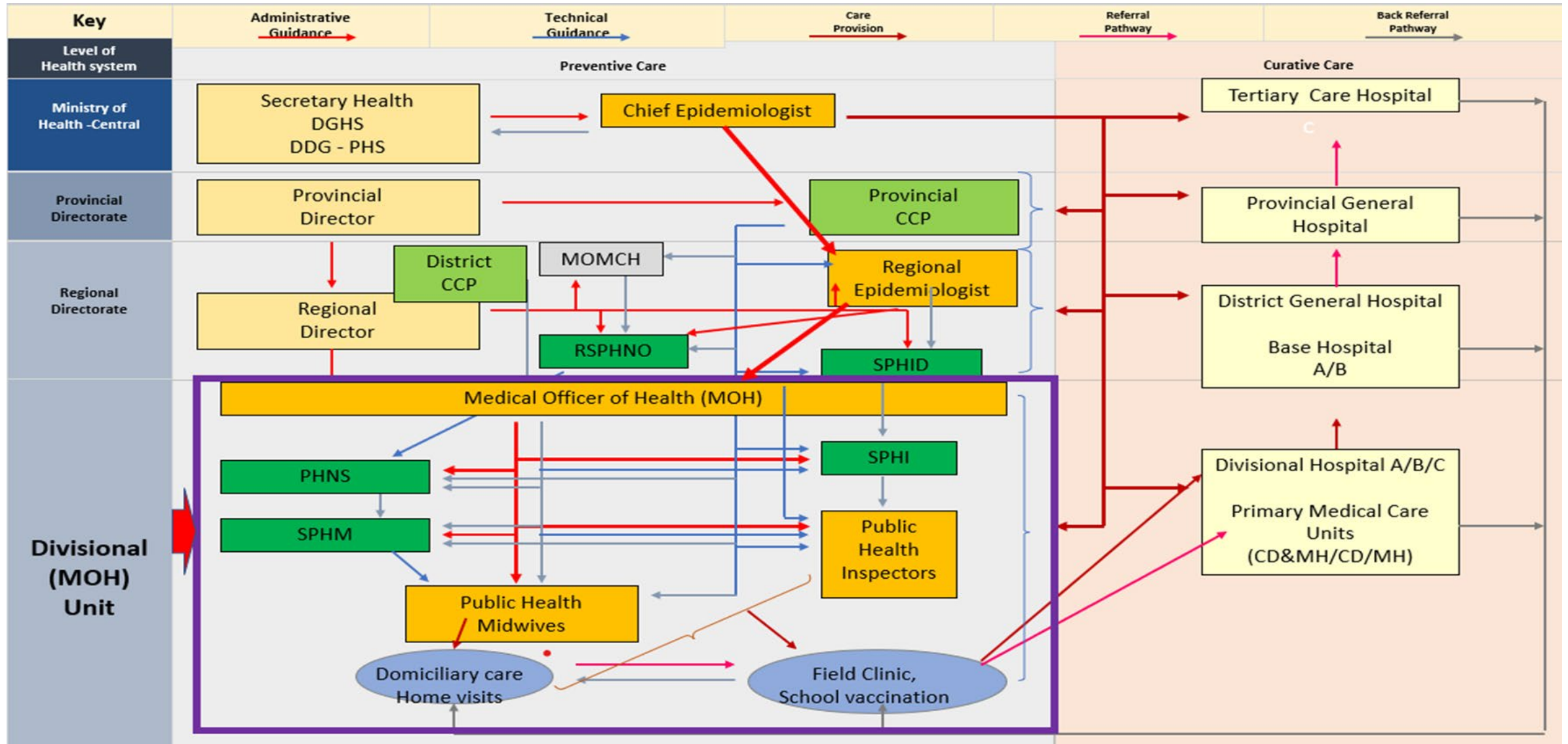


**Health Information Systems:
Data reporting and collection mechanism for HPV vaccination
programs and research gaps to improve health information system:
Sri Lanka**

