

# **EPI and VPD Review**

## **2024**



## **Guidelines for Data Collection**

**Epidemiology Unit**

## Purpose

The **Expanded Programme on Immunization (EPI)** is one of the most successful public health initiatives implemented by the **Ministry of Health, Sri Lanka**. Its effectiveness is driven by the dedicated efforts of **grassroots-level Primary Health Care workers, as well as divisional, regional, provincial, and national health managers and staff**.

Regular monitoring has been instrumental in optimizing the programme's operations since its inception. One of the key monitoring mechanisms, the annual **"EPI and VPD Review,"** evaluates **immunization coverage at the Public Health Midwife (PHM) area level** to assess the proportion of registered children vaccinated according to the **National Immunization Schedule**. Additionally, the review examines selected **quality aspects of the EPI programme**, ensuring continuous improvements in immunization services.

These reviews are conducted annually across all districts. Under the direction of the Regional Director, **Regional Epidemiologists, Medical Officers of Epidemiology, and Medical Officers of Maternal and Child Health** organize and oversee the process in their respective districts. **Medical Officers of Health (MOHs), supported by their teams**, collect, compile, and present Expanded Programme on Immunization (EPI) data during the review meetings.

The EPI and VPD reviews generate crucial insights that are used at the MOH, district, and national levels to refine and enhance various aspects of the EPI programme, ensuring improved immunization coverage and effectiveness.

## Aims of the EPI and VPD Review 2024

1. To assess the completeness of age-appropriate immunization of children who are eligible to have BCG, PVV1/OPV1/FIPV1, PVV2/OPV2/FIPV2, PVV3/OPV3, MMR1, LJEV, DPT4/OPV4, MMR2, DT/OPV5 during the year **2024** according to the national immunization schedule based on the recordings of the BI registers.
2. To assess the coverage of aTd, HPV1 & HPV2 among school children who are eligible to have aTd and HPV during the year **2024** according to the national immunization schedule based on the school immunization records & returns.
3. To assess the coverage of tetanus and rubella immunizations among mothers who have given a birth during the year **2024** according to the national immunization schedule based on the recordings of the pregnant mothers registers and mothers cards.
4. To compare the number of immunizations carried out using each antigen (except Rubella containing vaccines among 16 -44-year females, aTd, HPV1 and HPV2) against the estimated births for the relevant birth cohort.
5. To determine the level of vaccine wastage by different antigen.
6. To assess the status of adverse events following immunization surveillance.
7. To assess the quality of cold chain maintenance

8. To determine the notifications, routine & special investigation rates of Vaccine Preventable Diseases
9. To evaluate the adequacy of selected resource and logistical inputs required for the EPI programme

### **Preliminary preparation for the EPI and VPD review**

The **Medical Officer of Health (MOH)** holds the primary responsibility for **collecting, compiling, interpreting, and presenting EPI data**, with the assistance of other members of the health team. Before completing the **EPI and VPD review formats**, the following documents must be **accurately updated**. It is essential that the MOH ensures their accuracy by conducting **relevant cross-checks** with the assistance of supervising staff, including the **Public Health Nursing Sister (PHNS), Supervising Public Health Midwife (SPHM), and Supervising Public Health Inspector (SPHI)**.

1. Birth and immunization registers
2. Pregnant mothers' registers
3. School Immunization Registers
4. e-NIP data for the year 2024
5. Mothers' cards of the mothers who have delivered during the year -2024
6. Quarterly School Health Returns – 2024
7. Quarterly MCH clinic returns- 2024
8. Infant death investigation reports- 2024
9. MOH AEFI register, AEFI Investigation forms- 2024
10. Clinic immunization registers
11. CHDR B portions
12. MOH office Stock ledger
13. MOH office vaccine movement register and clinic vaccine movement registers
14. Monthly vaccine stock returns
15. MOH office notification register
16. MOH office ID register

It is important that supervising officers actively supervise transfer of data from the above sources rather than passively relying on the PHMs and PHI to fill the formats by themselves. As a preliminary measure the PHMM should be advised to duly update their Birth and Immunization Registers and Pregnant Mothers Registers. In updating BI registers due considerations should be given to the children those who have come to and gone out of the area and those who have had untimely deaths. Each PHM shall be advised to compile a list of mothers who had delivered in the year **2024** along with their tetanus and rubella immunization status. If a mother who came from outside area does not carry her mothers' card, the PHM shall establish her immunization status based on verbal evidence. The PHII should ensure that the Schol Immunization Registers are duly updated.

