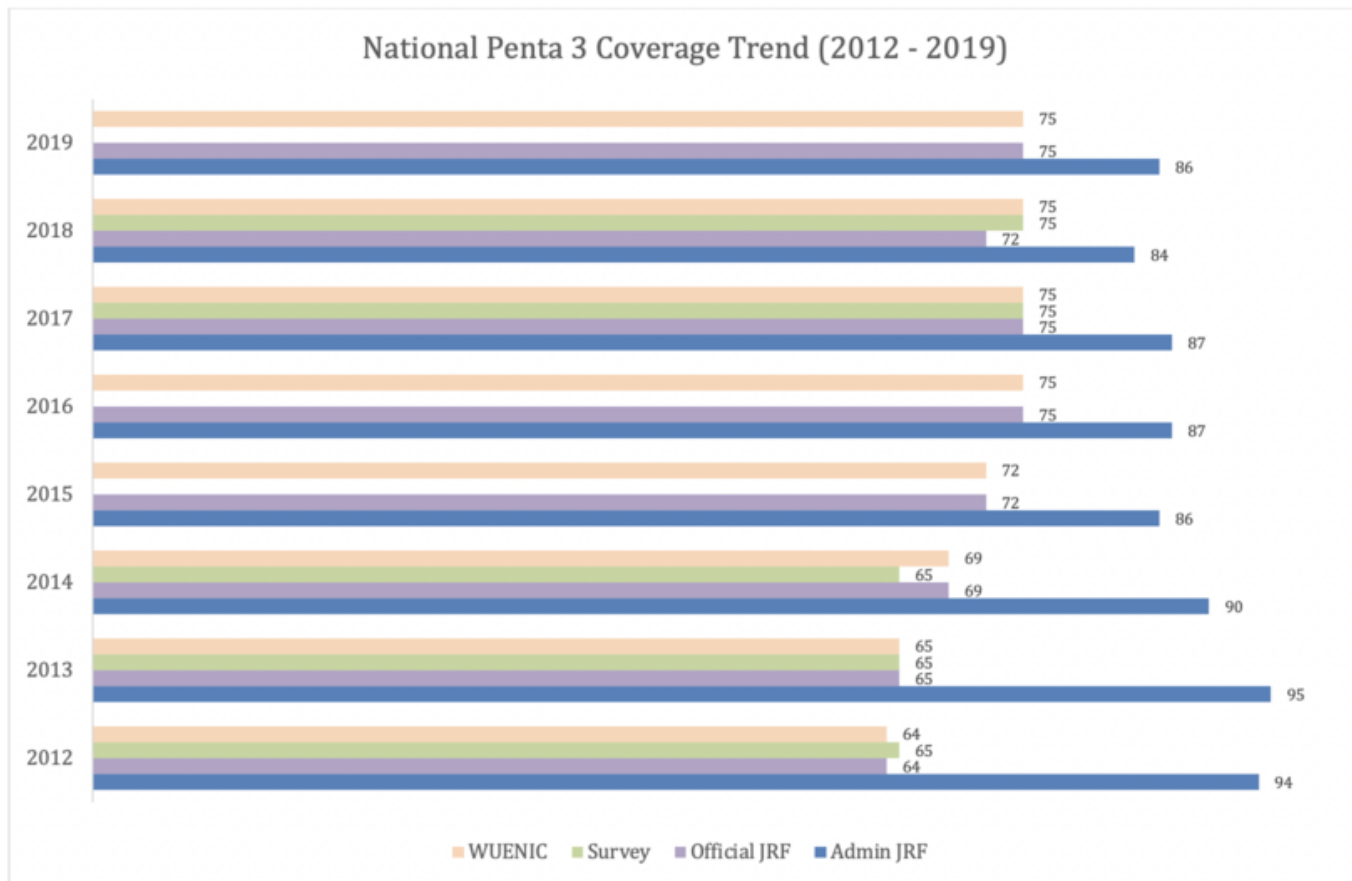
Vaccine	Introduction Date	2017 Coverage (%)	2018 Coverage (%)	2019 Target
PENTA	07-2008	75	75	-
PNEUMO	10-2012	79	73	-
IPV	08-2015	67	75	-
ROTA	11-2017	12	58	-
TYPHOID	12-2019	-	-	-

Vaccine Name	Type	Sub-Type	Status	CP Date ↑	Phase
MR	Routine	1st D	Applied	2018-04-01	NA
MR	Routine	2nd D	Applied	2021-12-31	NA
MR	Campaign	Catch-up	Applied	2021-12-31	NA
HPV	Campaign	MAC	Forecasted	2023-01-31	NA
HPV	Routine	-	Forecasted	2023-01-31	NA
JE	Campaign	-	Forecasted	2025-12-31	NA
MR	Campaign	Follow-up	Forecasted	2025-12-31	NA
JE	Routine	-	Forecasted	2025-12-31	NA
MR	Campaign	Follow-up	Forecasted	2029-12-31	NA

Performance against Alliance KPIs

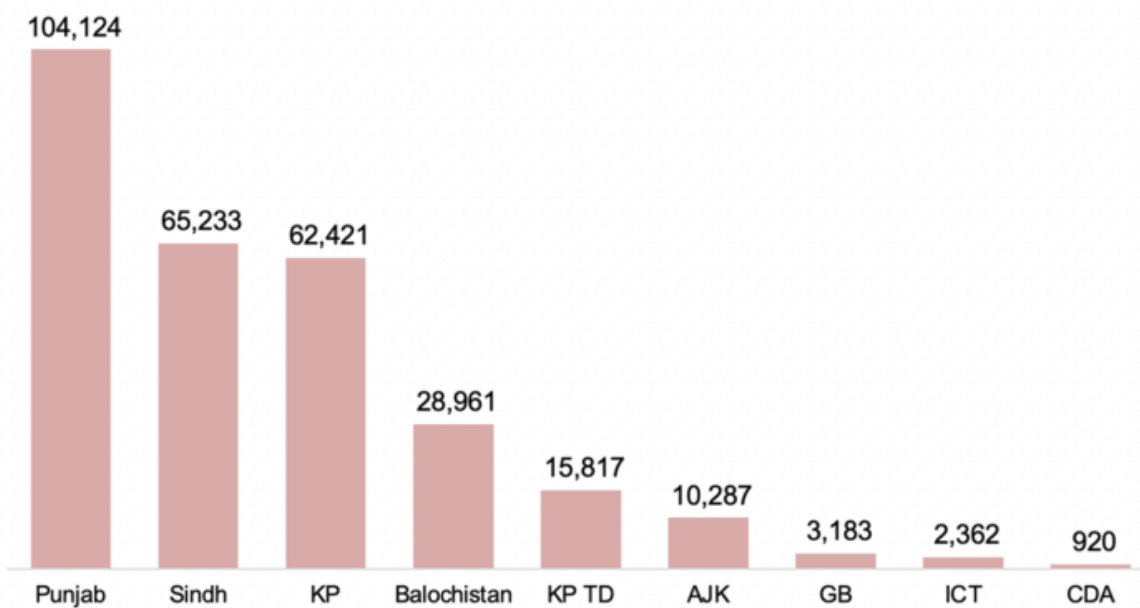
Indicator	Source Name	Year	Value	Previous Value	Trend
Measles containing vaccine (second dose) coverage at the national level (MCV2)	WUENIC	2019	71	67	▲
Pentavalent 3 coverage at the national level (Penta 3)	WUENIC	2019	75	75	→
Drop-out rate between Penta1 and Penta3	WUENIC	2019	12.8	11.8	▼
Difference in Penta3 coverage between children of urban and rural residences	Survey	2012	16	0	▼
Difference in Penta3 coverage between the highest and lowest wealth quintiles	Survey	2018	0	41.9	▲
Penta3 coverage difference between the children of educated and uneducated mothers/care-takers	Survey	2018	0	26.6	▲
EVM	EVM	2014	60.6	0	▲
# of Underimmunised Children	Calculated	2019	1275439.25	1276196.5	▲

Trends and district equity



Province wise defaulters (Penta-1 to Penta-3)