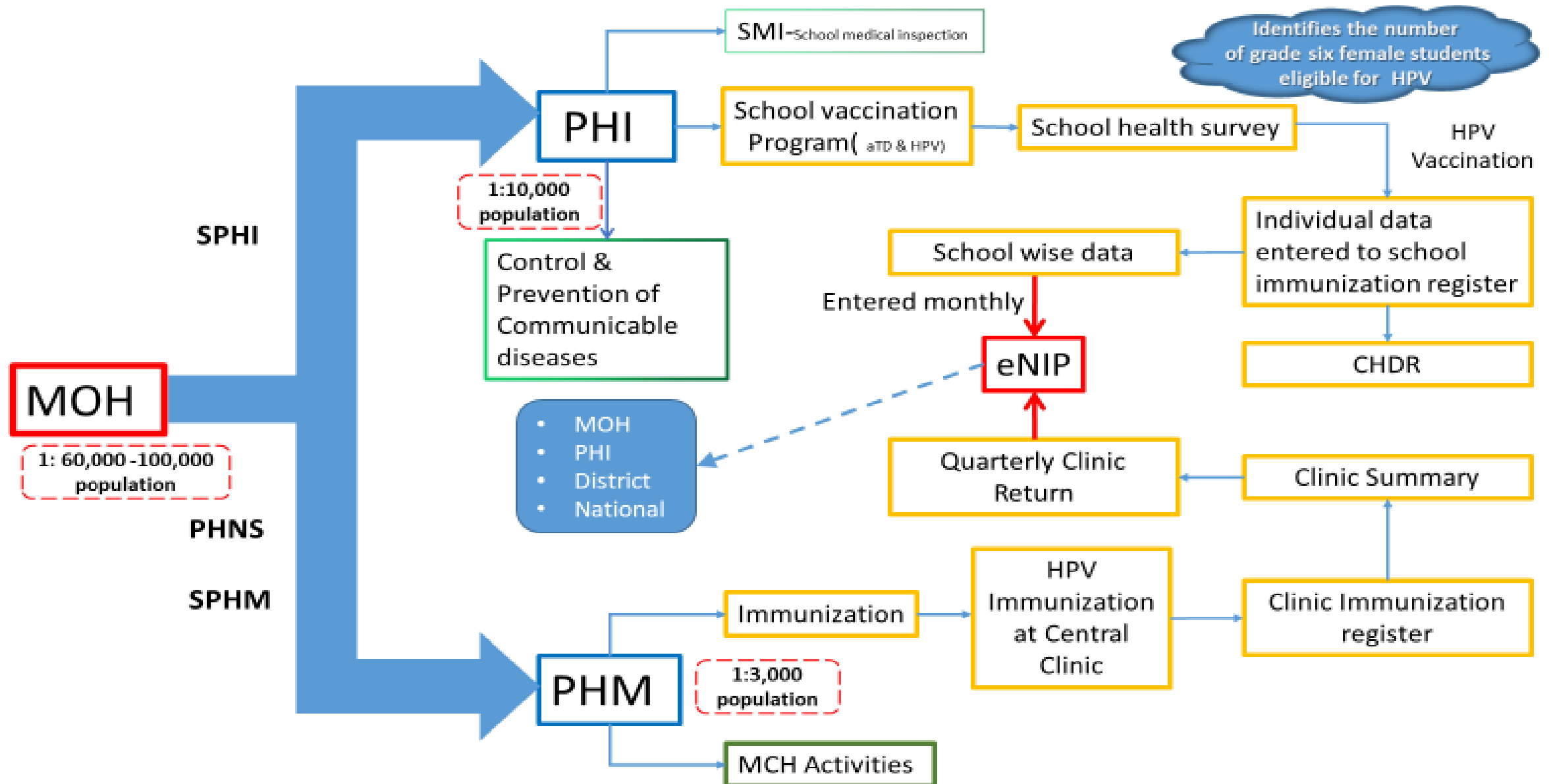
**Presented by:
Dr Samitha Ginige
Consultant Epidemiologist
Epidemiology Unit, Ministry of Health, Sri Lanka**

**South Asian Meeting
HPV Prevention and Control Landscape and the way forward.
13th , 14th and 15th - Dec 2022 – New Delhi, India.**

Immunization Service Delivery Structure



Divisional level HPV vaccine service delivery structure



[illegible][illegible]

School immunization Register

School Immunization Register

MOH Area _____

PHI Area _____

School _____

Epidemiology Unit
Ministry of Health

School Immunization Register

Page No. 42

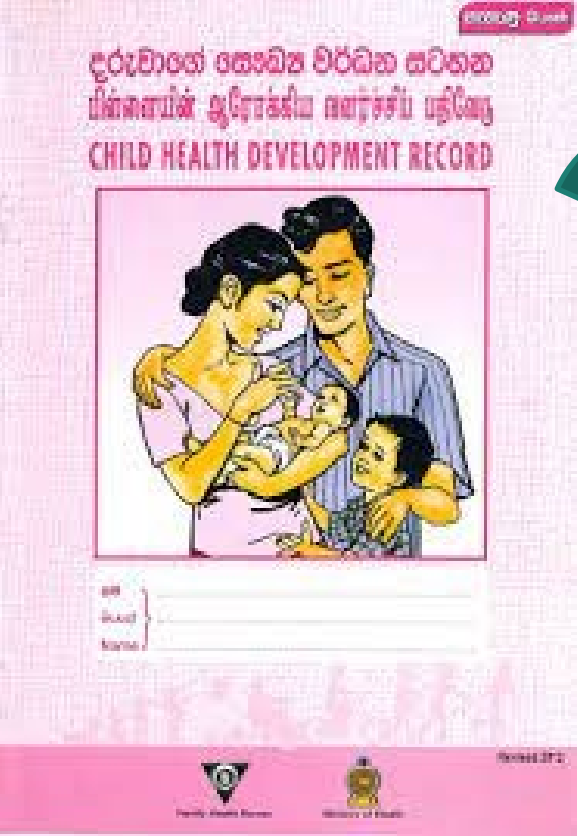
Grade/Class 6-A Number on roll 48 Calendar year 2022

