

Volume 56  
July-September  
2023

# EPIDEMIOLOGICAL BULLETIN

## SRI LANKA

*Third Quarter*  
*2023*

## EPIDEMIOLOGY UNIT

A publication of the Epidemiology Unit  
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## 1. POLIOMYELITIS

Twenty-three patients with acute flaccid paralysis were notified to the Epidemiology Unit during the 3<sup>rd</sup> quarter of 2023, while the expected number for the quarter was 28 (as per the annual surveillance target of 2 AFP patients:100,000 under 15-year population). Therefore, the non-polio AFP rate among under 15-year population for the third quarter of 2023 was 1.8:100,000.

### Notification of AFP Cases from Hospitals

Upon detection, all AFP patients should immediately be reported to the Epidemiology Unit and to the Regional Epidemiologist of the respective district of the patient's residence, in addition to notifying to the MOH of the patient's residence.

The highest number of AFP patients for quarter was notified from the Teaching Hospital Karapitiya and Sirimavo Bandaranaike Specialized Children's Hospital which had reported five patients each, followed by the Lady Ridgeway Hospital for Children and Teaching Hospital Peradeniya (four patients each).

### Distribution of AFP Cases according to Provinces, Districts & MOH Areas

Kandy district had reported the highest number of patients (n=4), while Nuwara Eliya and Matara districts had reported three patients each. The distribution of AFP patients according to the province, district and MOH area is given in table 2.

**Table 01: Reported AFP cases by hospitals**

Hospital	No: of cases reported
Lady Ridgeway Hospital	04
SBSCH	05
TH Karapitiya	05
TH Peradeniya	04
TH Kurunegala	01
TH Anuradhapura	01
TH Badulla	01
DGH Trincomalee	02
<b>Total</b>	<b>23</b>

**Table 02 : Distribution of AFP cases by district & MOH area - 3rd quarter 2023**

Province	District	MOH Area	Number of AFP cases	
Western	Gmpaha	Wattala	1	
	Kalutara	Bulathsinhala	1	
Central	Kandy	Akurana	1	
		Galagedara	1	
		Menikhinna	1	
		Panwila	1	
		Matale	Rattota	1
		Nuwara Eliya	Ragala	1
			Kotagala	1
Southern		Kotmale	1	
	Galle	Imaduwa	1	
		Matara	Dewinuwara	1
		Hakmana	1	
		Weligama	1	
		Hambantota	Tangalle	1
Eastern	Trincomalee	Kinniya	1	
		Padavisipura	1	
North Western	Kurunegala	Ganewatta	1	
		Giribawa	1	
North Central	Anuradhapura	Rambewa	1	
	Polonnaruwa	Dimbulagala	1	
Uva	Badulla	Kandaketiya	1	
Sabaragamuwa	Kegalle	Warakapola	1	
		<b>Total</b>	<b>23</b>	

### Seasonal Distribution of AFP Cases

A significant seasonal variation in reporting AFP patients was not observed during the period.

### Age and Sex Distribution of AFP cases

The proportion of males was significantly higher than females, with 16 out of 23 patients being males (70%). The age and sex distribution are given in Table 3.

**Table 03: Distribution of AFP cases by Age and sex: 3rd quarter 2023**

Age Group	Sex		Total	%
	Male	Female		
<1 year old	00	00	00	00.00
1-4 year old	04	01	05	22.00
5-9 year old	08	02	09	39.00
10-15 year old	04	04	08	34.00
<b>Total</b>	<b>16</b>	<b>07</b>	<b>23</b>	<b>100.0</b>

### Final diagnoses of AFP patients

For majority of patients, the final diagnosis was Guillain-Barre Syndrome (n=19, 82%), while Miller–Fisher Syndrome, Polydactylitis and XLA was diagnosed in one patient each.

### Laboratory surveillance of AFP cases

The exclusion of poliovirus requires two stool samples collected within 14 days of the onset of the symptoms. These samples should be sent to the virology laboratory at the Medical Research Institute (WHO regional reference laboratory for poliomyelitis) for the exclusion of poliovirus. According to WHO criteria these samples should be collected in a timely manner and be in 'good condition' upon receipt to the laboratory. A sample is determined to be in 'good condition' if it fulfills the following criteria: available in correct quantity (8 - 10g), sent in a leak proof container with no evidence of spillage or leakage, and presence of ice in the container on receipt to the lab. In order for the samples to be considered timely, the two samples should be collected within 14 days of onset of paralysis and the two samples should be collected 24 hours apart. Accordingly, in the majority of patients both stool samples had been collected on time and sent in 'good condition' to the MRI for polio virology (n=17, 74%).

### Sentinel site monitoring

Any hospital where the services of a Consultant Paediatrician is available is considered a sentinel site for AFP surveillance. Currently, a total of 104 hospitals function as sentinel sites. These hospitals send a weekly report of all AFP, measles, rubella, CRS patients reported from the hospital for the given week, including zero reporting. This is considered a complementary measure to the routine surveillance.

## 2. MEASLES

Eight hundred and five (805) patients suspected of measles/rubella, compatible with the surveillance case definition of "fever and maculopapular rash" were reported. The first case of the current Measles outbreak was reported in May 2023. A total of 555 measles-positive cases were identified during the 3rd quarter of 2023.

Western Province reported the highest number of fever and maculopapular rash (505). Colombo district reported the highest number of laboratory-confirmed Measles cases (239).

Laboratory testing for measles and rubella IgM was conducted at the WHO-accredited National Reference Laboratory of the Medical Research Institute (MRI) on 805 patients presenting with fever and maculopapular rash. The program reported a laboratory IgM testing rate of 97.39%, surpassing the monitoring target of >80%.