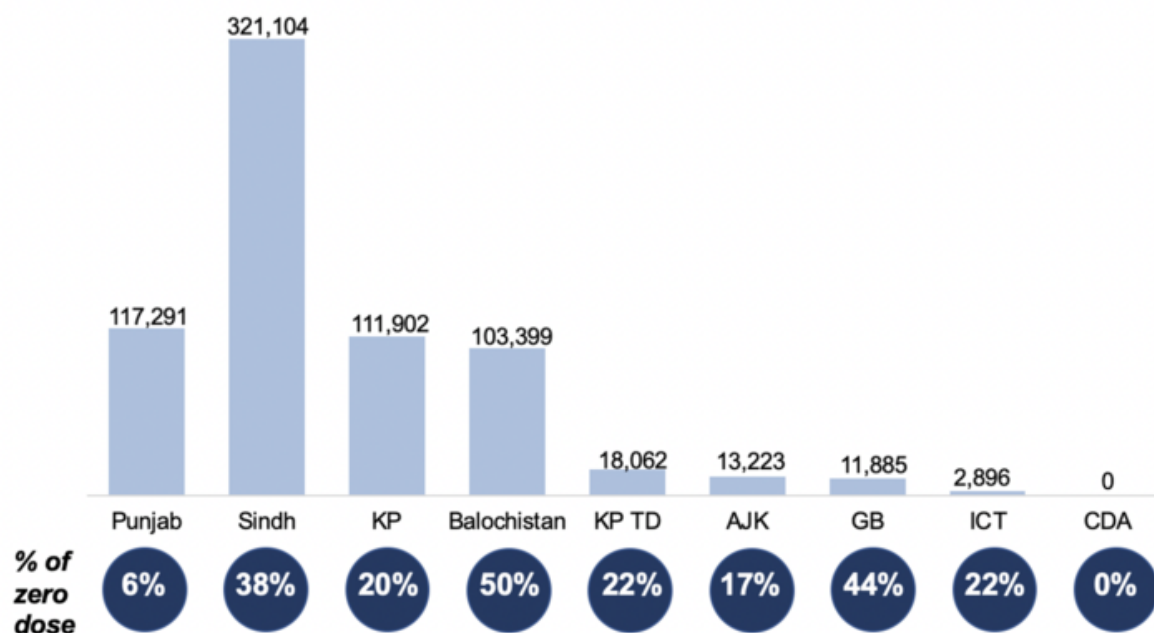
of defaulter children, Jan-20 to Jun-20



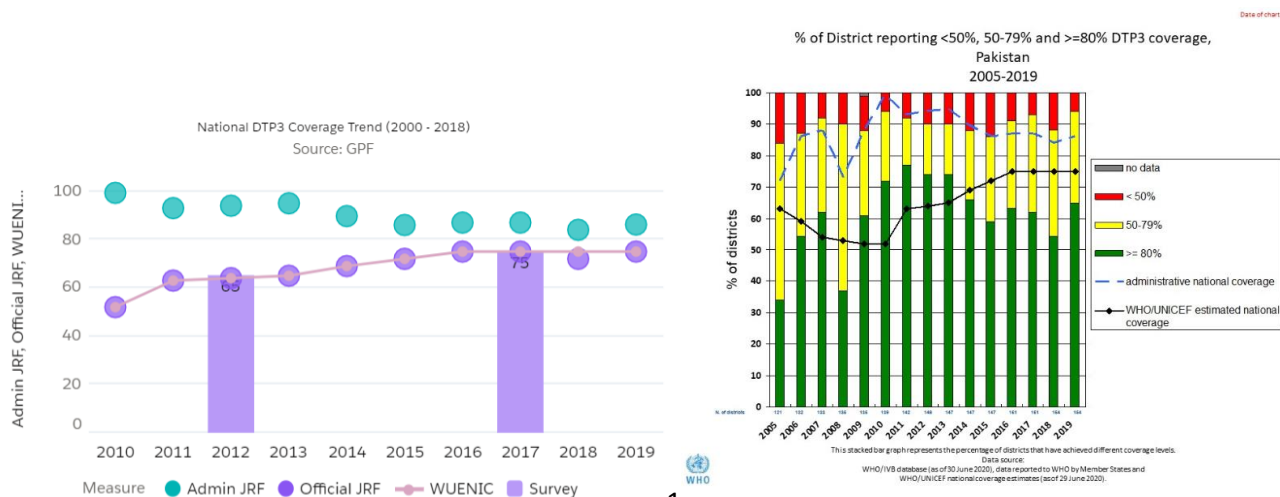
Source: EPI admin data

Province wise zero dose children

of zero-dose children from BCG, Jan to June 2020



Source: EPI admin data



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Progress against indicators and targets achievement

See above

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

HSS implementation summary (as of 15 March 2021)

Recipient	Grant Amount	Funds Disbursed	Expenditure	Country cash balance
World Bank - NISP	129.600.000	129.600.000	87.340.000	42.270.000
UNICEF–add HSS	6.360.698	6.360.698	2.141.746	4.218.951
WHO–add HSS	13.998.668	13.998.668	12.662.596	1.336.072
IRD–add HSS	1.638.000	1.638.000	715.491	922.509
ACASUS–add HSS	1.200.000	963.965	1.035.965	164.035
CHIP–add HSS	550.000	123.709	99.204	24.505

DLI status update(as of 12 March 202):

DLI	Status
2,4,6 & 7	Completed
9	Partially disbursed
1	Partially completed
3, 8 and 10	Partially completed
5	Partially completed

There has been considerable progress on achievement of DLIs despite some delays due to the COVID-19 outbreak. DLIs 2,4,6 and 7 have been completed and disbursed for all provinces. DLI 9 has been completed for all provinces and partially disbursed as USD 3.64 million grant for the 3rd year is still awaited. DLI 1 has been achieved by Punjab but remains to be verified by the World Bank for other provinces through TPVICS which is currently underway. DLIs 3, 8 and 10 remain to be verified by the World Bank through TPVICS which is currently underway. Validation of Year 4 DLI 5 is also under progress by TPV hired by Federal EPI.

HSS key milestones achieved in 2019

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

	Start Date	End Date	Recipient	In US\$				Status Update
				Grant Value	Disbursed	Expenditure	Cash balance	
<i>PBF 2018</i>	Dec 2020	Dec 2022	WHO	7,811,825	7,811,825	71,307	7,740,518	Active grant
<i>PBF 2018</i>	Dec 2020	Dec 2022	UNICEF	1,868,634	1,868,634	245,345	1,623,289	Active grant
<i>PBF 2018</i>	Mar 2020	Dec 2020	Unicef SD	3,719,160	3,719,160	1,813,860	1,905,300	Active grant
<i>Measles SIA</i>	Aug 2018	Dec 2021	UNICEF	19,408,452	19,408,452	16,834,099	2,574,353	Active grant
<i>Measles SIA</i>	Jul 2018	Dec 2021	WHO	1,941,062	1,941,062	1,496,079	444,983	Active grant
<i>TCV Opcost I&II</i>	Jul 2019	Dec 2022	UNICEF	4,429,486	4,429,486	3,309,419	1,120,067	Active grant
<i>TCV Opcost I&II</i>	Jul 2019	Dec 2022	WHO	12,431,406	12,431,406	10,132,208	2,299,323	Active grant
<i>TCV VIG I&II</i>	Jul 2019	Dec 2022	UNICEF	160,444	160,444	60,369.69	100,074	Active grant
<i>TCV VIG I&II</i>	Jul 2019	Dec 2022	WHO	4,083,760	4,083,760	937,154	3,146,606	Active grant
<i>IPV2 PSG</i>	Feb 2021	Jan 2023	UNICEF	298,109	298,109	0	298,109	Active grant
<i>IPV2 PSG</i>	Feb 2021	Jan 2023	WHO	1,502,921	1,502,921	0	1,502,921	Active grant
<i>PCV PSG 2019</i>	Jul 2019	Dec 2021	UNICEF	366,156	366,156	69,297.03	296,859	Active grant
<i>PCV PSG 2019</i>	Jul 2019	Dec 2021	WHO	1,368,274	1,368,274	1,271,141	97,133	Active grant
<i>PCV PSG 2021</i>	Jan 2021	Dec 2022	UNICEF	850,506	850,506	0	850,506	Active grant
<i>PCV PSG 2021</i>	Jan 2021	Dec 2022	WHO	1,038,801	1,038,801	43,587	927,255	Active grant

1.4. Compliance, absorption and other fiduciary risk matters

- Comments on financial absorption as of [date]:
- Compliance with financial reporting requirements (periodic/annual financial reports, audits):
- Compliance with programmatic reporting requirements (GPF):

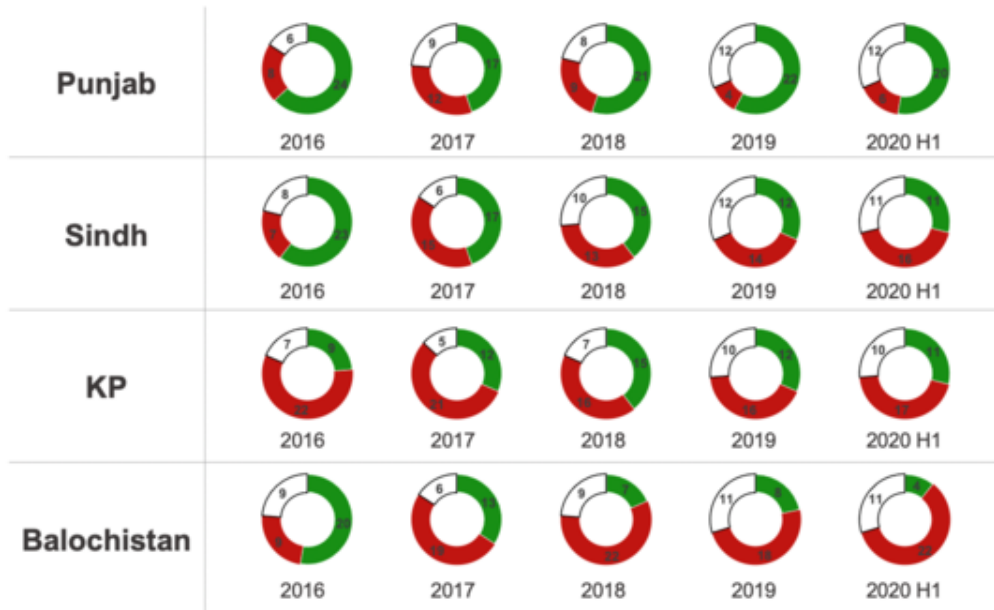
All Gavi resources in Pakistan are managed through the WB or by WHO/UNICEF, and fall under approved financial management and reporting processes.

COVID-19 has had some, although limited, impact on Pakistan's programmatic reporting requirements for the first half of 2020. Trends shows that the number of unachieved targets for GPF indicators in the first half of 2020 have slightly increased.

For the first time in 5 years, Punjab was not able to meet the target for "percentage of districts or equivalent administrative area with Penta3 coverage greater than 80%." One of the major reasons could be associated with the disruption of Penta3 supply due to COVID-19. Similarly, other provinces were impacted by the pandemic. For instance, KP failed to meet the target for "number of surviving infants who received the first recommended dose of IPV" for the first time in the last 4 years. GB was not able to meet the target for "MCV1 coverage at the provincial level" in the first half of 2020.

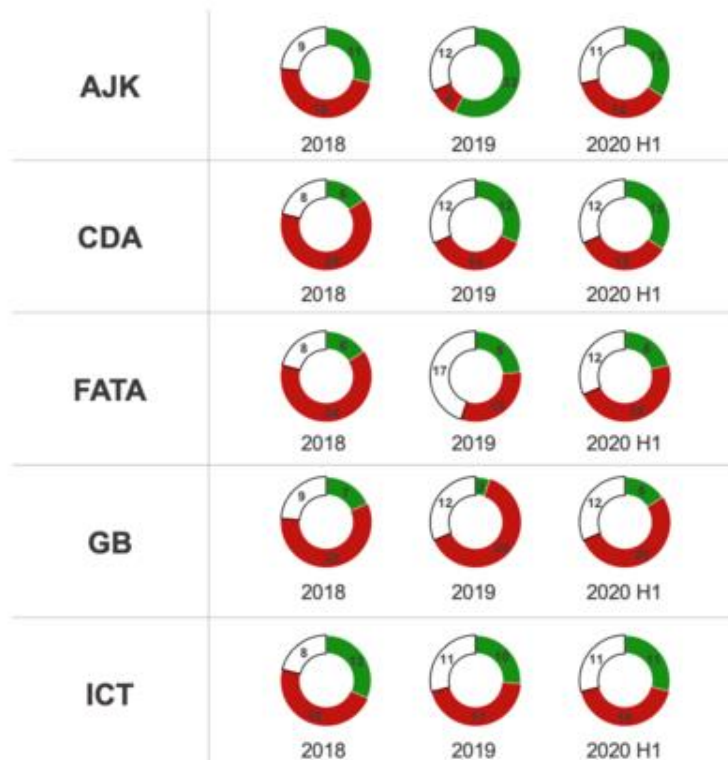
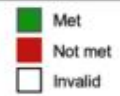
EPI is focusing on improving performance on these indicators in the second half of 2020 so that the targets can be achieved.