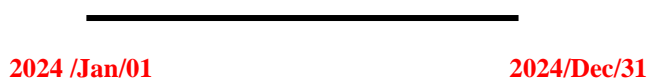
PHMs should be instructed to update the MOH AEFI register based on their respective clinic AEFI registers. The e-NIP data should also be gathered and checked for the accuracy.

### **EPI and VPD Review cohorts (2024)**

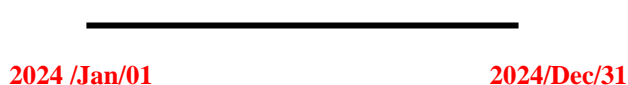
The overall aim of the review is to assess the immunization coverage of infants, children and their mothers who were supposed to have received particular vaccine/s according to the national immunization schedules **during the year 2024**. Therefore, the relevant birth cohorts will differ according to the vaccine. The following figure presents the birth cohorts that should be reviewed to evaluate the different vaccines.

#### **Birth cohorts to be evaluated by respective vaccine**

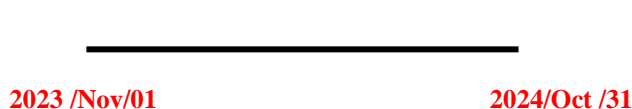
- 1. BCG: All children born during 2024 January 01 to 2024 December 31**



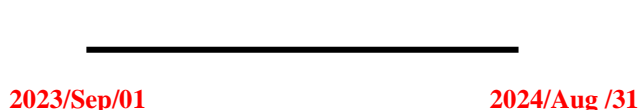
- 2. Tetanus Toxoid/Rubella: All mothers who have given a birth during 2024 January 01 to 2024 December 31**



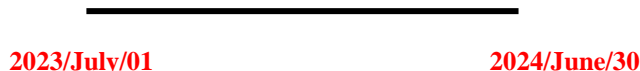
- 3. PVV1/OPV1/FIPV1: All children born between 2023 November 01 to 2024 October 31**



- 4. PVV2/OPV2/FIPV2: All children born between 2023 September 01 to 2024 August 31**



- 5. PVV3/OPV3: All children born between 2023 July 01 to 2024 June 30**



6. MMR 1: All children born between **2023 April 01 to 2024 March 31**

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**2023/April/01**

**2024/March/31**

7. LJEV: All children born between **2023 January 01 to 2023 December 31**

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**2023/Jan/01**

**2023/Dec/31**

8. DPT4/OPV4/: All children born between **2022 July 01 to 2023 June 30**

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**2022 /July/01**

**2023/June/30**

9. MMR2: All children born between **2021 January 01 to 2021 December 31**

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**2021/Jan/01**

**2021/Dec/31**

10. DT/OPV5: All children born between **2019 January 01 to 2019 December 31**

11. aTd: All children who were in grade 7 during the year **2024**

12. HPV1: All female children who were in grade 6 during the year **2024**

13. HPV2: All female children who were in grade 6 during the year **2024**

## Annexure 1: Sources of data to complete the EPI and VPD review format

Slide No	Variable	Data Source
2. Background Information	6-Crude Birth Rate for District	EPI and VPD Review 2024- Annexure 4 District Birth Rate
	7-Crude Birth Rate for Province	EPI and VPD Review 2024 - Annexure 4 Provincial Birth Rate
	9-Number of Immunizations performed in the year	e-NIP
	10-Number of pregnant mothers registered for the area	Pregnant Mother Register (H 513)/ Mothers B card (H 512-B) registered in year 2023
	11-Number of live births reported for the area	e-RHMIS
	12- Number of infants registered for the area	e-RHMIS
3.	<b>A, B, C, D, and E</b>	Pregnant Mother Register (H 513)/ Mothers B card (H 512-B) registered in year 2023
	Number of pregnant mothers registered and delivered in 2024 (F)	Pregnant Mother Register (H 513)/ Mothers B card (H 512-B) registered in year 2024
	Pregnant mothers who have registered in another MOH area and delivered in 2024, who had come permanently to the MOH area before the delivery (G)	Pregnant Mother Register (H 513) – Temporary component/ Mothers B card (H 512-B) registered in year 2024
	Pregnant mothers who have registered in another MOH area and delivered in 2023, who had come permanently to the MOH area immediately following the delivery (G)	Pregnant Mother Register (H 513) Post-partum mother component/ eRHMIS 2024 data
<b>6. Coverage of BCG vaccination</b>	BCG	Birth and Immunization Register- 2024
	TT and Rubella	Pregnant mother register (H 513)
7 to 14		Birth and Immunization Registers, e-NIP
18- aTd	Number on roll in grade 7	School Health Survey (H 1015 A)
	Number on roll in grade 7- at the time of Immunization	School health PHI monthly Return (H 1014)/ School Immunization Register
	aTd coverage of year 2024	School Immunization Register
19- HPV	Number of female children in grade 6	School Health Survey (H 1015 A)
	Number of female children in grade 6- at the time of Immunization	School health PHI monthly Return (H 1014)/ School Immunization Register
22- AEFI		eAEFI
24- VPD	A, B and C	e-Surveillance
	E	Notification register remarks/ ID register remarks/ Special Investigation forms

