# Understanding and Clearing Immunisation Backlogs in the Wake of the COVID-19 Pandemic

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Sri Lanka, 6-7/12/2022



### **General Information**

- Population: 99.2 millions
- Size of 2021 Birth Cohort: 1,501,510
- Fertility Rate, total (births per woman): 2.09
- Distribution of population (% rural/urban): 66%/34%
- GDP average annual growth rate: 2.6% (2021)
- Number of Counties/Provinces/Districts with Populations: 4 regions/63 provinces/702 districts
- Number of Public Facilities/Private Facilities: ~11,000/~2,000
- Year of transition from Gavi support: 2018
- Number of antigens on the national vaccination schedule: 10









### Vaccine introduction into National EPI



### **EPI vaccine schedule**





## Main achievements in EPI

- 1. Millions of children and women are free vaccinated every year.
- 2. The fully immunized child (FIC) coverage for children aged under 1 yo has been over 90% for many years.
- **3**. Polio eradication since 2000.
- 4. Neonatal tetanus elimination since 2005.
- **5.** Control of measles, rubella, diphtheria and pertussis.





# Status of Routine Immunisation Coverage



### **Status of Coverage**

Coverage rates for DPTI & DPT3 (Penta vaccine) from 2018 to Oct 2022



Sources: Annual reports of National EPI

-DPT3 -DPT1



### **COVID-19 Pandemic in Vietnam**

#### <mark>(1)</mark> 23/1/2020 – 24/7/2020

- 415 cases (internal: 106, imported: 309)
- 0 death
- Identifying cases, tracing, isolation, social distancing by area

(2) 25/7/2020-27/1/2021

- 1.136 cases (internal: 554, imported: 582)

- 35 deaths
- Identifying cases, tracing, isolation, social distancing by area

<mark>(3)</mark> 28/1–26/4/2021

- 1.031 cases
   (internal: 901,
   imported: 391)
- 0 death
- Identifying cases, tracing, zoning, medical isolation at home, social distancing by area

### (4) 27/4/2021-present

- Over 11.5m cases (internal: 11.5m, imported: 4,000)
- 43,000 deaths
- Outbreak and spread throughout the country
- Medical isolation at home, social distancing by area, COVID-19 vaccine rolling out



### COVID-19 vaccine implementation campaign (as of 4/12/2022)

Age groups	Target population	Primary series	lst booster dose	2nd booster dose	
Adult (18+)	64,673,733	~100%	79.8%	87.8%*	
Adolescent (12-17 yrs)	8,484,490	~100%	67.8%	Not applicable	
Children (5-11 yrs)	11,045,860	<ul> <li>Dose 1: 91.9%</li> <li>Dose 2: 69.1%</li> <li>(on going)</li> </ul>	Not applicable	Not applicable	

\* Only for high-risk groups with a total of about 20 millions.



### **Overview of Coverage**

- Routine immunisation coverage was impacted during the pandemic:
  - People could not go out due to social distancing
  - People did not want to bring their children to immunization posts to receive vaccines as they worried that they may get COVID-19 infection
  - Health workers focused on the control of COVID-19 pandemic
  - Vaccine procurement procedure took more long time



### **Overview of Coverage**

How was the coverage monitored at both the national and sub-national levels?

- We have developed an electronic database for EPI since 2017. All immunization facilities are provided an account to import information when they implement vaccination and make monthly reports.
- There is a person who is responsible for immunization data and statistics at each level.
- Routine vaccination coverage is collected, aggregated and analyzed every month.



# Disruption & Mitigation Strategies



## **Understanding Disruptions**

#### 2020

- Scale: Few provinces
- No. of cases: Few (thousands)
- Social distancing: small scale & short time
- Covid vaccine: Not yet
- Routine immunization: Almost normal

#### 2021

- Scale: nationwide
- No. of cases: Many (millions)
- Social distancing: Large scale & long time
- Covid vaccine: Yes but limited
- Routine immunization: disruptions in few months

#### 2022

- Scale: nationwide
- No. of cases: Many (millions)
- Social distancing: No
- Covid vaccine: Yes with high coverage
- Routine immunization: No but lack of vaccines



### **Disproportionate Impact of Disruptions**

- Were certain populations disproportionately impacted by these disruptions? If so, who were they, and why were they disproportionately impacted?
  - Urban vs. Rural Populations: COVID-19 pandemic mainly happened in urban areas, therefore children in these areas were likely to be impacted than rural areas.
  - Across income strata: We don't have full evidence; however high income group may have less impact as they can bring their children to receive vaccines in private sector.



## **Mitigating Disruptions**

What was done to mitigate disruptions to RI coverage during pandemic peaks? What worked, what didn't, and why?