Serial number	Name of the child	Age	Sex	Dates of immunization (DD/MM/YYYY)			Remarks		
				HPV-1	HPV-2	aTd	HPV I	HPV II	aTd
01	W. M. A Senudi Rehansa	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
02	T. P. Ganguli umesha	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
03	S. H Thenuli Pahandi	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
04	W. Vihansa hemindi	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
05	N. D Himansa sankalani	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
06	V. G sithmi Vihansa	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
07	A. P Minudi dinara	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	
08	W. G Dinuli sandanuli	11	F	<u>2022</u> <u>04/22</u>	<u>2022</u> <u>10/31</u>		✓	✓	

- ❑ PHI of the respective area needs to maintain one register for each school in his area.
- ❑ All the children enrolled to grade 6 & 7 need to be included in the school registry at the beginning of each year.

Individual Vaccination Records

- ❑ All vaccination details need to be entered into a CHDR by a health care worker at the vaccination site.
- ❑ If CHDR is not available, HPV vaccination details need to be entered into the vaccination card.



Immunization

Child's Name	Age	Type of vaccine	Date	Batch No.	Remarks
2007 06 12	30756				
2	09 8 15	ORTA 2001.0			
2	09 8 15	2003207			
4	09 08 19	2003207			
4	09 10 24	2003207			
6	09 12 19	2003207			
9	09 12 19	2003207			
18	11 2 12	027290060			
3	2012 07 21	016N1009			
5	14 7 5	022300302			
10-4	21 10 12	2331X0010			
HPV 1	10 08 20	2003207			

INSTRUCTIONS

- This is your HPV vaccination record [attach this to Child Health Development Record (CHDR)]
- Make sure you bring your CHDR to the school for necessary recordings
- Two doses of HPV vaccine are required for prevention of cervical cancer

**THIS RECORD IS VERY IMPORTANT
KEEP IT SAFE**

FOR FURTHER INFORMATION
Medical Officer of Health
OR
Epidemiology Unit
Ministry of Health - Sri Lanka
Tel : 0112 695112
www.epid.gov.lk

**HPV vaccine
for prevention of
Cervical Cancer**

Name :

Date of Birth : / /

School:

Grade / Class

Address

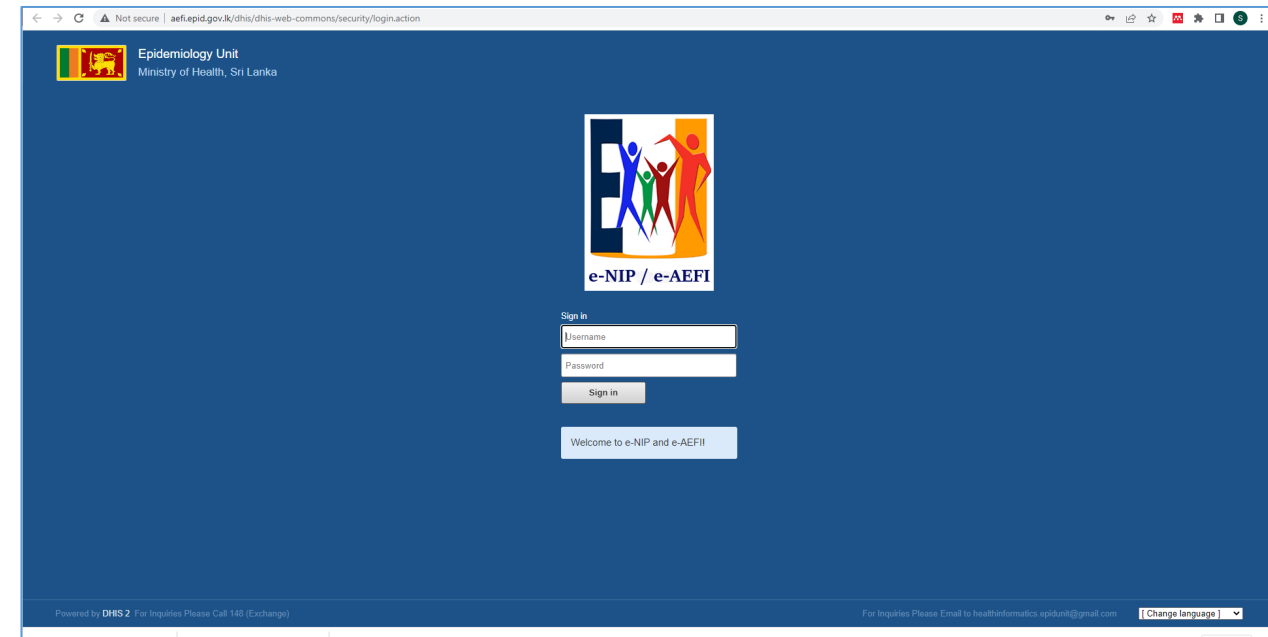
Telephone



HPV Vaccination Details				
Type of Vaccine	Date of Vaccination	Age	Batch No. of the vaccine	Remarks
HPV-1				
HPV-2 6 months after 1 st dose				

Electronic National Immunization Programme data management system (e-NIP)

- ❑ The first Web-based Management Information System of the National Immunization Programme (NIP) - the WEBIIS, was introduced in 2016.
- ❑ It was upgraded to the e-NIP in 2019 and is currently being used to collect and compile NIP data.
- ❑ Developed using the DHIS2 platform.



- ❑ Data entry point - Vaccination clinics (the service delivery point of the NIP) based on aggregated data entered.
- ❑ The data are available for analysis and interpretation at each level.
- ❑ Validation points are incorporated into the system to ensure the validity of entered data.
- ❑ Allows regular monitoring of the NIP – e.g. immunization coverage rate for each vaccine and vaccine wastage rates.
- ❑ This system immensely helps to monitor the district immunization coverage especially during the peak COVID period.

Aggregated HPV data entry format – Individual school level

No. of HPV doses given at each school during each clinic session

The screenshot shows the DHIS2 data entry interface for HPV doses. The top section displays the 'Organisation Unit' as 'Clinic_School - Pannampitiya M.V.' and the 'Data Set' as 'Immunization Data School Clinic Return'. The 'Period' is set to 'March 2021'. Below this, there is a table for '1. HPV' with columns for 'Dose' and 'Count'. The table includes rows for 'Sixth grade (1st dose)', 'Sixth grade (2nd dose)', 'Other grades (1st dose)', 'Other grades (2nd dose)', 'Total amount', 'Used amount (Injected Doses + Discarded Doses)', and 'Wastage%'. The counts are: 36 for Sixth grade (1st dose), 0 for Sixth grade (2nd dose), 1 for Other grades (1st dose), 36 for Other grades (2nd dose), 71 for Total amount, 71 for Used amount, and 0 for Wastage%. Below the table, there is a section for '2. Adult Tetanus/ Diphtheria Vaccine (aTd Vaccine)'.

Dose	Count
Sixth grade (1st dose)	36
Sixth grade (2nd dose)	0
Other grades (1st dose)	1
Other grades (2nd dose)	36
Total amount	71
Used amount (Injected Doses + Discarded Doses)	71
Wastage%	0

2. Adult Tetanus/ Diphtheria Vaccine (aTd Vaccine)

No. of HPV doses given monthly / yearly at each school

The screenshot shows the DHIS2 Pivot Tables interface for HPV doses. The table displays the number of doses given monthly and yearly for the 'Clinic_School - D.S.Senaniyake M.V.'.

Period / Data	HPV_grade 6_1st dose +	HPV_grade 6_2nd dose +	HPV_other grades_1st dose +	HPV_other grades_2nd dose +	Total +
January 2021	0	0	0	0	0
February 2021	0	0	0	0	0
March 2021	68	0	0	3	71
April 2021	0	0	0	0	0
May 2021	0	0	0	0	0
June 2021	0	0	0	0	0
July 2021	0	0	0	0	0
August 2021	0	0	0	0	0
September 2021	0	0	0	0	0
October 2021	2	65	0	0	67
November 2021	0	0	0	0	0
December 2021	0	0	0	0	0
Total	70	65	0	3	138

The screenshot shows the DHIS2 Pivot Tables interface for HPV doses. The table displays the number of doses given yearly for the 'Clinic_School - D.S.Senaniyake M.V.'.