Summary of targets achieved (provinces)

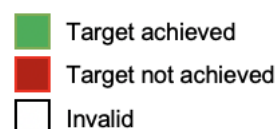


Note: Results only shared for 1H of 2020

Summary of targets achieved (federated areas)



Note: Results only shared for 1H of 2020



	Punjab	Sindh	KPK	Balochistan	AJK	CDA	FATA	GB	ICT
Outcome Indicators									
Difference in Penta3 coverage between the highest and lowest wealth quintiles									
Drop-out rate between PCV1 and PCV3									
Drop-out rate between Penta1 and Penta3									
Inactivated polio vaccine coverage at the national level (IPV)									
Measles containing vaccine (first dose) coverage at the provincial level (MCV1)									
Penta3 coverage difference between males and females									
Penta3 coverage difference between the children of educated and uneducated mothers/care-takers									
Pentavalent 3 coverage at the provincial level (Penta 3)									
Percent of children aged between 12-23 months who are fully immunised									
Percentage of districts or equivalent administrative area with Penta3 coverage between 50% and 80%;									
Percentage of districts or equivalent administrative area with Penta3 coverage greater than 80%									
Percentage of districts or equivalent administrative area with Penta3 coverage greater than 95%									
Pneumococcal Conjugate Vaccine (PCV) 3 coverage at the provincial level									

	Punjab	Sindh	KPK	Balochistan	AJK	CDA	FATA	GB	ICT
Intermediate Results Indicators									
Cumulative IPV utilisation rate for the last year (provincial)									
Cumulative PCV utilisation rate for the last year (provincial)									
Cumulative pentavalent vaccine utilisation rate for the last year (provincial)									
Effective Vaccine Management Score (composite score)									
Number of annual progress reports that are produced and discussed with key stakeholders regularly									
Number of districts which have EPI annual plans consistent with the provincial cMYPs and are reviewed on a quarterly basis									
Number of surviving infants who received the first recommended dose of IPV									
Number of surviving infants who received the first recommended dose of measles containing vaccine (MCV1)									
Number of surviving infants who received the first recommended dose of PCV vaccine (PCV1)									
Number of surviving infants who received the first recommended dose of pentavalent vaccine (Penta1)									
Number of surviving infants who received the third recommended dose of PCV vaccine (PCV3)									
Number of surviving infants who received the third recommended dose of pentavalent vaccine (Penta3)									
Occurrence of stock-out at provincial level for any Gavi-supported vaccine									
Percent of children under two years of age with a vaccination card available									
Percentage of districts with at least 80% timeliness and completeness reporting on vLMIS									
Percentage point difference between Penta 3 provincial administrative coverage and survey point estimate									

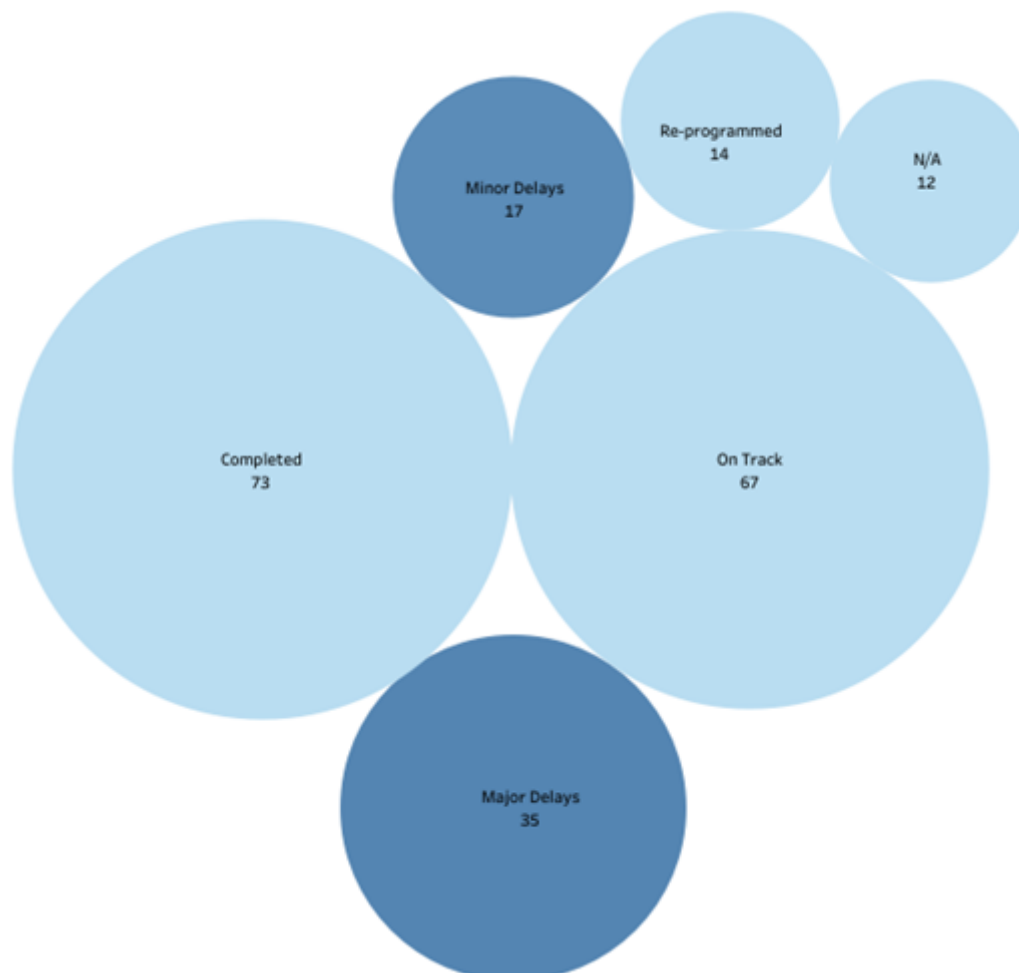
	Punjab	Sindh	KPK	Balochistan	AJK	CDA	FATA	GB	ICT
Process Indicators									
Budget allocations for immunisation are continuous, adequate can easily be tracked within the government financial management information system									
Number of contracts with CSOs for provision of immunisation services in urban slums awarded									
Percent of detailed UC supervisory plans implemented for all district supervisors to all provincial supervisor officers									
Percent of districts with their recognised surveillance sites having functional online surveillance for vaccine preventable diseases and adverse events following immunisation									
Percent of Union Councils for which revised computerised UC level micro plans are in functional use at district and provincial levels									
Percentage of districts with functional cold chain equipment in place as per specifications >95% in each tier of the health system (including at least 1 month buffer stock capacity at district level)									
Percentage of districts with functional electronic tracking of the vaccinators and supervisors									
Percentage of total combined number of midlevel managers who have attended MLM courses									
Percentage of Union Councils with at least two skilled staff capable of providing immunisation									

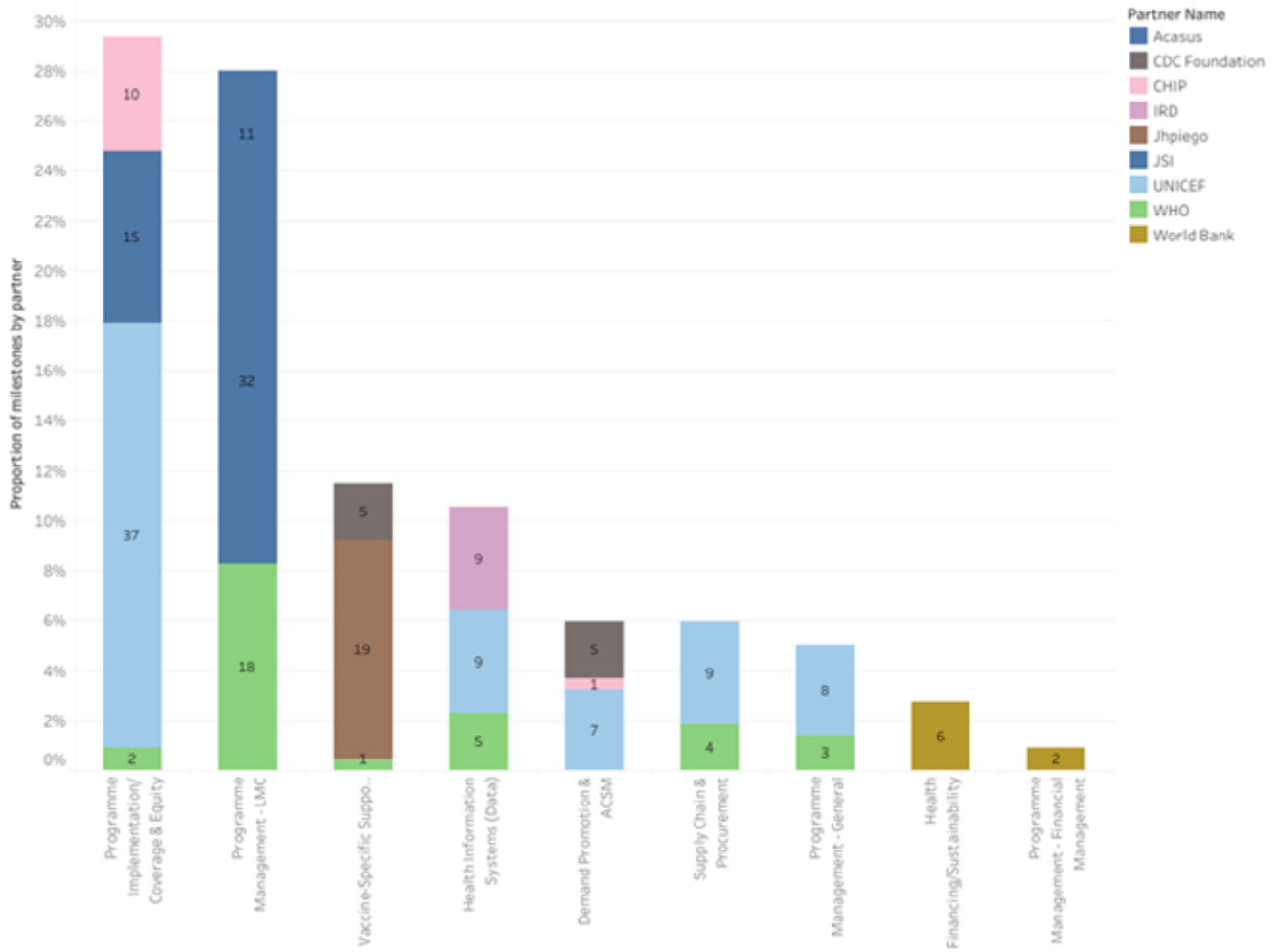
	Punjab	Sindh	KPK	Balochistan	AJK	CDA	FATA	GB	ICT
DLI Indicators									
Percent of children aged between 12-23 months who are fully immunised									
Percent of Union Councils for which revised computerised UC level micro plans are in functional use at district and provincial levels									
Percentage of districts or equivalent administrative area with Penta3 coverage greater than 80%									
Percentage of districts with at least 80% timeliness and completeness reporting on vLMIS									
Percent of districts with their recognised surveillance sites having functional online surveillance for vaccine preventable diseases and adverse events following immunisation									
Percentage of districts with functional cold chain equipment in place as per specifications >95% in each tier of the health system (including at least 1 month buffer stock capacity at district level)									
Percent of detailed UC supervisory plans implemented for all district supervisors to all provincial supervisor officers									
Percent of children under two years of age with a vaccination card available									
Budget allocations for immunisation are continuous, adequate can easily be tracked within the government financial management information system									