**Table 04: Number of Fever rash cases tested for Measles: 3<sup>rd</sup> Quarter 2023**

District	Notified fever and rash cases	Laboratory confirmed Measles cases	District	Notified fever and rash cases	Laboratory confirmed Measles cases
Colombo	332	239	Batticaloa	1	1
Gampaha	131	98	Ampara	0	0
Kalutara	42	32	Trincomalee	3	1
Kandy	8	4	Kurunegala	13	10
Mannar	1	1	Puttalam	5	5
Kalunai	3	2	Anuradhapura	18	6
Galle	28	22	Polonnaruwa	15	9
Hambantota	6	3	Badulla	5	2
Matara	30	17	Moneragala	5	2
Jaffna	87	66	Rathnapura	26	13
Vavuniya	3	3	Kegalle	21	10
Kilinochchi	0	0	Nuwaraeliya	13	7
Matale	9	2	Mullativu	0	0

## 3. LEPTOSPIROSIS

During the 3<sup>rd</sup> Quarter of 2023, 1825 cases and 33 deaths (CFR 1.8) due to Leptospirosis were notified to the Epidemiology Unit compared to **3276** cases and **69** deaths in the previous quarter and **1750** cases and **45** deaths during the corresponding quarter of 2022.

The age and sex distribution of patients, revealed by the special surveillance data is given in Table 06.

**Table 05: Selected Characteristics of Leptospirosis Patients (%) - 3rd quarter 2023.**

Age Group	Sex	
	Male	Female
0 - 9 years	4	1
10 - 19 years	89	9
20 - 29years	156	21
30 - 39years	197	31
40 - 49years	237	34
50 - 59 years	206	51
>60years	189	50
<b>Total</b>	<b>83.65%</b>	<b>15.34%</b>

#### 4. HUMAN RABIES

Four cases of Human Rabies were reported to the Epidemiology Unit in the 3rd quarter, of 2023 compared to eight cases in both the previous quarter and the corresponding quarter of 2022. Three cases were laboratory-confirmed

#### 6. VIRAL HEPATITIS

In the 3rd Quarter 2023, a total of 59 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 60 cases in the previous quarter and 115 cases in the corresponding quarter of 2022. Badulla district (18) and Monaragala district (6) reported the highest number of cases.

**Table 07: Rabies Control Activities - 3rd quarter 2023.**

##### **Animal Rabies 3<sup>rd</sup> quarter 2023**

During 3<sup>rd</sup> quarter, 71 dogs were reported positive for rabies, compared to 46 in the previous quarter and 73 positives in the same period in the last year.

##### **Rabies Control Activities**

**Dog vaccination** - A total of 448533 dogs were vaccinated during the 3<sup>rd</sup> Quarter under review compared to 259929 in the previous quarter and 294288 in the corresponding Quarter of the last year.

##### **Rabies Control Activities – 3<sup>rd</sup> quarter 2023**

##### **Animal Birth control**

**Chemical**– Discontinued

**Surgical**–7815 female dogs were subjected to sterilization by surgical method during the quarter review compared to 6666 in the previous quarter and 9704 in the corresponding quarter of last year.

#### 5. MALARIA

There were no indigenous malaria cases reported during the 3<sup>rd</sup> quarter of 2023. Twenty two imported malaria cases reported in the 3<sup>rd</sup> quarter of 2023.

#### 7. ENTERIC FEVER

In the 3rd Quarter 2023, a total of 11 cases of Enteric fever were reported to the Epidemiology Unit, compared to 21 cases in the previous quarter and 11 cases in the corresponding quarter of 2022. Kandy district reported the highest number of cases (2).

#### 8. DYSENTERY

In the 3rd Quarter 2023, a total of 253 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 288 cases in the previous quarter and 353 cases in the corresponding quarter of 2022. Nuwaraeliya district (42 cases) and Jaffna district (26 cases) reported as the highest number of cases.

#### 9. JAPANESE ENCEPHALITIS (JE) -3RD QUARTER 2023

During the 3<sup>rd</sup> quarter of 2023, 40 clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of these, 33 cases were epidemiologically confirmed by Public Health Inspectors during their field investigations.

There were no lab-confirmed JE cases during the 3<sup>rd</sup> quarter of 2023, similar to the 2<sup>nd</sup> quarter of 2023, though there were two laboratory-confirmed cases during the 1<sup>st</sup> quarter of 2023.

**Table 06: The distribution of DF/DHF cases, deaths, and case fatality rate (CFR) by districts in the 3rd Quarter of 2023**

RDHS	No of Cases reported in 3 <sup>rd</sup> Quarter 2023	%	Deaths	CFR
Western Province	6520	43	4	0.06
Colombo	2942	19.4	3	0.1
Gampaha	2553	16.84	0	0.00
Kalutara	1025	6.76	1	0.09
Central Province	3040	20.05	1	0.03
Kandy	2510	16.55	1	0.03
Matale	473	3.12	0	0.00
Nuwara Eliya	57	0.38	0	0.00
Southern Province	1623	10.7	2	0.1
Galle	994	6.56	1	0.1
Hambantota	208	1.37	0	0.00
Matara	421	2.78	1	0.2
Northern Province	394	2.6	0	0.00
Jaffna	348	2.3	0	0.00
Kilinochchi	7	0.05	0	0.00
Mannar	7	0.05	0	0.00
Vavuniya	13	0.09	0	0.00
Mulativu	19	0.13	0	0.00
Eastern Province	617	4.07	0	0.00
Batticaloa	303	2	0	0.00
Ampara	47	0.31	0	0.00
Trincomalee	127	0.84	0	0.00
Kalmunai	140	0.92	0	0.00
North-Western Province	800	5.28	0	0.00
Kurunegala	516	3.4	0	0.00
Puttalam	284	1.87	0	0.00
North-Central Province	171	1.13	0	0.00
Anuradhapura	91	0.6	0	0.00
Polonnaruwa	80	0.53	0	0.00
Uva Province	448	2.95	0	0.00
Badulla	277	1.83	0	0.00
Moneragala	171	1.13	0	0.00
Sabaragamuwa Province	1550	10.22	0	0.00
Ratnapura	778	5.13	0	0.00
Kegalle	772	5.09	0	0.00
<b>TOTAL</b>	<b>15163</b>	<b>100</b>	<b>7</b>	<b>0.04</b>

**10. DENGUE FEVER (DF) / DENGUE HAEMORRHAGIC FEVER (DHF) – QUARTER 3 of 2023**

During the third quarter of 2023, 15,163 confirmed or clinically suspected DF / DHF cases were reported from all districts, with seven deaths (CFR 0.05%), compared to 22,871 cases of DF/ DHF, with 26 deaths (CFR 0.11%) in the third quarter of 2022.