Period / Data	HPV_grade 6_1st dose +	HPV_grade 6_2nd dose +	HPV_other grades_1st dose +	HPV_other grades_2nd dose +	Total +
2021	70	65	0	3	138
Total	70	65	0	3	138

District & Divisional level HPV vaccination and coverage data

No. of HPV doses disaggregated by month/year & 1st/2nd dose, at district level

DHIS 2 Pivot Tables

Untitled

Update Favorites Layout Options Download Embed

Data

Periods

Monthly

Available > >> << < Selected

January 2021
February 2021
March 2021
April 2021
May 2021
June 2021
July 2021
August 2021
September 2021

Days

☐ Today
☐ Yesterday
☐ Last 3 days
☐ Last 7 days
☐ Last 14 days

Weeks

☐ This week
☐ Last week
☐ Last 4 weeks
☐ Last 12 weeks
☐ Last 52 weeks
☐ Weeks this year

Months

☐ This month
☐ Last month
☐ Last 3 months
☐ Last 6 months
☐ Last 12 months
☐ Months this year

Bi-months

☐ This bi-month
☐ Last bi-month
☐ Last 6 bi-months
☐ Bi-months this year

Quarters

☐ This quarter
☐ Last quarter
☐ Last 4 quarters
☐ Quarters this year

Financial years

☐ This financial year
☐ Last financial year
☐ Last 5 financial years

Years

☐ This year
☐ Last year
☐ Last 5 years

Organisation units

Administrative Boundaries

Clinics

HPV Vaccine

Matale RDHS

Period / Data	HPV_grade 6_1st dose	HPV_grade 6_2nd dose	HPV_other grades_1st dose	HPV_other grades_2nd dose	Total
January 2021	35	4	0	10	49
February 2021	168	48	2	17	235
March 2021	1 436	170	40	367	2 013
April 2021	309	115	0	33	457
May 2021	1	2	1	0	4
June 2021	6	1	2	4	13
July 2021	15	2	1	19	37
August 2021	14	2	0	1	17
September 2021	352	165	0	12	529
October 2021	2 283	1 612	44	200	4 139
November 2021	99	237	3	13	352
December 2021	20	63	1	0	84
Total	4 738	2 421	94	676	7 929

No. of HPV doses disaggregated by month/year & 1st/2nd dose, at divisional level

DHIS 2 Pivot Tables

Untitled

Update Favorites Layout Options Download Embed

Data

Data elements

527 Monthly Return

Available > >> << < Selected

Diphtherial Tetanus Vaccine (Dual Vaccine-DT)_3rd Dose
Diphtherial Tetanus Vaccine (Dual Vaccine-DT)_4th Dose
Diphtherial Tetanus Vaccine (Dual Vaccine-DT)_5th Dose
Diphtherial Tetanus Vaccine (Dual Vaccine-DT)_used
HPV_used
IPV_FIPV2_used
Live JE Vaccine_1 Year
Live JE Vaccine_Others
Live JE Vaccine_used
MMR Vaccine for women in reproductive age
MMR Vaccine for women in reproductive age_used
Measles/ Mumps/ Rubella (MMR Vaccine)_1st Dose (9 Months)
Measles/ Mumps/ Rubella (MMR Vaccine)_2nd Dose (9 Months)

Periods

Organisation units

Administrative Boundaries

MOH - Dambulla

Period / Data	HPV_grade 6_1st dose	HPV_grade 6_2nd dose	HPV_other grades_1st dose	HPV_other grades_2nd dose	Total
January 2021	0	0	0	0	0
February 2021	0	0	0	0	0
March 2021	296	0	23	166	485
April 2021	5	0	0	4	9
May 2021	0	0	0	0	0
June 2021	0	1	0	0	1
July 2021	0	0	0	0	0
August 2021	0	0	0	0	0
September 2021	42	0	0	0	42
October 2021	8	279	10	13	310
November 2021	0	1	3	4	8
December 2021	0	0	0	0	0
Total	351	281	36	187	855

← → ↻ Not secure | aefi.epid.gov.lk/dhis/dhis-web-pivot/

DHIS 2 Pivot Tables

Untitled

Update Favorites Layout Options Download Embed

Data

Periods

Yearly

Available > >> << < Selected

2022
2020
2019
2018
2017
2016
2015

Matale RDHS

Period / Data	HPV_grade 6_1st dose	HPV_grade 6_2nd dose	HPV_other grades_1st dose	HPV_other grades_2nd dose	Total
2021	4 738	2 421	94	676	7 929
Total	4 738	2 421	94	676	7 929

← → ↻ Not secure | aefi.epid.gov.lk/dhis/dhis-web-pivot/

DHIS 2 Pivot Tables

Untitled

Update Favorites Layout Options Download Embed

Data

Periods

Yearly

Available > >> << < Selected

2022
2020
2019
2018
2017
2016

MOH - Dambulla

Period / Data	HPV_grade 6_1st dose	HPV_grade 6_2nd dose	HPV_other grades_1st dose	HPV_other grades_2nd dose	Total
2021	351	281	36	187	855
Total	351	281	36	187	855