What was done	What worked	What didn't	Why
Guidelines on organizing immunization sessions	Yes		<ul> <li>Sustained routine immunization at hospitals for births</li> <li>Prevented COVID-19 infection</li> </ul>
Guidelines on management of target population	Yes		<ul> <li>Prepare for mop-up immunization later on</li> </ul>
Routine immunization maintenance	No	Yes	<ul> <li>Social distancing</li> </ul>



# **Scale of Backlog**



## **Scale of Backlogs**

Vaccine	2017	2018	2019	2020	2021	Oct 2022
Measles (%)	97,4	97,2	95,4	97,3	89,0	66,9
Fully Immunized Coverage (%)	96,8	94,8	94,3	96,8	87,1	67,4

- ✤ Notes:
  - ➢ In 2020, routine immunization was not impacted.
  - In 2021, routine immunization was significantly impacted by COVID-19. About 193,000 children <1 yr was not fully immunized.</p>
  - In 2022, coverage rates are low and it is difficult to meet the targets due to COVID-19 and shortage of vaccines.



## **Disproportionate Impact of Backlogs**

- Did you find any pockets of partly immunized and unimmunized children?
  - Under Immunized Children: DPT3 Coverage (%): (DTP3 DTP1)
  - Zero Dose Children: DPTI Coverage (%): (100%-DTP1%)

Please describe these pockets. What do these children look like? What are the key barriers to immunisation?

	2018	2019	2020	2021
Under Immunized Children (%)	3.5	7.0	2.1	4.0
Zero Dose Children (%)	21.5	4.0	3.7	12.8
Which children?	In EPI (not private sector)			All
Key barriers?	AEFI with DPT-HepB- Hib vaccine			<ul> <li>Disruptions of routine immunization</li> <li>Scare of COVID-19 infection</li> </ul>



## **Addressing Backlogs**

- Who coordinated the clearing of backlog? Was it through existing clinics/additional immunization sessions, outreach activities, and/or supplementary immunization campaigns?
- What did regional and national co-ordination look like?
- What were the roles of the public, private, and independent sectors in clearing the backlog?
- What incentives, if any, were provided for staff for additional work?
- National EPI:
  - Developed SIAs and mop-up immunization activities
  - Guided lower levels to implement immunization activities
- Regional EPI: Co-ordinated with National EPI to deploy activities
- Provincial CDC: Co-ordinated with higher levels as well as guided lower levels to deploy activities
- Immunization facilities:
  - Implemented immunization activities
  - Some staff may receive little incentives from local goverments or international support for additional work.
- Private sector: Provided fee-based vaccines that partly contributed to the FIC.



### **Current Status of Backlogs**

#### Results of SIAs and mop-up immunization activities

Region	BCG	DPT- HepB- Hib1	DPT- HepB- Hib2	DPT- HepB- Hib3	OPV1	OPV2	OPV3	IPV	Measles	FIC	MR	DPT4	JE1	JE2	JE3
Nothern	1,328	1,906	2,125	2,325	2,206	2,092	3,181	2,362	2,606	2,304	5,447	4,473	3,440	5,141	6,751
Central	0	3	0	0	3	0	1	1	2	0	1	4	0	0	3
Highland	948	1,650	2,065	2,526	1,537	1,936	2,370	4,005	3,036	349	9,166	4,965	3,793	3,772	4,899
Southern	20,186	25,796	30,132	42,561	35,544	32,901	56,374	42,473	36,621	36,102	31,074	31,454	22,240	25,281	22,815
Total	22,462	29,355	34,322	47,412	39,290	36,929	61,926	48,841	42,265	38,755	45,688	40,896	29,473	34,194	34,468



### **Best Practices**

- What strategies and approaches did the country use to address the backlog? What worked, what didn't, and what will you employ going forward?
- During pandemic peaks:
  - > Sustained routine immunization at hospitals
  - Requested immunization facilities to manage target population
- After pandemic peaks:
  - > Resumed routine immunization activities as soon as possible
  - > Extended more time of routine immunization sessions.
  - > Conducted SIAs and mop-up immunization activities.



Commitment of government, relevant ministries and stake holders

Directions of Ministry of Health

- Active response and well preparation of National EPI
- Participation of all levels, especially immunization staff
- Sustain routine immunization even during pandemic peaks
- Implement SIAs and mop-up immunization activities
- Mass media communication

Court international organizations' support



### Propose

- Strong commitment and investment of Government for routine EPI
- Directions and support from MoH and relevant Ministries
- COVID-19 preparedness and response
- Increase salary and incentives as well improve working environment
- Facilitate policies on vaccine procurement procedure
- Conduct training and re-training for immunization staff
- Continues to mobilize support of international organizations and share experiences in improving immunization coverage during COVID-19 pandemic



# Thank you for your attention!



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