**Table 07**

Month	Number of cases	Proportion of cases
July	7369	48.60%
August	5189	34.22%
September	2605	17.18%

The age distribution of DF/DHF cases for the 3rd quarter of 2023

**Table 08**

Quarter 3	<1yr	1-4yr	5-9yr	10-14yr	15-19yr	20-24yr	25-49yr	50-64yr	>=65yr
No of cases	80	586	924	1178	1732	1903	5821	1999	940
%	0.53	3.86	6.09	7.77	11.42	12.55	38.39	13.18	6.2

**11. RUBELLA DISEASE AND CONGENITAL RUBELLA SYNDROME (CRS) 3rd Quarter 2023**

Measles and rubella surveillance is conducted through a combined "fever and maculopapular rash" surveillance system, using this as a sensitive case definition for detecting both measles and rubella cases. During the quarter 805 cases of fever and maculopapular rash were investigated for rubella, and subsequently discarded.

**Congenital Rubella Syndrome (CRS):3rd Quarter 2023**

In 3rd quarter 2023, 377 suspected cases were investigated under TORCH screening and discarded as non-CRS cases.

**12. CHOLERA**

No confirmed cases of cholera were reported to the Epidemiology Unit during the 3rd Quarter 2023. Last case of cholera was reported in the country in January 2003.

**Table 9: Results of Blood smear examination for malaria parasites - 3rd quarter 2023**

	3 <sup>rd</sup> quarter 2022	3 <sup>rd</sup> quarter 2023
No. of blood smears examined	192140	209653
No. of positives	9	22
No. of <i>P. vivax</i>	0	01
No. of <i>P. falciparum</i>	8	14
No. of mixed infections	1	00
No. of infant positives	0	00
Slide positivity rate (S.P.R)	0	0.00
P.V.: P.F. ratio	0	1:14
Percentage of infant positives	0	0

**Table 10: Distribution of Number of Blood Smears Examined by District RMO - 3rd quarter 2023**

RMO	July	August	September	Total
Ampara	2450	1867	1753	6070
Anuradhapura	3328	3610	3712	10650
Badulla	2355	2315	2307	6977
Batticaloa	5445	3781	6018	15244
Colombo	10027	9297	8554	27878
Embilipitiya	3125	3401	2811	9337
Galle	1842	1531	1758	5131
Gampaha	3627	2977	2839	9443
Hambantota	2306	1934	1983	6223
Jaffna	2214	2058	1871	6143
Kalmune	2606	2772	2410	7788
Kalutara	1200	1318	1003	3521
Kandy	4720	5121	4587	14428
Kegalle	1329	1864	1802	4995
Kilinochchi	737	794	811	2342
Kurunegala	5642	6048	6405	18100
Maho	1535	1311	1029	3875
Mannar	910	910	840	2660
Matale	2726	3205	2877	8808
Matara	2160	2189	2115	6464
Monaragala	2363	1912	1978	6253
Mullathivu	1968	1695	1731	5394
Nuwara Eliya	929	945	822	2696
Polonnaruwa	1714	1885	2063	5662
Puttalam	2577	2054	2184	6815
Trincomalee	715	1126	963	2804
Vavuniya	1381	1351	1220	3952
SRI LANKA	71936	69271	68446	209653

### 13. TETANUS

In 2023, six patients in the age group of 55-80 years with tetanus were notified and confirmed. Three deaths have been reported among these patients.

No neonatal tetanus cases were reported during 2023 and no tetanus cases were reported during pregnancy

One patient was notified and clinically confirmed as tetanus in 3<sup>rd</sup> Quarter, 2023 from Matale district.

### 14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 3<sup>rd</sup> quarter of 2023 with 98.3% completeness of submitting monthly AEFI notification forms via the electronic AEFI system (e-AEFI), while 84.9% reports were submitted on time. Majority of the districts have submitted all three monthly AEFI notification forms (23 out of 26 health districts) (Table 13).

The highest number (667 cases) of AEFIs and the highest rate (1422.4 per 100,000 doses given) were reported in Batticaloa District in the 3<sup>rd</sup> quarter of 2023.

For the third quarter, the highest number of AEFI (n=2135) was reported against the Pentavalent vaccine (PVV), whereas the highest rate of AEFI (2025.4 /100,000 doses administered) was reported against DTP vaccine. The rate of AEFI for Pentavalent (01<sup>st</sup>, 02<sup>nd</sup> & 03<sup>rd</sup> doses) is 1135.7 per 100,000 doses administered. High Fever (1705), Nodule (626), and Allergic Reaction (485) are the leading AEFI reported. The highest numbers of fever cases reported were following Pentavalent (1026 cases: 641.9 per 100,000 doses administered) and DPT (498 cases: 836.3 per 100,000 doses administered) vaccines. Nodules were largely due to PVV (419 cases: 262.1 per 100,000 doses administered) and DPT (172 cases: 288.8 per 100,000 doses administered). Majority of the allergic reactions occurred following MMR vaccine (145 cases: 101.6 per 100,000 doses administered), DPT vaccine (132 cases: 232.7 per 100,000 doses administered), and PVV (123 cases: 76.9 per 100,000 doses administered).