- Other financial management and fiduciary risk comments:

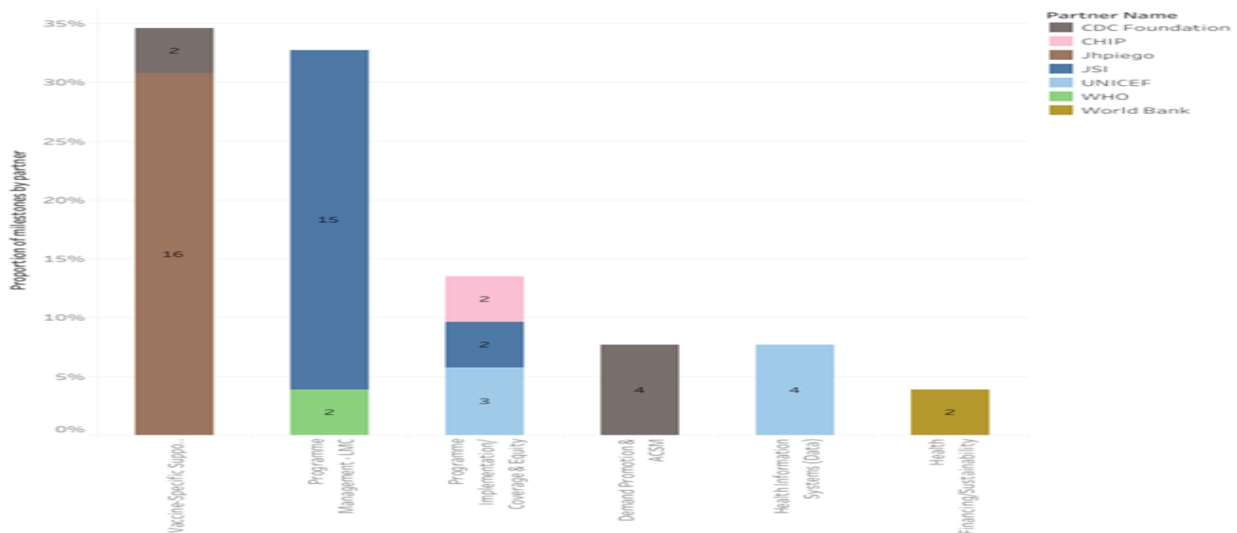
1.5. Overview of PEF TCA progress (end of 2019/ early 2020) (graph provided by the PEF team)

Overall milestones for PEF TCA, June 2019 – June 2020





Delayed milestones for PEF TCA, June 2019 – June 2020



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)

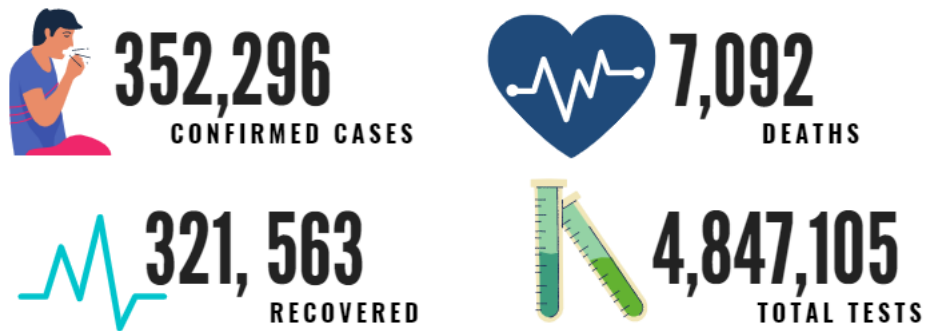
The implementation of the TCA plan was increasingly participatory with effective coordination between the Government of Pakistan and expanded partners. Every key objective was finalized through building consensus between all important stakeholders, ensuring that the goals set by GAVI and EPI are jointly achieved in a timely manner.

All the following activities have been completed for the reporting period:

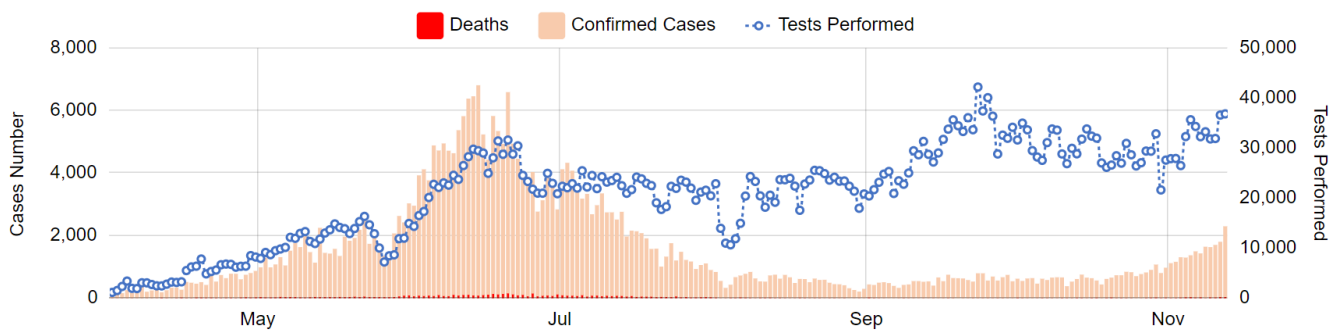
- Planning – micro-plans (annual and micro-plan updates),
- EPI Reviews and DQAs were conducted as per plan,
- Surveillance trainings were conducted along with the development of surveillance guidelines. Support for CRS, Rota, IBD surveillance has been continued,
- Quarterly program reviews were conducted,
- Mid-level managers training is on track,
- WHO also developed a plan to further enhance immunization services with the following key objectives:
 - improving the equity access to immunization services in rural and slum areas (vulnerable groups),
 - improving the routine coverage by reaching un-reachable children, tracing defaulters and vaccinating zero dose children,
 - improving accountability at all levels by identifying the gaps and immediate actions to be taken by management.

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

2.1 COVID-19 cases and deaths (as of 13th November 2020)

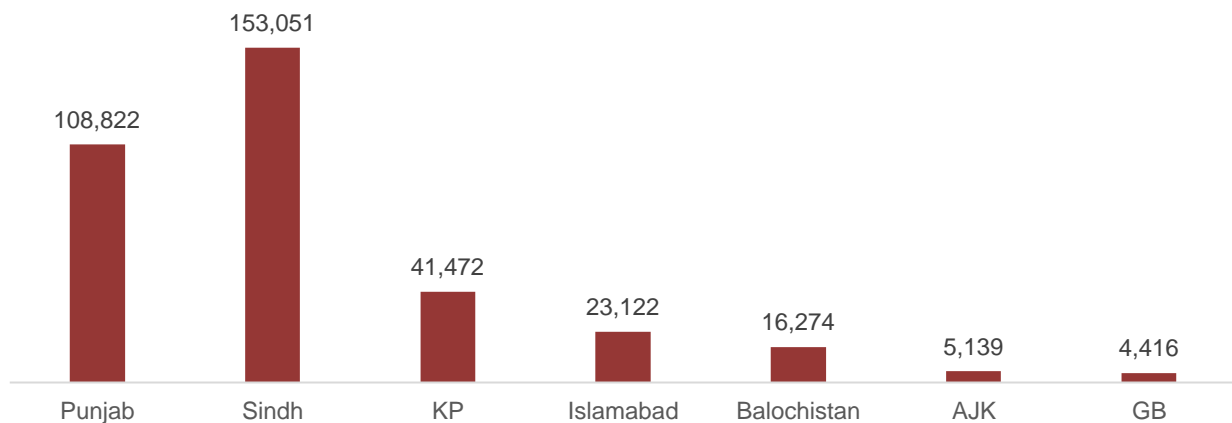


Source: MNHSR&C 2020



Source: MNHSR&C 2020

Province/Area Wise Confirmed Cases As of 13th November 2020



Source: MNHSR&C 2020

2.2 Disease Surveillance and Incidence

[Information from CCM team and/or <https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/data-statistics-and-graphics>]

Impact of COVID-19 on disease surveillance

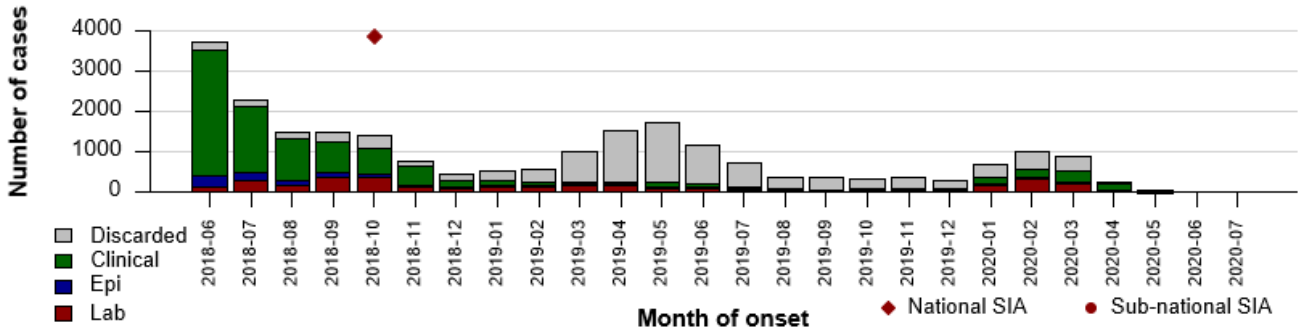
Briefly describe the impact of COVID-19 on the sensitivity and specificity of vaccine preventable disease surveillance. Measles surveillance data are one option to illustrate that impact, including:

- Changes in the number of reported suspected measles cases

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



Measles cases: Pakistan

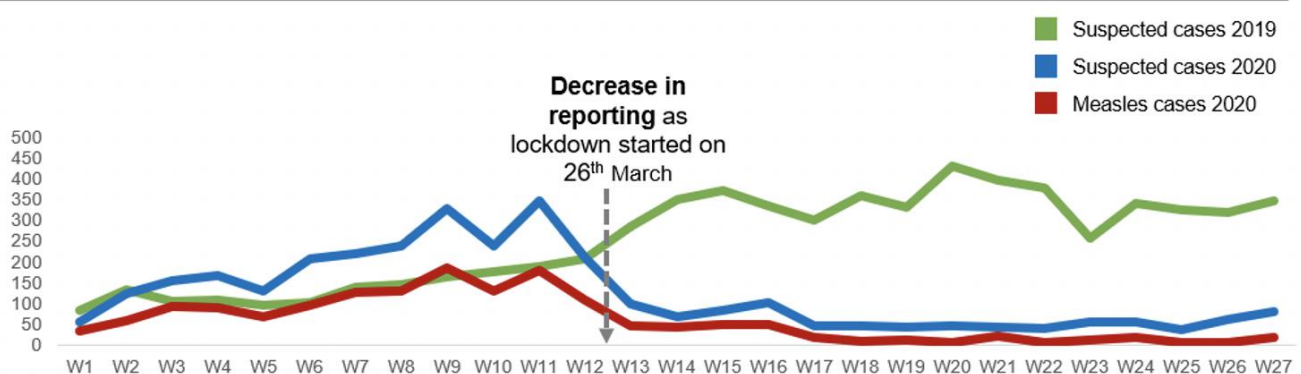


The focus on COVID-19 response and outbreak control have affected the surveillance of Vaccine Preventable Diseases (VPDs). The lockdown measures imposed in week 12 and closure of out-patients' clinics in most health facilities resulted in a decrease in patients' flow, leading to a drop in VPDs reported cases and Non-Measles Non-Rubella rate. Despite having high timeliness and high completeness of reports (above 89%), the total number of reported cases were fewer than those reported in previous years. Non-Measles and Non-Rubella rate decreased from 2.27 in week 12 (onset of lockdown) to 1.77 in week 16. It continued decreasing to 1.32 in week 28 before it started increasing again in week 29 and reached 1.40/10000 population in week 35.