National level HPV vaccination and coverage data

Total No. of HPV doses given in Grade 6 & other grades

Epidemiology unit Srinaka Srinaka Epidemiology Unit		
Not secure http://sefi.epid.gov.lk/dhis/dhis-web-reporting/showDataSetReportForm.action		
New Tab Performance of Gov... COVID-19 Immuniz... Presidential Secreta... The Geneva Learnin... Google Google Calendar ...		
eNIP/eAEP Epidemiology Unit		
Report	Wastage%	
Standard Report	11. HPV	
Data Set Report	හයවන ශ්‍රේණිය (පළමු ඖෂධ) Sixth grade (1st dose)	131339
Reporting Rate Summary		
Resource		
Organisation Unit Report	හයවන ශ්‍රේණිය (දෙවන ඖෂධ) Sixth grade (2nd dose)	61202
Data Approval		
Report Table	වෙනත් ශ්‍රේණි (පළමු ඖෂධ) වෙනත් ශ්‍රේණි (දෙවන ඖෂධ) Other grades (1st dose)	11011
	වෙනත් ශ්‍රේණි (පළමු ඖෂධ) වෙනත් ශ්‍රේණි (දෙවන ඖෂධ) Other grades (2nd dose)	31748
	එකතුව මொத்த தொகை Total amount	235300
	භාවිත කරනු ලබන ප්‍රමාණය (වෙනත් කරනු ලබන ප්‍රමාණය + පරතර වීම් ප්‍රමාණය) உபயோகப்படுத்தப்பட்ட + பயன்படுத்தாதவை கைவிடப்பட்ட தடுப்பூசி மருந்தின் அளவு Used amount (Injected Doses + Discarded Doses)	233741.7
	අපතර් වීම් ප්‍රමාණය % வீரயம் Wastage%	-0.7
12. කාන්තාවන් සඳහා සංකීර්ණ මුල් වයස්/දිගුමුල් කාන්තාවන් பெண்களுக்கான சின்னமுத்து, கூவைக்கட்டு, ருபெல்லா தடுப்பு மருந்தின்		

epidemiology unit sri lanka - Google | Epidemiology Unit | DHIS 2 Pivot Tables

Not secure | http://aefi.epid.gov.lk/dhis/dhis-web-pivot/

New Tab | Performance of Cov... | COVID-19 Immuniz... | Presidential Secreta... | The Geneva Learnin... | Google | Google Calendar - ...