**Table 11: Completeness and Timeliness of Monthly Reports of AEFI by RDHS Divisions – 3rd quarter 2023**

Province	District	Completeness of reporting %	Timeliness of reporting %	No. of AEFI	AEFI Rate ( 100,000 doses)
Western	Colombo	94.7	68.4	224	318.9
	Gampaha	100	100	187	178.6
	Kalutara	100	87.2	135	313.2
	NIHS	100	100	33	180.8
Central	Kandy	100	87.5	249	319.3
	Matale	100	100	169	559.5
	Nuwara Eliya	100	87.2	88	193.0
Southern	Galle	100	100	168	287.3
	Hambantota	100	86.1	108	276.7
	Matara	100	94.1	211	489.4
Northern	Jaffna	92.9	81	175	505.2
	Kilinochchi	100	100	81	851.0
	Mannar	100	93.3	28	284.3
	Vavuniya	100	75.0	77	642.3
	Mullativu	100	83.3	75	946.2
Eastern	Batticaloa	100	85.7	667	1422.4
	Ampara	100	47.6	40	271.6
	Trincomalee	100	83.3	49	132.0
	Kalmunai	100	79.5	58	143.1
North Western	Kurunegala	100	96.6	271	299.2
	Puttalam	100	74.4	55	109.3
North Central	Anuradhapura	100	60.9	175	299.9
	Polonnaruwa	100	83.3	54	213.4
Uva	Badulla	97.9	87.5	177	355.5
	Moneragala	100	81.8	99	307.7
Sabaragamuwa	Ratnapura	100	91.7	242	394.6
	Kegalle	100	97.0	110	179.3
<b>Sri Lanka</b>		<b>98.3</b>	<b>84.9</b>	<b>4009</b>	<b>347.6</b>

Table 12: Number of Selected Adverse Events by Vaccines –  
3rd quarter 2025

	BCG	OPV	IPV	PPV*	DPT	MMR	LJE	DT	TT	HPV	aTd	Total number of AEFI reported**
<b>Total Number of AEFI Reported</b>	6	22	35	2135	1206	307	90	156	17	2	19	<b>3995</b>
<b>AEFI reporting rate/100,000 doses administered</b>	(13.9)	(7.4)	(33.3)	(1335.7)	(2025.4)	(215.0)	(143.7)	9200.3)	(25.3)	(13.0)	(15.6)	<b>(346.4)</b>
<b>High Fever (&gt;39°C)</b>	0	13	16	1026	498	57	36	57	0	0	2	<b>1705</b>
<b>Reporting rate/100,000 doses administered</b>	(0)	(4.4)	(15.2)	(641.9)	(836.3)	(40.0)	(57.5)	(73.2)	(0)	(0)	(1.7)	<b>(147.8)</b>
<b>Allergic reactions</b>	0	5	6	123	132	145	22	37	7	0	8	<b>485</b>
<b>Reporting rate/100,000 doses administered</b>	(0)	(1.7)	(5.7)	(76.9)	(221.7)	(101.6)	(28.7)	(47.5)	(10.4)	(0)	(6.6)	<b>42.0</b>
<b>Severe local reactions</b>	1	0	0	4	5	2	0	0	0	0	0	<b>12</b>
<b>Reporting rate/100,000 doses administered</b>	(2.3)	(0)	(0)	(2.5)	(8.4)	(1.4)	(0)	(0)	(0)	(0)	(0)	<b>(1.04)</b>
<b>Seizure (Febrile/Afebrile)</b>	0	2	0	25	67	9	13	3	0	1	1	<b>121</b>
<b>Reporting rate/100,000 doses administered</b>	(0)	(0.7)	(0)	(15.6)	(112.5)	(6.3)	(20.7)	(3.8)	(0)	(6.5)	(0.8)	<b>(10.5)</b>
<b>Nodules</b>	1	0	3	419	172	5	1	21	2	0	2	<b>626</b>
<b>Reporting rate/100,000 doses administered</b>	(2.3)	(0)	(2.8)	(262.1)	(288.8)	(3.5)	(1.6)	(27.0)	(3.0)	(0)	(1.6)	<b>(54.3)</b>
<b>Injection site abscess</b>	2	0	0	49	7	2	0	0	0	0	0	<b>60</b>
<b>Reporting rate/100,000 doses administered</b>	(4.6)	(0)	(0)	(30.6)	(11.7)	(1.4)	(0)	(0)	(0)	(0)	(0)	<b>(5.2)</b>
<b>HHE</b>	0	0	0	2	0	0	0	0	0	0	0	<b>2</b>
<b>Reporting rate/100,000 doses administered</b>	(0)	(0)	(0)	(1.2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	<b>(0.2)</b>

\* PPV- Pentavalent Vaccine

\*\*Total given only for eleven vaccines listed in the table



## 15. TUBERCULOSIS

A total of 2324 TB patients were notified to the NPTCCD by H816A (TB Notification Form) for the 3rd quarter of 2023, while 2377 patients were registered at chest clinics during the same quarter according to the quarterly report on case finding (TB 08). Of these 2210 TB patients (93%) were new TB cases, 166 (7%) were retreatment cases and 01 case was identified for previous treatment history unknown category. (Please refer to Annex 1) Out of new TB cases, 1218 (55.1%) were bacteriologically confirmed TB, 409 (18.5%) were clinically diagnosed (sputum negative) TB and 583 (26.4%) were new extrapulmonary TB cases. Out of these retreatment cases, 106 (63.9%) patients relapsed, 23 (13.9%) patients were treated after failure, 26 (15.7%) patients were lost to follow and 11 (6.6%) patients were previously treated. A total of 2350 TB patients were screened for HIV; out of them 7 patients were positive for HIV. There were 2 patients with known positive HIV status at the time of TB diagnosis. A total of 9 patients were TB co-infection. 4 Multi-drug resistant TB patients were detected during the above quarter. The distribution of TB Patients by RDHS divisions is in the annexed table.