Due to lockdown, immunization reporting has been adversely affected in Pakistan. This can be clearly elaborated if we consider measles reporting. The suspected cases for 2020 were initially high as compared to 2019; however, as illustrated below, due to decrease in reporting after lockdown the suspected cases decreased, and the actual cases were even lower. This shows that measles case reporting decreased significantly after the lockdown which was imposed in the last week of March 2020. Similar pattern can be seen in AEFI and VPD diseases such as diphtheria, pertussis and neonatal tetanus.

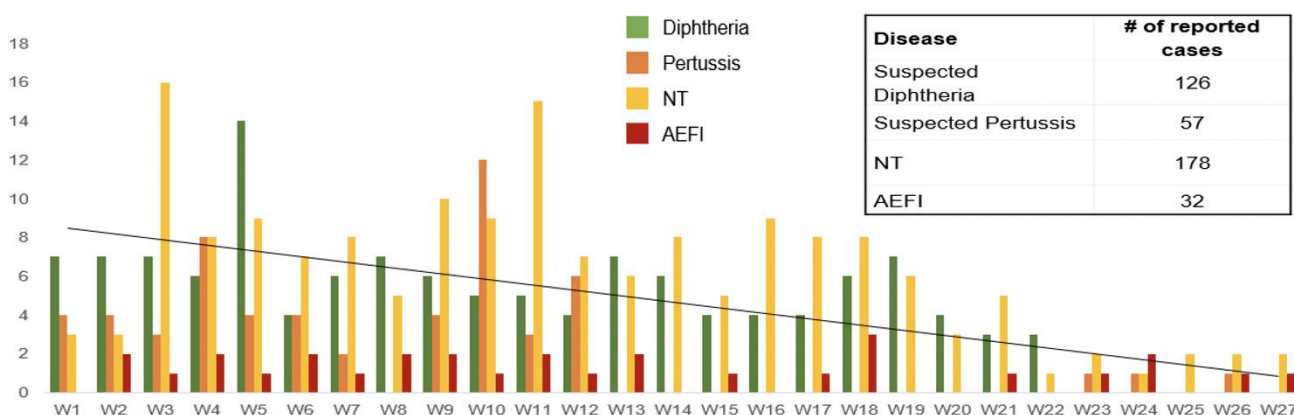
Week wise measles cases

Suspected and measles cases, 2019 & 2020



Total number of reported VPDs

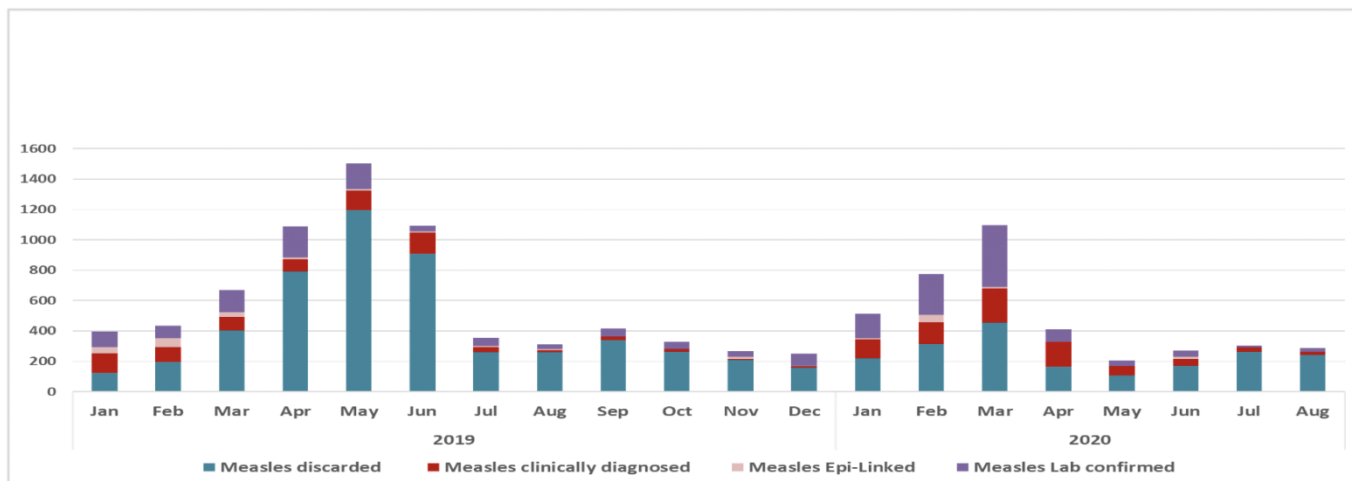
Week wise Diphtheria, Pertussis, NT & AEFI cases, 2020



Involvement of surveillance staff in Covid-19 response also contributed to shifting of focus from regular VPDs surveillance to Covid-19 response, which in turn affected VPDs surveillance indicators. Completeness of investigation decreased to 69% and only 77% of cases had samples collected. This resulted in an increase in Measles clinically compatible cases, which also affected the Non-measles non-rubella rate.

Lab indicators remained up to the mark despite the burden of COVID testing. The lab maintained timely measles and rubella testing, and the indicator of *results feedback within 4 days of sample receipt* remained above 80%.

Measles final case classification by months 2019 – 2020



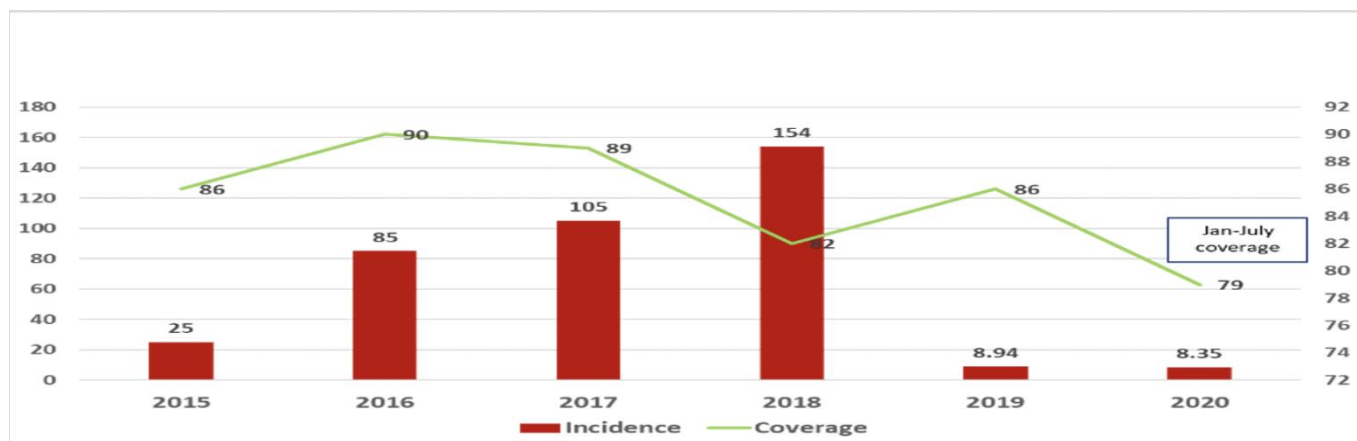
Impact of COVID-19 on disease cases

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.

Measles incidence rate per 1M population vs. immunization coverage 2015- Aug 2020



There is an expected increase in measles incidence rate despite the decrease in the reported suspected cases. Measles incidence in August 2020 rate exceeded that of the same period in 2019. A total of 23 Measles outbreaks were reported from 3 provinces in 2020. The response was conducted (despite the lockdown measures) after coordination with local authorities and in compliance with infection prevention and control measures. During the outbreak response, 51,684 children under five were vaccinated against measles in Punjab, 19,719 in Sindh, and 638 in Balochistan. However, the possibility of undetected VPD cases/outbreaks cannot be entirely ruled out.

2.3 Impact of COVID-19 on immunisation

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)

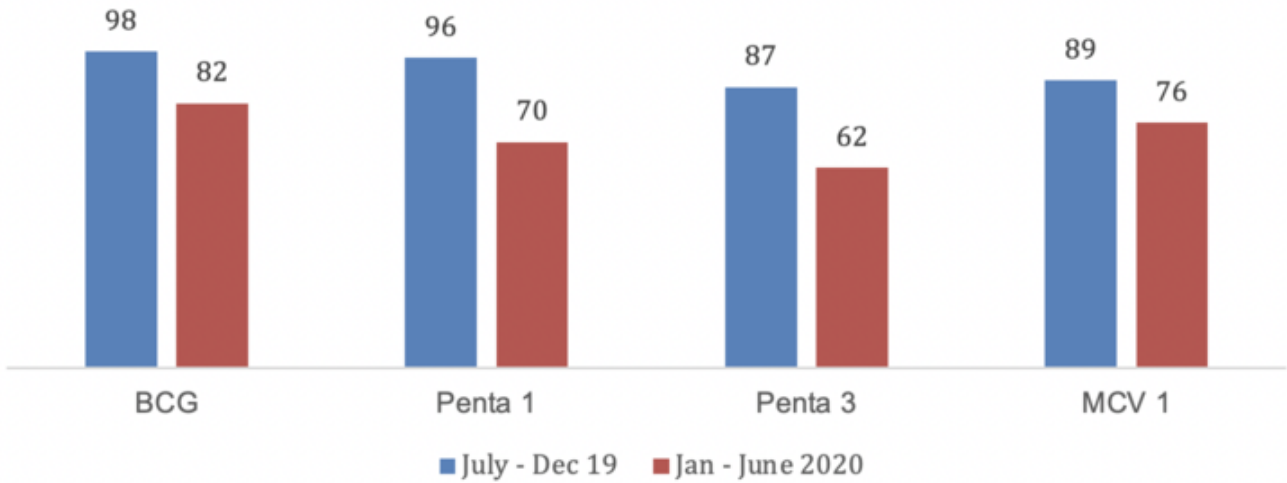
What has been the impact on the implementation of Gavi support (vaccines, HSIS, TCA, other), including financial absorption, stock management etc.?