**Annexure 2: Changes made to the EPI review format and important points to consider when preparing the slides**

Slide Number	Slide topic	Important points to note/ Changes done
Slide 6-11	Coverage of vaccines BCG-LJE	The value for column B (Number of estimated births for 2023) should be obtained from Slide 2 - The most probable number of births for the MOH area (Number 13)
Slide 16	PHM areas with high immunization coverages and high left the area percentages	The highest left the area % should be calculated for only last 3 vaccines – DPT, MMR2, DT <b>Denominator: Total number of infants registered (within 3 months of birth + after 3 months of birth + came newly into the area) (V + W + X)</b>
Slide 17	Follow up on recommendations of previous EPI review	The issues identified and the recommendations made at the previous EPI review along with the progress of the actions should be included in this slide.
Slide 18	Coverage of aTd vaccination among school children in grade 7 & other grades in 2024	For the number on roll in Grade 7 in 2024, <b>both the number obtained during the School Health Survey at the beginning of the year and the number of roll at the time of the vaccination</b> should be entered. <b>All School immunization registers should be available during the review.</b>
Slide 19	Coverage of HPV vaccination among female children who were in grade 6 in year 2024	For the number of female children on roll in Grade 6 in 2024, <b>both the number obtained during the School Health Survey at the beginning of the year and the number of roll at the time of the vaccination</b> should be entered.
Slide 20 & 21	Coverage of HPV vaccination among female children who were in grade 6 in year 2023 and 2022	These slides contain details about HPV vaccination <b>for girls who were in Grade 6 in year 2023 and 2022</b> . As their vaccination programme was interrupted due to a number of reasons these slides have been added to assess the current progress of coverage of this cohort.
Slide 24	Rates of the AEFIs reported during 2024	This slide collects information on the AEFI rates based on the number of AEFIs reported and number of doses administered for a given vaccine.
Slide 25 (Last slide)	Reasons for not-vaccinating	This slide should be available for the following vaccines: BCG/TT/Rubella, PVV1, MMR1, MMR2, aTd. The slide should be available next to the coverage slide for these vaccines.

**Annexure 3: Documents that should be available at the EPI and VPD Review**

01	Birth and Immunization Registers of the PHHM with highest left area % for DPT, MMR2, DT
02	School Immunization Registers
03	MOH AEFI register
04	MOH vaccine movement register
05	ILR Temperature monitoring charts for 2024
06	Fidge tag printouts for 2024



**Annexure 4: District and Provincial Birth Rates to be used for calculation of estimated number of births for year 2024**  
**(Source- Provisional data from the Department of Census and Statistics)**

<b>Districts</b>	<b>District Birth Rate 2024 per 1000 population</b>	<b>Provincial Birth Rate 2024 per 1000 population</b>
Colombo		
Gampaha		
Kalutara		
Kandy		
Matale		
Nuwara Eliya		
Galle		
Matara		
Hambantota		
Jaffna		
Kilinochchi		
Mannar		
Vavuniya		
Mullaitivu		
Batticaloa		
Ampara		
Trincomalee		
Kalmunai		
Kurunegala		
Puttalam		
Anuradhapura		
Polonnaruwa		
Badulla		
Monaragala		
Ratnapura		
Kegalle		
Sri Lanka		