Table 13: Tuberculosis Patients by RDHS Divisions - 3rd quarter 2023

RDHS DIVISION	New				Retreatment	Previous treatment history unknown	Total
	PTB sp+ve	PTB sp-ve	EPTB	Total			
Colombo	337	64	132	533	7	0	582
Gampaha	171	65	62	298	3	0	340
Kalutara	94	39	30	163	1	0	175
Kandy	85	32	33	150	3	0	157
Matale	21	11	16	48	0	0	52
Nuwara Eliya	18	8	26	52	0	0	54
Galle	43	23	34	100	0	0	107
Matara	18	4	14	36	0	0	37
Hambantota	17	6	20	43	1	0	47
Jaffna	24	19	23	66	0	0	71
Vavuniya	8	0	4	12	0	0	12
Batticaloa	22	13	8	43	0	0	44
Ampara	13	4	4	21	0	0	23
Kalmunai	25	3	5	33	2	1	38
Trincomalee	19	6	6	31	0	0	35
Kurunegala	56	34	26	116	1	0	121
Puttalam	21	9	12	42	0	0	43
Anuradhapura	39	10	24	73	1	0	77
Polonnaruwa	19	4	7	30	0	0	31
Badulla	26	7	28	61	2	0	64
Monaragala	18	2	9	29	0	0	30
Rathnapura	53	35	34	122	1	0	124
Kegalle	52	7	14	73	0	0	74
Mannar	6	1	4	11	1	0	13
Mulathivu	8	3	2	13	0	0	13
Kilinochchi	5	0	6	11	0	0	13
<b>Total</b>	<b>1218</b>	<b>409</b>	<b>583</b>	<b>2210</b>	<b>23</b>	<b>1</b>	<b>2377</b>

PTB-Pulmonary Tuberculosis

EPTB– Extra Pulmonary Tuberculosis

SP + ve - Sputum Positive

SP – ve - Sputum Negative

Data from Central TB Register

Source - National TB Register

**Table 14: TB/HIV status**

	Number
TB patients screened for HIV in the 3rd quarter	2350
No of patients found to be positive for HIV in the same semester	7
Known positive HIV patients in 3rd quarter	2
Total HIV/TB co infection	9

**16. SURVEILLANCE AT SEAPORT**

Details of the vaccinations carried out by the Assistant Port Health Office during the 3rd quarter 2023 is as follows; Table 15

	Vaccine	Total
A.	Yellow fever	410
B.	Meningococcal meningitis	433
C.	Oral polio Vaccine	37

**17. SURVEILLANCE AT AIRPORT**

Surveillance activities carried out at the International Airport, Katunayake during the 3rd quarter 2023 is given below.

**Table 16**

<b>Emerging and reemerging disease (Ebola/MERS CoV/ SARS.... Etc)</b>	
<b>Ebola</b>	
No. Of passengers screened	0
<b>No. Of suspected cases transferred</b>	0
<b>Zika</b>	
No. Of passengers screened	0
<b>No. Of suspected cases transferred</b>	0
<b>Malaria</b>	
No. of passengers visited to Health office	14
No. of passengers drug issued	10
No. of blood films done (R.D.T.)	14
Referred to I.D.H./Other unit	0
<b>Yellow Fever</b>	
No. of yellow fever cards inspected	326
No. Invalid/without Yellow Fever cards	08
Referred to I.D.H/Other units	0

**18. LEPROSY****QUARTERLY RETURN OF LEPROSY STATISTICS – 3<sup>RD</sup> QUARTER 2023****Table 17****National**

	At the end of the quarter			Cumulative for end of the quarter		
	3 <sup>th</sup> quarter 2023	3 <sup>th</sup> quarter 2022	Diff (%)	2023	2022	Diff (%)
New patients detected	368	350	+5.14	1112	1008	+0.39
Children	48	40	+20.00	122	112	+8.92
Grade 2 Deformities	15	21	-28.57	62	75	-17.33
Multi-Bacillary	242	220	+10.00	747	644	+15.99
Females	141	130	+8.46	430	393	+9.41

District	New patients	G2-Deformity	Children	MB	Females
<b>Central</b>					
Kandy	1	0	0	1	1
Matale	5	0	0	4	0
NuwaraEliya	5	0	1	5	3
<b>Eastern</b>	<b>76</b>	<b>4</b>	<b>16</b>	<b>55</b>	<b>36</b>
Ampara	10	1	1	7	4
Batticaloa	48	3	10	34	24
Kalmunai	11	0	3	8	7
Trincomalee	7	0	2	6	1
<b>Northern</b>	<b>8</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>4</b>
Jaffna	2	0	0	2	0
Kilinochchi	1	0	0	1	1
Mannar	4	0	3	2	2
Vavuniya	1	0	0	1	1
Mullaitivu	0	0	0	0	0
<b>North Central</b>	<b>31</b>	<b>4</b>	<b>3</b>	<b>24</b>	<b>9</b>
Anuradhapura	18	2	1	12	5
Pollonnaruwa	13	2	2	12	4
<b>North Western</b>	<b>33</b>	<b>1</b>	<b>3</b>	<b>17</b>	<b>14</b>
Kurunegala	21	1	3	8	8
Puttalam	12	0	0	9	6
<b>Sabaragamuwa</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>7</b>
Kegalle	3	1	0	3	1
Rathnapura	9	0	0	6	6
<b>Southern</b>	<b>39</b>	<b>0</b>	<b>3</b>	<b>30</b>	<b>15</b>
Galle	18	0	2	15	5
Hambanthota	1	0	1	1	0
Matara	20	0	0	14	10
<b>Uva</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>0</b>
Baddulla	1	0	0	1	0
Monaragala	9	1	1	8	0
<b>Western</b>	<b>148</b>	<b>4</b>	<b>18</b>	<b>82</b>	<b>52</b>
Colombo	70	0	11	35	25
CMC	23	2	4	13	10
Gampaha	36	2	0	24	15
Kalutara	19	0	3	10	2
<b>Sri Lanka</b>	<b>368</b>	<b>15</b>	<b>48</b>	<b>242</b>	<b>141</b>