Pakistan reported its first COVID-19 case on February 26, 2020, and as of November 13, 2020, there are 352,296 confirmed cases with 7,092 reported deaths. The ongoing pandemic has had a considerable impact on Pakistan's health delivery system. As health services get affected in general, it is important to highlight the impact on routine immunization particularly.

As illustrated below, there has been a significant decrease in national immunization coverage since the spread of Covid-19 in Pakistan. Considering the coverage highlighted below, on average, the immunization coverage has dropped by 16% percent (Source: EPI admin data).

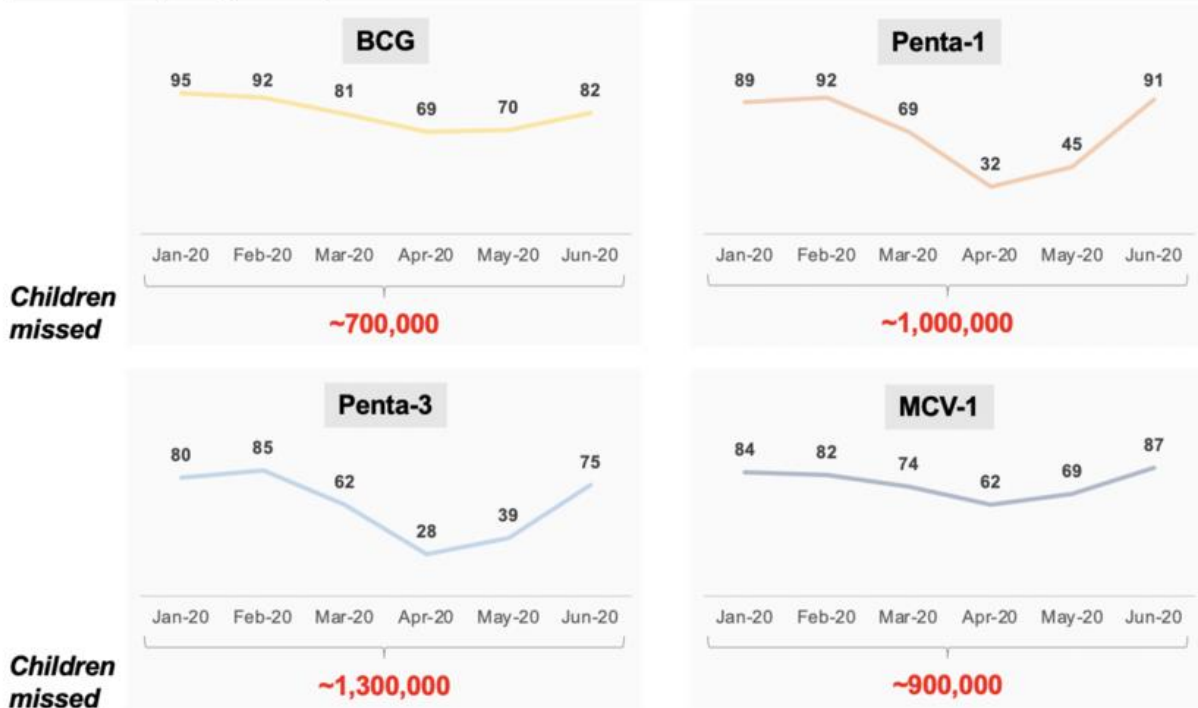
National Immunization Coverage

Percentage of children immunized



Antigen-wise national immunization coverage

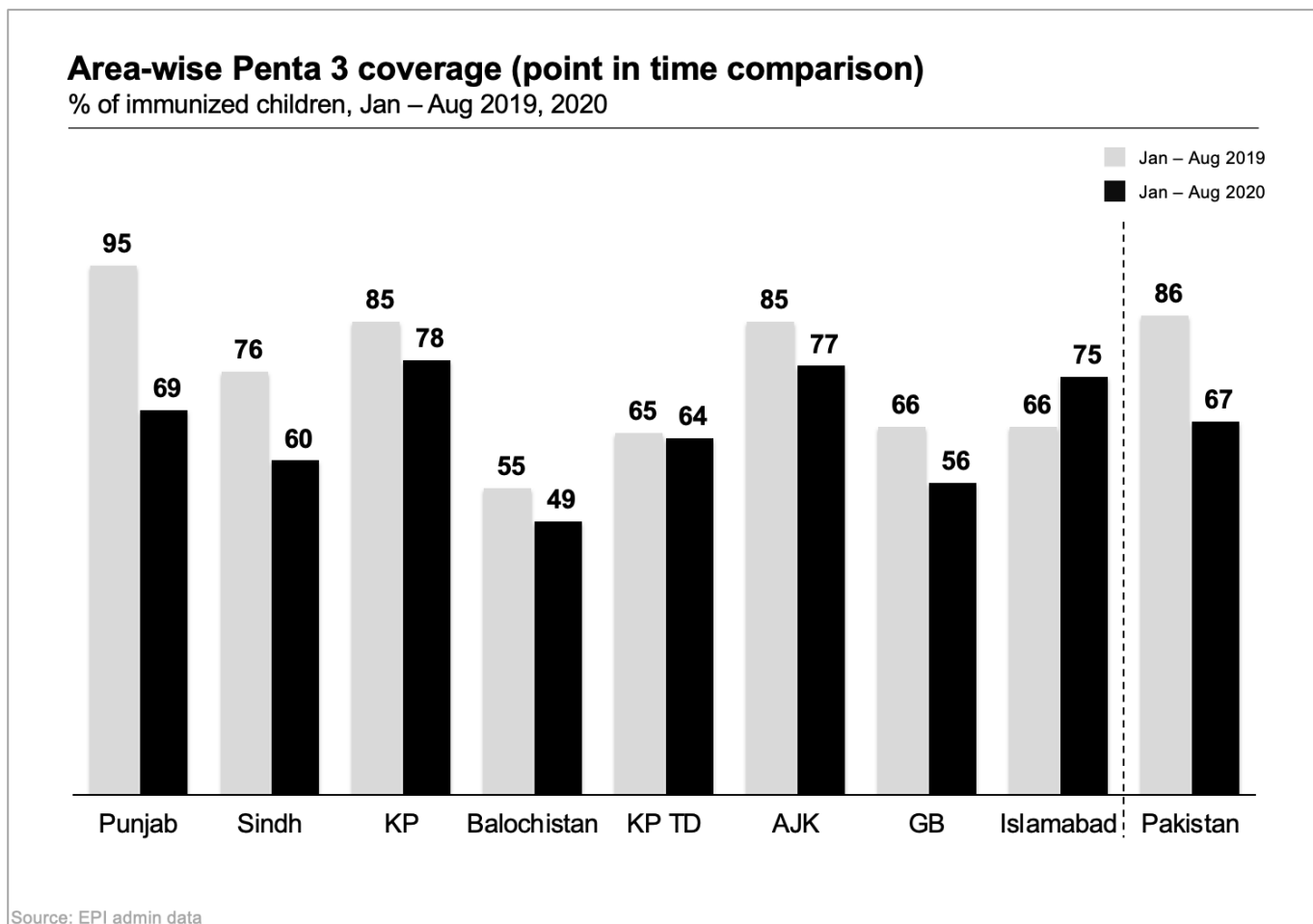
% of coverage targets met, 2020



Source: EPI admin data

Although the percentages themselves are significant, once converted into the number of missed children, the number is alarmingly high. As demonstrated above, during January'20 to June'20, roughly 700,000 children missed their BCG birth dose, 1 million children missed their doses of Penta 1 vaccine, 1.3 million missed Penta-3 doses and 900,000 missed their Measles 1 vaccine. In relation to this, a study by Johns Hopkins University (Robertson et al. 2020) estimates that between 42,000 and 192,000 more children worldwide could die each month due to COVID-19's indirect impacts on health and food access. If the data analysis is projected for Pakistan, the situation is bleak. According to the study, Pakistan could face the third-highest total of additional child deaths of 118 countries measured, behind India and Nigeria.

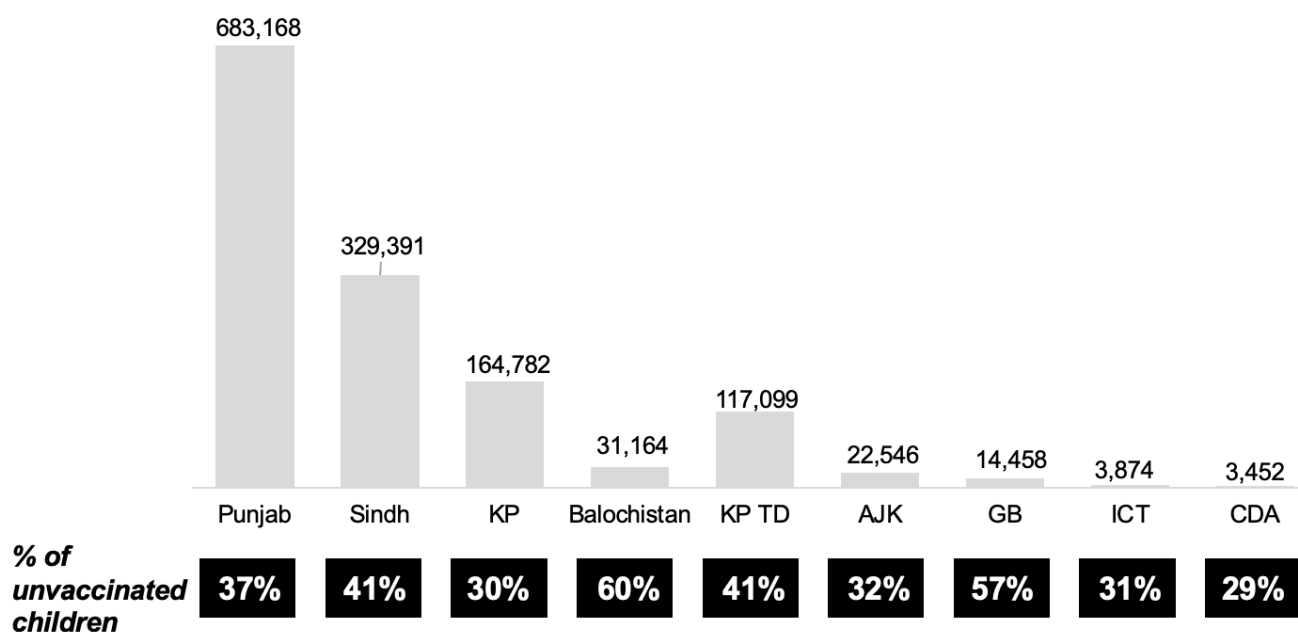
Another research study (Chandir et al. 2020) on the pandemic’s impact on routine immunization in Sindh can be also generalized for Pakistan. The study found out that during Covid-19 lockdown, one out of two children missed routine immunizations, Covid-19 lockdown disproportionately affected coverage rates across the districts and the drop in the number of immunizations was higher in rural areas followed by urban slums. Moreover, the study argues that the expanding pool of un-immunized children is bringing down herd immunity and raising the risk of vaccine-preventable disease outbreaks.