DHIS 2 Pivot Tables

Untitled

Data

Periods

Organisation units

☐ User org unit ☐ User sub-units ☐ User sub-v2-units

Sri Lanka

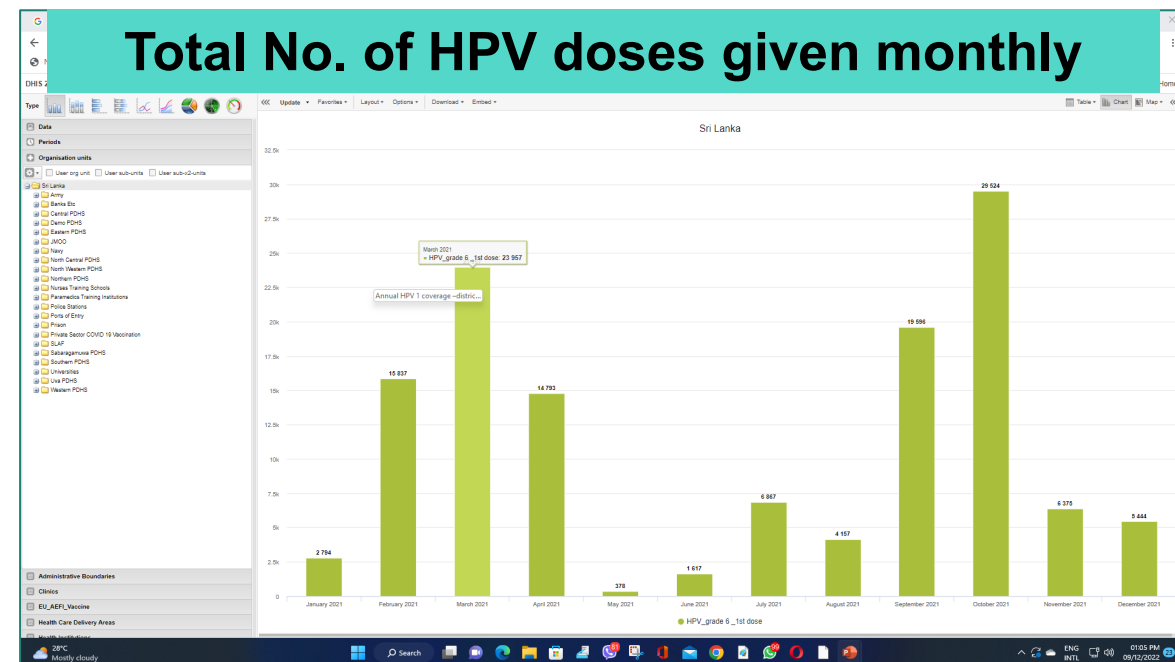
Army

Banks Etc

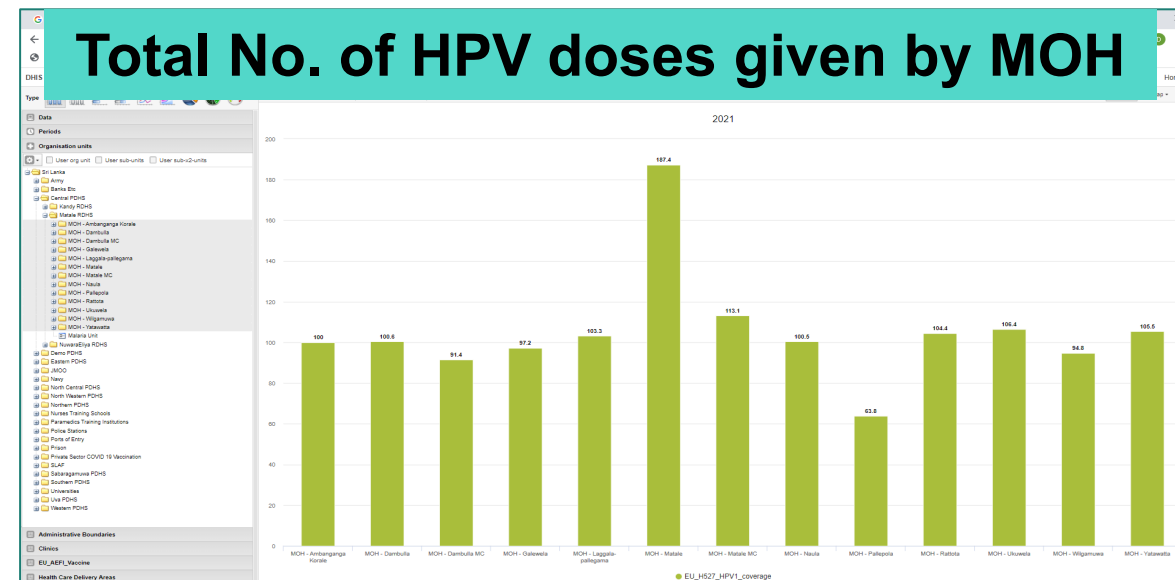
Update | Favorites | Layout | Options | Download | Embed

Sri Lanka					
Period / Data	HPV_grade 0_1st dose #	HPV_grade 0_2nd dose #	HPV_other grades_1st dose #	HPV_other grades_2nd dose #	Total
2021	131 339	01 202	11 011	31 748	236 300
Total	131 339	01 202	11 011	31 748	236 300