Source : Anti Leprosy Campaign

## 19. SEXUALLY TRANSMITTED DISEASES

Table 18: New Episodes of STD/HIV/AIDS Reported or Treated at STD Clinics in Sri Lanka –3rd quarter 2023

Disease	New cases or new disease episodes during the quarter			Total new cases or new episodes for the calendar year up to end of the quarter#		
	Male	Female	Total	Male	Female	Total
HIV Positives <sup>1</sup>	127	12	139	434	50	484
Early Syphilis <sup>2</sup>	132	21	153	278	52	330
Late Syphilis <sup>3</sup>	174	70	244	449	197	646
Congenital Syphilis <sup>4</sup>	2	1	3	4	2	6
Gonorrhoea <sup>5</sup>	234	41	275	648	146	794
Ophthalmia Neonatorum <sup>6</sup>	1	0	1	1	0	1
Non specific cervicitis/urethritis	209	604	813	683	1678	2361
Chlamydial Infection	5	3	8	10	3	13
Genital Herpes	350	456	806	953	1307	2260
Genital Warts	370	262	632	1045	797	1842
Pelvic inflammatory disease		24	24		68	68
Trichomoniasis	7	14	21	9	30	39
Candidiasis	340	507	847	1101	1478	2579
Bacterial Vaginosis		461	461		1205	1205
Other sexually transmitted diseases <sup>7</sup>	116	38	154	339	111	450
Non-venereal <sup>8</sup>	2091	989	3080	6312	2772	9084

Source: NSACP

\* Central STD clinic Colombo and peripheral STD clinics of National STD/AIDS Control Programme of Sri Lanka

\*\* - Includes adjustments for revised diagnosis, reporting delays or any other amendments

1 - Includes AIDS cases

2 - Diagnosed within 2 years of infection and considered to be infectious

3 - Diagnosed after 2 years of infection and considered to be non-infectious

4 - Includes both early and late cases

5 - Includes presumptive Gonorrhoea

6 - Includes both gonococcal and chlamydial conjunctivitis in neonatal period

7 - Includes Lymphogranuloma venerium, Granuloma inguinale, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.

8 - Number of STD clinic attendees who were not having sexually transmitted diseases.

## 20. BACTERIOLOGY REPORT, MEDICAL RESEARCH INSTITUTE 3rd QUARTER 2023

Table 19: Bacteriological report, MRI 3rd quarter 2023

		3 <sup>rd</sup> Quarter 2023		
		JULY	AUGUST	SEPT
<b>(A) CHOLERA</b>				
No. of stool specimens Examined		0	0	01
No. of positives El. Tor <i>Cholera</i>		0	0	0
<i>Ogawa</i>		0	0	0
<i>Inaba</i>		0	0	0
<i>Cholera O139</i>		0	0	0
<b>(B) SALMONELLA</b>				
Blood– No. Examined		0	0	0
<i>S.typhi</i>		0	0	0
<i>S.paratyphi</i>		0	0	0
Stools—No. examined		41	22	21
<i>S.typhi</i>		0	0	0
<i>S.paratyphi</i>		0	0	0
Others		04	0	0
<b>(C) SHIGELLA</b>				
No. of specimens examined		41	22	21
<i>Sh.flexneri</i>	<i>I</i>	0	01	0
<i>Sh.flexneri</i>	<i>II</i>	0	0	0
<i>Sh.flexneri</i>	<i>III</i>	0	0	0
<i>Sh.flexneri</i>	<i>IV</i>	0	0	0
<i>Sh.flexneri</i>	<i>V</i>	0	0	0
<i>Sh.flexneri</i>	<i>VI</i>	0	0	0
<i>S. sonnei</i>		0	0	0
<i>S.dysenteriae</i>		0	0	0
<b>(D) ENTEROPATHOGENIC</b>				
<b>E. COLI</b>				
No.Examined		02	02	02
No.+ve		0	0	1
<b>(E) CAMPYLOBACTER</b>				
No.Examined		41	22	21
No. Positive		01	01	0
<b>(F) SPECIAL</b>				

**Table 20: Summary findings for special investigations carried out for clinically confirmed cases of Meningitis from 1st of July to 30th September 2023.**

CSF Culture Report		
CSF Culture	Number	(%)
CSF results available	305	
• No Growth	125	40.9
Enterococcus	01	0.3
Cocci	01	0.3
Culture results not known	0	0
Not done	7	2.3
Information not available	171	56.2
Total	305	100
Final outcome of the patient		
Outcome	Number	(%)
Cured	261	85.57 %
Died	07	2.30%
Information not available	36	11.80 %
Total	305	100%
Final Diagnosis( based on clinical and lab findings)		
Diagnosis	Number	(%)
Culture confirmed	02	0.66%
Probable bacterial meningitis	33	10.82 %
Probable viral meningitis	98	32.13 %
Suspected Meningitis	166	54.43 %
Total	305	100%

## 21. SURVEILLANCE OF MENINGITIS–

Meningitis has been a notifiable disease in Sri Lanka since 2005. During the 3<sup>rd</sup> quarter of 2023, 468 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system.

Out of this 410 cases were clinically confirmed by the Public Health Inspectors during their field investigations. The highest number of meningitis cases were reported from the Kurunegala district (n=83) followed by Gampaha (n=65) and Kegalle (n=41) districts.