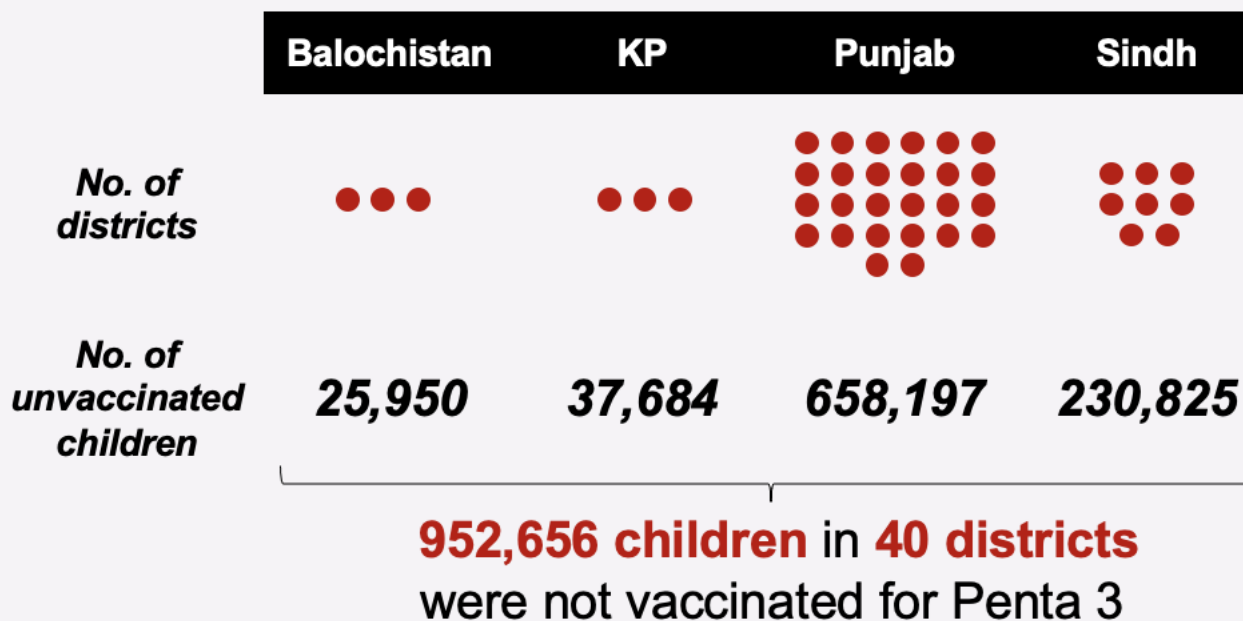
Immunization coverage in Punjab and Sindh was impacted the most due to COVID-19. A point in time comparison shows that Penta-3 coverage in Punjab from Jan to Aug 2020 was 69% compared to 95% from Jan to Aug 2019. Similarly, coverage of Penta-3 in Sindh was 60% from Jan to Aug 2020, compared to 76% from Jan to Aug 2019. Thus, more children missed essential vaccinations in 2020, compared to 2019.

Province/area wise children unvaccinated for Penta 3

of children, Jan to June 2020



Children unvaccinated for Penta 3 in 40 districts



~1,300,000 children missed their Penta 3 vaccines in the first half of 2020. Further analysis showed that 70% of these missed children were concentrated in 40 districts. 3 of these districts were located in Balochistan, 3 in KP, 8 in Sindh and 26 in Punjab. Out of these, the districts with the highest number of children who missed their Penta 3 doses were **mostly urban, such as Karachi** (140,000 children unvaccinated for Penta 3), Faisalabad (67,500 children unvaccinated for Penta 3) and Rawalpindi (45,000 children unvaccinated for Penta 3). Enhanced Outreach Activities were conducted by EPI in these districts to cover the missed children.

It can be rightfully argued that due to lockdown immunization services were halted. However, the pandemic also provided an impetus for a change in social behavior. Pakistan faces a two-pronged issue in improving routine immunisation coverage: keeping hospitals and clinics open and accessible, and convincing parents to visit them in the middle of a pandemic. Due to social distancing measures, health-seeking behaviours changed, and parents started delaying routine vaccination of their children due to fear of contagion. For instance, it was reported that in Islamabad, the local community was reluctant to get their children vaccinated. The lockdown situation affected the already struggling provinces even more. In Balochistan it was reported that there was low turnout at fixed EPI sites due to fear of contracting the virus. In addition to trainings and consultations, EOA activities were also suspended. Moreover, the already overburdened national and provincial governments in Pakistan had no choice but to take measures on ad-hoc basis.

The impact of COVID-19 cannot be ignored when it comes to supply chain management. The national immunization program in Pakistan hasn't faced a stockout in recent years; however, due to shipment cancellations a few stockouts were reported in Punjab and Balochistan. Although supply was disrupted, the halting of immunization services during the lockdown coupled with a decrease in demand meant that the stockout was not the bottleneck to service delivery to the extent that it would have with normal demand. Additionally, EPI's dry storage capacities have also been stretched to full capacity due to the receipt of Personal Protection Equipment (PPE) shipments. Due to decreased demand EPI had been unable to dispatch regular vaccines and they remained in EPI's dry stores. In addition, extra space had to be created for the PPE shipments.

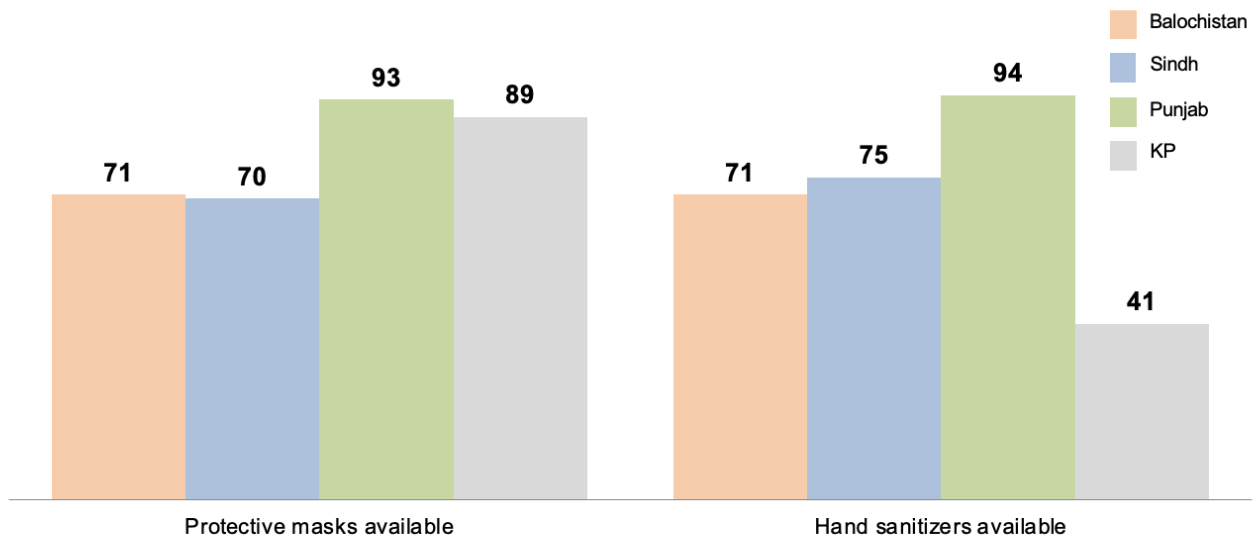
The unprecedented Covid-19 pandemic has affected all possible aspects of immunization, including introduction of new vaccines and campaigns. In 2019, the TCV campaign was implemented in Sindh. Prior to the spread of the pandemic, a TCV catch-up campaign was planned in the rest of the Pakistan in September/October 2020. However, due to non-availability of vaccine, the campaign has been delayed until further notice. Moreover, due to the country-wide lockdown, the national immunization program in Pakistan could not mobilize resources and preparatory activities could not be initiated as planned.

Covid-19 response

To counter the impact of COVID-19 on immunization services and achieve the country's target of universal immunization by 2023, the Federal Expanded Program on Immunization adopted various strategies in close collaboration with its partners. A gradual approach was adopted towards opening of fixed immunization sites and outreach activities. When the countrywide lockdown was removed in May 2020 and fixed site immunization was resumed, EPI provided PPEs to ensure the safety of vaccinators, children and their parents. Supervision data from July 2020 shows high availability of PPEs in most areas.