Total No. of HPV doses given monthly

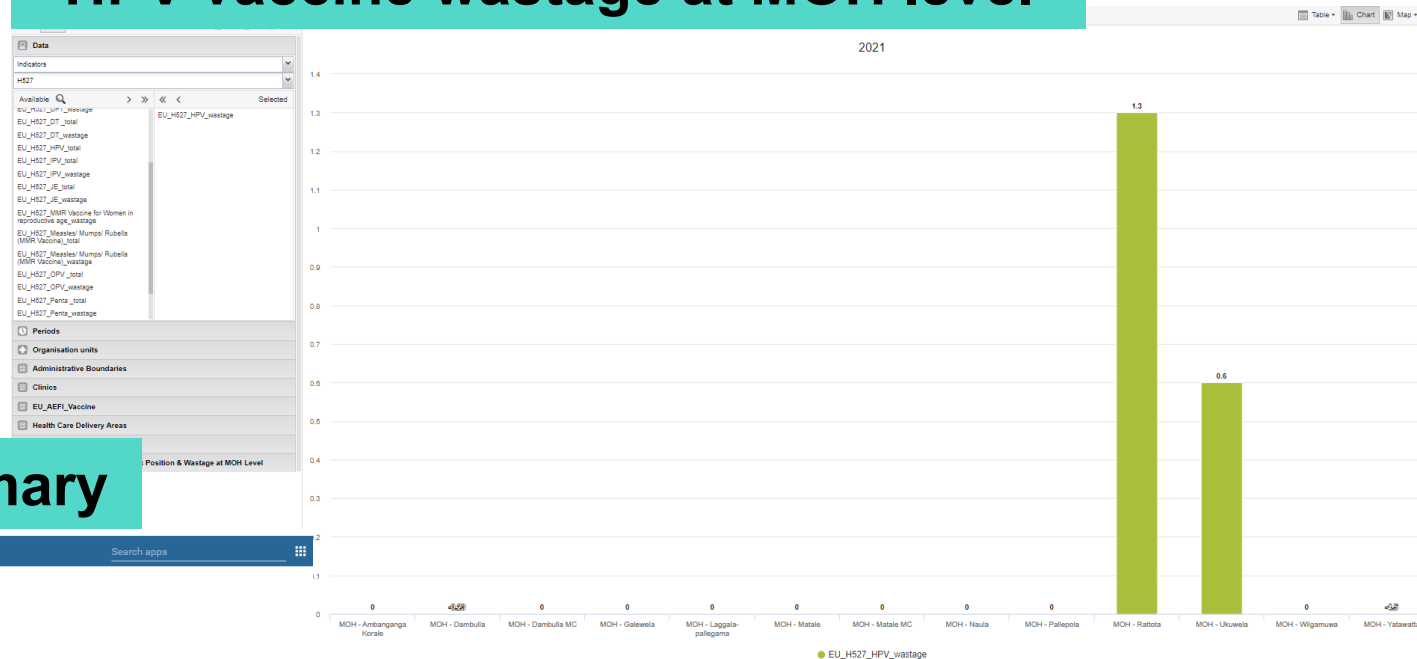


Total No. of HPV doses given by MOH



Evaluating the vaccine wastage and process evaluation

HPV vaccine wastage at MOH level



Evaluation of reporting rate summary

e-NIP/e-AFI |
 Epidemiology Unit
[Search apps](#)

Report
[Standard Report](#)
[Data Set Report](#)
[Reporting Rate Summary](#)
[Resource](#)
[Organisation Unit Report](#)
[Data Approval](#)
[Report Table](#)

Reporting Rate Summary ?

Organisation unit

☒ Sri Lanka

☒ Based on complete data set registrations
☐ Based on compulsory data elements

Immunization Data Clinic Return

Yearly 2021

Previous year
Next year

Get report
Show more options

Download as PDF
Download as Excel

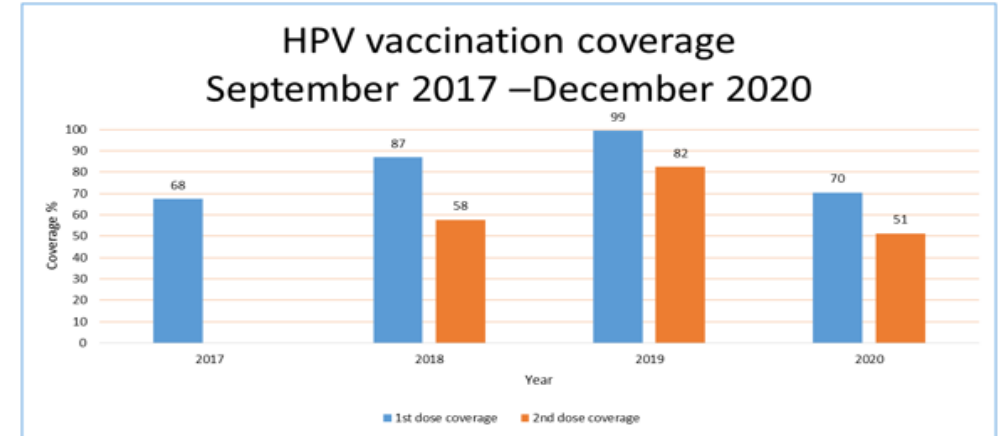
Name	Actual Reports	Expected Reports	Percent	Reports On Time	Percent On Time
Northern PDHS	4411	4428	99.6	2201	49.7
Eastern PDHS	5354	5412	98.9	3162	58.4
North Central PDHS	4204	4272	98.4	1470	34.4
North Western PDHS	6400	6540	97.9	1587	24.3
Southern PDHS	6984	7140	97.8	3134	43.9
Uva PDHS	5733	5880	97.5	1590	27
Central PDHS	8123	8340	97.4	2965	35.6
Western PDHS	7227	7428	97.3	1878	25.3
Sebaragamulla PCHS	4623	5196	89	784	15.1
Demo PDHS	0	624	0	0	0
Sri Lanka	53059	55280	96	18771	34

Limitations in the current system

- Individual HPV immunization details are recorded in a **paper-based information system**
- Can only track individual data at the facility level (School) and the divisional level
- National/district level monitoring - limited to the aggregated school-level HPV immunization coverage for doses 1 & 2
- Data are compiled for the administrative year - Limited use in monitoring the HPV coverage (completion of 2 doses) for a birth cohort



To establish a web system that will enable the entering of individual vaccination data by the PHI at the point of vaccination.



Source : Epidemiology Unit, Ministry of Health, National Immunization Programme data,

Note: 2 age cohorts have been considered for denominator in coverage estimate for 2018

HPV vaccination coverage Same cohort FU coverage 2017-2018 (by Dec 2019)	Garde 6, Age 10-11 year girl cohort	1st dose coverage	2nd dose coverage
	2017	77%,	70%
	2018	95%	93%