About 32.79% (n= 100) of the clinically confirmed meningitis cases belonged to the age group less than one year, another 16.72% (n=51) belonged to the age group 1- <5 years and 15.74 (n=48) belonged to the age group 6 – <15 years. Fifty– seven clinically confirmed cases were males and 41% were females.

## 22. INFLUENZA SURVEILLANCE- 3rd quarter 2023

### Human Influenza surveillance

Surveillance of human influenza is carried out under two main components; Influenza-like illness (ILI) surveillance and Severe Acute Respiratory Infections (SARI) surveillance. As for the ILI surveillance, epidemiological data and respiratory samples are collected from 19 sentinel hospitals throughout the country (GH Ampara, TH Karapitiya, GH Matara, LRH, NIID, NHSL, TH Kalubowila, TH Peradeniya, TH Ratnapura, TH Kurunegala, GH Vavunia, GH Nuwara Eliya, GH Badulla, TH Anuradhapura, GH Polonnaruwa, TH Ragama, GH Chilaw, TH Batticaloa, TH Jaffna). Under SARI surveillance epidemiological data and respiratory samples are collected from four sentinel hospitals (GH Matara, TH Peradeniya, TH Ragama and LRH). These respiratory samples are tested and analyzed at the National Influenza Centre (NIC), and Medical Research Institute (MRI). The Influenza testing facility is also available at TH Kandy, TH Karapitiya, and TH Anuradhapura.

### Epidemiological Component—ILI Surveillance

In the 3<sup>rd</sup> quarter of the year 2023, 18 sentinel sites (GH Ampara, TH Karapitiya, GH Matara, LRH, NIID, NHSL, TH Peradeniya, TH Ratnapura, TH Kurunegala, GH Vavuniya, GH Nuwara Eliya, GH Badulla, TH Anuradhapura, GH Polonnaruwa, TH Ragama, GH Chilaw, TH Batticaloa and TH Jaffna) reported ILI data with a reporting rate of 94.7%. A total of 53,653 ILI cases were reported, accounting for 6.2 % of all OPD visits (n=856,585). During the third quarter, the highest number of ILI cases were reported from TH Anuradhapura (n=9,589 17.9%) and most of the patients were in the age group 15 — 49 years (n=20,148, 37.5%). For the 3<sup>rd</sup> quarter, the highest proportion of infant ILI patients (n=1133, 52.5%) was reported from TH Anuradhapura.

### SARI Surveillance

A total of 1037 SARI cases were reported for the 3rd quarter of 2023 from four sentinel hospitals. Out of 27,362 admissions during the 3rd quarter, to the medical and pediatrics wards in the relevant hospitals, 3.8 % were due to SARI. The highest number of SARI cases was reported from LRH (n=546, 52.6 %).

### Laboratory Component

A total of 465 respiratory samples were received at the MRI, TH Kandy, TH Karapitiya and TH Anuradhapura during the 3<sup>rd</sup> quarter of 2023. The months of July, August and September received 187, 151 and 127 samples respectively. 35 samples were positive for influenza A and 18 were positive for Influenza B during the 3<sup>rd</sup> quarter of 2023. Therefore, influenza A was the predominant circulating Influenza viral strain identified.

### Bird Influenza Surveillance

Sri Lanka has been recognized as carrying a high risk for Avian Influenza (AI) making bird influenza surveillance an important component of the influenza surveillance system. This high risk is mainly due to its location in the South East Asian Region. The country's poultry industry with a significant proportion of people engaged in backyard poultry and the commercial level poultry industry adds to this risk. Also, the country being a hotspot for migratory birds, attracting over two hundred species of migratory birds annually in two migratory seasons, is another risk factor that makes bird influenza surveillance necessary. Bird surveillance is conducted by the Department of Animal Production and Health (DAPH) with serum samples collected from poultry farms every month and faecal samples collected from migratory bird hotspots during the two migratory seasons, where fifteen faecal samples are collected from each birding hotspot, pooled in bottles with five samples in each and analyzed at the virology laboratory at Polgolla.

**TABLE 21: TYPES OF INFLUENZA VIRUSES ISOLATED IN ILI SAMPLES FOR THE 3<sup>rd</sup> QUARTER OF THE YEAR 2023**

Month	Total tested	Total positives	Influenza A	A (H1N1)	A (H3N2)	Not typed	Influenza B
July	187	42	26	4	6	16	16
August	151	8	6	0	4	2	2
September	127	3	3	0	2	1	0
Total	465	53	35	4	12	19	18

*(Source: NIC/MRI, TH Kandy, TH Karapitiya, TH Anuradhapura)*

The total positive rate for influenza A was 7.5% and was the predominant strain identified for the 3rd quarter of 2023.

**TABLE 22: ANIMAL SAMPLES COLLECTED BY MONTH AND DISTRICT FOR THE 3rd QUARTER OF THE YEAR 2023**

Month	Pool samples for embryonated chicken egg passage	District samples collected from	Serum Samples for ELISA	District samples collected from
July	1728	Anuradhapura, Badulla, Batticaloa, Chilaw, Dambulla, Homagama, Jaffna, Kegalle, Kundasale, Vavuniya, Welisara, Rathnapura, AQM, AQB, Zoological Garden	371	Anuradhapura, Badulla, Batticaloa, Dambulla, Jaffna, Kegalle, Kilinochchi, Kundasale, Vavuniya, Welisara, AQB
August	1108	Anuradhapura, Chilaw, Dambulla, Homagama, Kaluthara, Kegalle, Pannala, Wariyapola, Welisara, Rathnapura, AQM, AQB	728	Chilaw, Galle, Homagama, Kegalle, Matara, Pannala, Wariyapola, Welisara, AQB
September	1923	Anuradhapura, Chilaw, Galle, Homagama, Kaluthara, Kegalle, Kilinochchi, Kundasale, Mullative, Monaragala, Pannala, Polonnaruwa, Welisara	389	Anuradhapura, Chilaw, Homagama, Kegalle, Kilinochchi, Kundasale, Pannala, Polonnaruwa, Welisara, AQB
Total	4759		1488	

\*

AQM — Animal Quarantine office Maththala, AQB Animal Quarantine office Katunayaka

(Source: *Department of Animal Production and Health*)

All samples were negative for AI virus isolation for the 3<sup>rd</sup> quarter of 2023.