PPE availability, July 2020

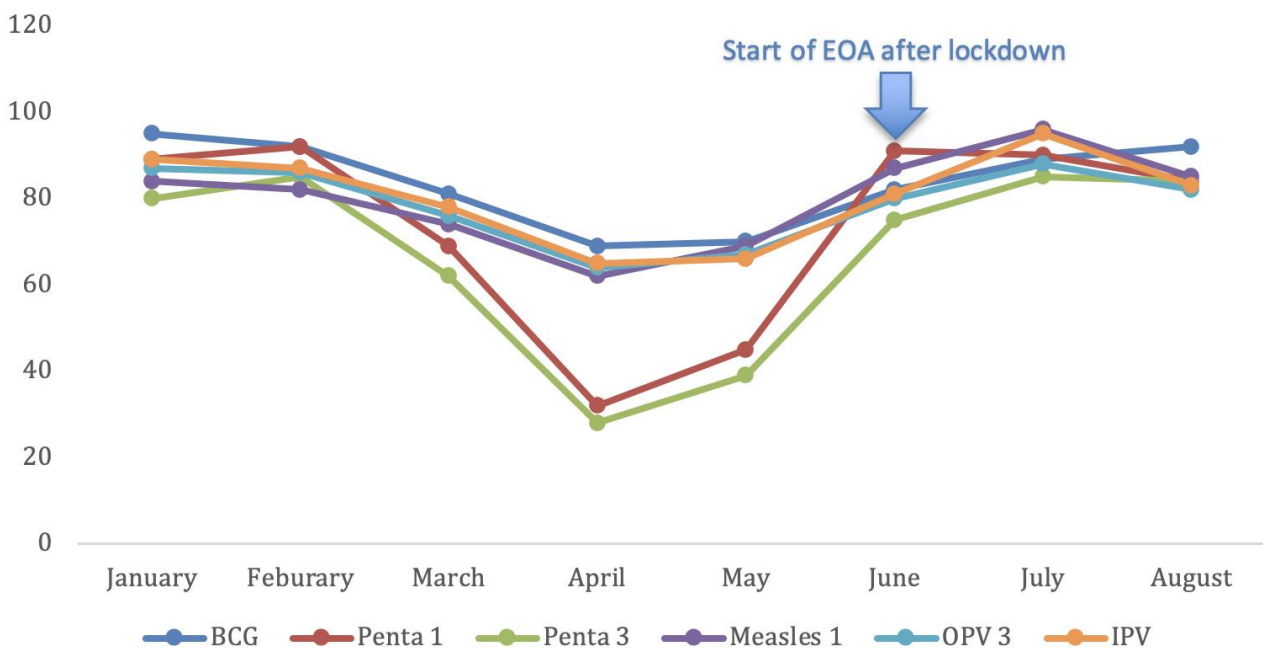
% of fixed EPI sites with adequate stocks of PPE available



NOTE: Facilities are required to have PPE stocks for 15 days
Source: AcasusData 2020

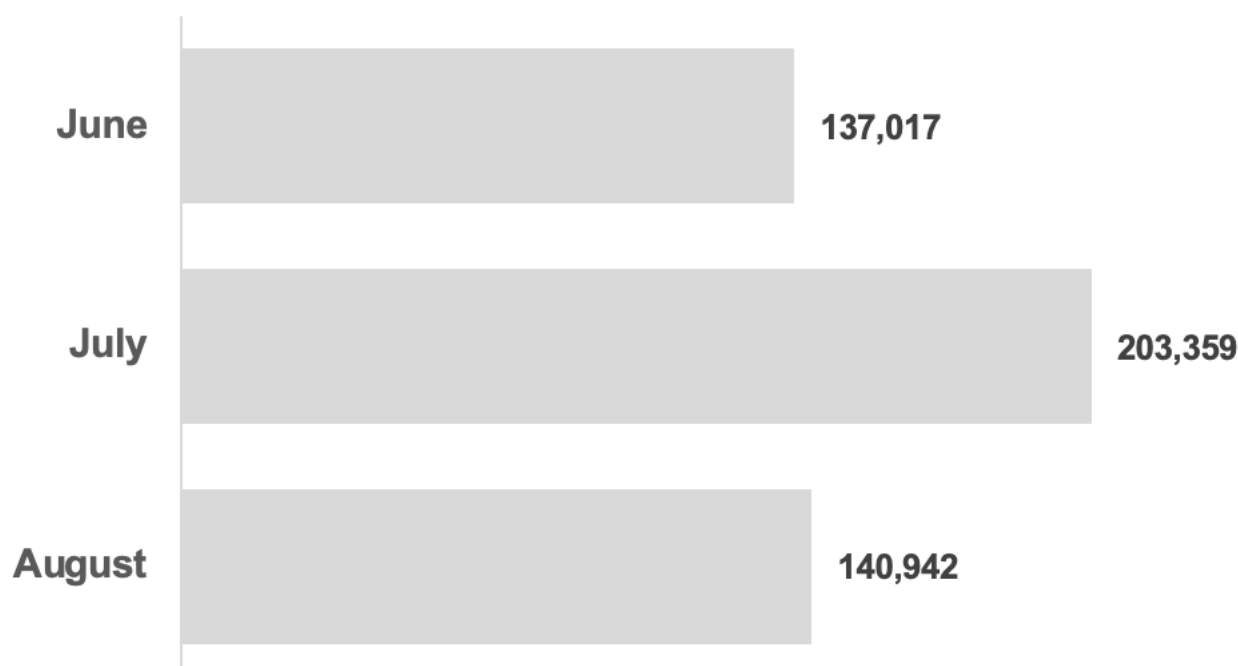
In response to Covid-19 and in order to improve national immunization coverage, EPI organized Enhanced Outreach Activities (EOA) to cover missed children in provinces on monthly basis. As illustrated below, EOA has contributed to improve immunization coverage after the lockdown. The coverage for all the antigens improved significantly after the commencement of EOA in June 2020. Around 480,000 children were vaccinated through EOA between June and August 2020.

The Impact of EOA on National Immunization Coverage



Impact of Enhanced Outreach Activities (EOA)

Number of zero dose children covered during EOA, Jun-Aug 2020



Source: WHO

EPI is focusing on additional key areas to improve coverage. The program has mobilized its resources to replenish stores to ensure availability of vaccines. The second-year deployment of CCE-OP is 98% complete, and planning for the third year of deployment has been initiated as it will play a key role in i) expanding storage capacity for accommodating buffer stock, ii) providing additional vaccine supply for enhanced outreach and for iii) expansion of EPI services to private sector. EPI has also conducted an Effective Vaccine Management (EVM) Assessment which enunciates that few provinces have functionality and availability gaps. Overall, the score has improved from 62% in 2014 to 74% in 2019. In relation to this, EVM improvement plan will be formulated which will outline activities for the next 5 years. Refurbishment of EPI facilities is also a priority and approximately 1,500 facilities are being refurbished across the country. Refurbishment of 5 facilities in Sindh is underway and the assessment for 45 facilities in Super High-Risk UCs has been completed with plans to begin work on refurbishment soon.

EPI is moving forward in terms of building trust in communities by using mass and social media. To strengthen Environmental and Social Management Plan (ESMP) coordination, EPI has mobilized dedicated ESMP coordinators for all provinces. Furthermore, in order to enhance the mobility of vaccinators within communities, EPI has provided more than 1,200 motorbikes to the federating areas.

EPI acknowledges the importance of resource mobilization to cover the cost of vaccines and considers it to be a critical challenge. The country is currently in the preparatory transition phase and is expected to enter the accelerated transition phase in 2023. This transition will increase the cost ratio on the government which currently stands at 30%. By 2026, the government is expecting to bear all cost of the vaccines. Extensive advocacy is being done by concerned ministries to sensitize the provincial governments.

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

[Please complete table to reflect any budget reallocations already approved – example below]

	COVID-19 activity	Amount reallocated	Status of implementation
Activity 1	Infection prevention and control – PPE procurement	NISP CCEOP funds: \$7 million NISP TA funds: \$1.5 million Total: \$8.5 million	Complete
Activity 2	Trainings	\$300,000	Complete
Activity 3	Software developments - COVIM	\$50,000	Complete

2.5 Already agreed modifications in Technical Assistance (if applicable)

[This refers to modifications already agreed as part of the COVID-19 emergency response, graphs are provided by the PEF team]

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

[Brief narrative and/or table. Considering that some activities have been cancelled, delayed or modified, this is an overview of funds available to be re-allocated.]

WHO: No reallocation planned - all activities are expected to be completed.

UNICEF: No inputs.

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

Pakistan's Recovery Plan

Similar to other developing countries, this year has been challenging for Pakistan in terms of providing quality health services. The ongoing pandemic has had significant impact on Pakistan's health delivery system including immunization services. However, EPI, in close collaboration with international donor and development partners, has been diligently working to counter the adverse impact of Covid-19. In this scenario, EPI has formulated a recovery plan in order to counter the adverse impact of Covid-19 on routine immunization.

The Recovery Plan is divided in three categories - *Immediate Recovery Plan, Catch-up Plan and Continuation Plan*. The Immediate Recovery Plan can be considered as a short-term plan (3 months) to restore the immunization service and increase the coverage which was affected during the nation-wide lockdown. The Immediate Recovery Plan is followed by the Catch-up Plan (6 months), which illustrates medium-term planning of boosting immunization services in Pakistan. Finally, the Continuation Plan can be regarded as a long-term plan (additional 6 months) to strengthen the restored immunization services. The essence of the recovery plan is based on the approach of building back better.

The Immediate Recovery Plan primarily focuses on six key areas. The first is to strengthen existing immunization delivery system by expanding fixed EPI sites, maintaining the EOA in all districts, building structured public-private Partnership with CSOs and private hospitals for service delivery in mega cities, continuation of integrated outreach services. Speaking of mega cities, provision of 24/7 immunization services in tertiary and secondary care hospitals. Moreover, Super High-Risk UCs (SHRUCs) and urban slum areas will be prioritized by organizing evening shifts or weekend vaccination.

The second key area to be focused in the immediate recovery plan is the strengthening of data analysis and use of data for making informed decisions. In this regard, MIS and Electronic Immunization Registry (EIR) will be scaled up in order to improve data accuracy and consistency. Another similar area to be strengthened is monitoring and evaluation. For the said purpose, additional M&E officers will be recruited in order to conduct rigorous monitoring of routine immunization services. Government staff will be also facilitated for supportive supervision and field monitoring. For real-time monitoring, provision of GPS-based monitoring vehicles are also part of the immediate recovery plan.

Considering the high prevalence of Covid-19 cases in mega cities, urban immunization will be specifically focused in the recovery plan. A framework for integrated immunization service delivery in mega cities, urban poor areas will be developed in the context of Covid-19 pandemic. Another key area that has been signified in the recovery plan is the effective supply chain management. After the successful implementation of CCEOP II, the third phase of the CCEOP will be ensured to include new public and private EPI centres. In the end, effective waste management has been given due significance in the recovery plan by focusing on capacity building on medical waste management and safe disposal.

Another area to be focused is the VPDs/AEFI surveillance which should be sustained and strengthened to enable of evaluating the impact of the vaccinations and identifying high risk areas. the surveillance system should be comprehensive to include all health facilities and scale up the online system including the module of surveillance within the EPI MIS.

The aforementioned Catch-up Plan and Continuation Plan are the continuation of the Immediate Recovery Plan, however, some of the activities will be started or concluded based on different timelines. For instance, in the Catch-up Plan, provincial urban health strategies will be developed based on the results of the profiling, immunization coverage in slums and cMYPs in order to strengthen urban immunization in Pakistan. For effective waste management, burial pits will be upgraded, and chamber incinerators will be installed as per the catch-up plan. Federal and provincial EPI has substantial amount of PPE supplies till December 2020, therefore, in the catch-up plan additional PPEs (masks, sanitizers, soaps) will be provided for the year 2021.

In terms of cost of the recovery plan encompassing the short, medium and long-term plans is estimated to be \$ 46M. However, due to scarcity of funds, EPI in Pakistan will divert the already approved Performance-Based Fund (PBF) worth \$9.6M to cover the cost of the immediate recovery plan. In this regard, a budget having detailed activities and justifications will be submitted to GAVI for approval.