**23. Special Reports –****SURVEILLANCE OF CHICKENPOX**

Of the 1596 notified Chickenpox cases, 1519 (95.2%) were confirmed for the 3<sup>rd</sup> quarter of 2023. The highest districts reporting was Kurunegala (171) followed by Kalutara (141), Kegalle (139), Colombo and Matara reported each (104), and Galle (94). September was the highest month reporting (677) in the 3<sup>rd</sup> quarter. According to the case-based investigation, the maximum presentation of cases was 21 - 40 years of age (49.8%) and male (52.8%). The majority (80.0%) was found as no complications. Myocarditis (6), Pneumonia (3), and Encephalitis (2) were found as complications.

**SURVEILLANCE OF MUMPS**

Of the 66 notified Mumps cases, 47 (71.2%) were confirmed for the 3<sup>rd</sup> quarter of 2023. The highest district reporting was Anuradhapura (7), followed by Jaffna (6), Nuwara Eliya, Galle, and Kurunegala reporting 5 cases each. September (29) was the highest month reporting in the 3<sup>rd</sup> quarter. According to the case-based investigation, the maximum presentation of

**SURVEILLANCE OF WHOOPING COUGH**

Altogether seven patients were notified while only three cases were clinically confirmed as whooping cough-like illness during 2023. Their ages ranged from one month to two years.

Three notifications were received while two were clinically confirmed as whooping cough-like illnesses in the 3<sup>rd</sup> quarter. They were a 22-day-old newborn from Gampaha district and a two-month-old infant from Kandy district. The two-month-old infant has not yet received the 1<sup>st</sup> DPT containing vaccine.

**SURVEILLANCE OF LEISHMANIASIS**

Of 2390 examined suspected Leishmaniasis patients, 1150 (48.1%) were confirmed for the 3<sup>rd</sup> quarter of 2023. The highest district reporting was Kurunegala (290) followed by Anuradhapura (234) Hambantota (126) Matara (68) and Matale (55). August was the highest month reporting (453) in the 3<sup>rd</sup> quarter.

## 24. SUMMARY OF NOTIFIABLE DISEASES

Table 23 – 3rd quarter 2023

Health Region	Dy se n t e r y	En- ce ph alit is	En- teri c Fe- ver	Fo od Poi so nin g	Hu ma n Ra- bie s	Le pto spi ros is	Me asl es	Si m ple Co n- Fe- ver	Tet an us	Ty- ph us Fe- ver	Vi- ral He pat itis	Wh oo pin g Co ugh	De ng ue Fe- ver / DH F	Tu- ber cul osi s	Chi ck en po x	Mu mp s	Me nin giti s	Lei sh ma nia sis
Colombo	7	2	1	5	0	79	167	1	0	0	2	0	2628	542	104	3	13	1
Gampaha	11	3	4	3	0	150	70	0	0	3	7	1	2240	214	85	3	65	14
Kalutara	8	2	1	11	0	217	39	0	0	1	6	0	1064	178	173	5	35	1
Kandy	9	2	3	5	1	84	11	0	0	16	0	1	2853	174	92	3	8	8
Matale	2	3	0	21	0	17	7	0	1	4	3	0	520	24	23	0	3	89
Nuwara-Eliya	56	2	0	11	0	54	9	10	0	21	1	0	102	80	88	5	15	2
Galle	13	1	0	10	0	222	17	0	0	43	1	0	968	121	94	5	13	1
Hambantota	5	0	0	1	0	53	5	0	0	18	2	0	282	42	37	1	2	180
Matara	5	2	0	8	0	83	13	2	0	12	3	0	585	2	104	3	6	55
Jaffna	34	1	3	15	1	4	77	3	0	33	3	0	400	74	43	6	9	0
Kilinochchi	4	0	1	0	0	1	0	0	0	1	0	0	16	11	7	1	2	0
Mannar	0	0	0	0	0	6	3	0	0	0	1	0	10	8	1	0	1	1
Vavuniya	5	0	0	18	0	5	3	1	0	1	1	0	41	13	9	1	9	3
Mullaitivu	4	1	1	1	0	7	0	0	0	1	0	0	27	13	5	2	2	2
Batticaloa	32	2	0	1	1	18	0	2	0	0	3	0	304	36	43	1	10	0
Ampara	4	0	0	53	0	15	0	0	0	1	0	0	58	24	24	4	17	3
Trincomalee	9	0	1	50	0	11	1	0	0	2	3	0	135	34	31	0	9	4
Kurunegala	13	8	1	3	0	107	8	1	0	8	2	1	599	135	171	5	83	189
Puttalam	23	2	0	1	0	41	1	2	0	1	0	0	280	29	21	1	30	4
Anuradhapura	8	1	0	6	2	27	14	0	0	2	2	0	144	97	72	8	13	207
Polonnaruwa	5	1	1	5	0	28	11	0	0	2	1	0	97	72	26	0	4	119
Badulla	14	2	0	17	0	86	5	0	0	22	22	0	301	74	40	3	16	18
Moneragala	6	1	0	8	1	66	2	0	0	6	7	0	246	18	15	3	26	52
Ratnapura	14	3	1	19	1	277	20	3	0	9	5	0	558	136	78	2	25	56
Kegalle	9	1	0	7	0	152	11	0	0	20	3	0	830	70	139	4	41	20
Kalmunai	22	0	0	0	0	15	2	0	0	0	0	0	168	49	71	1	13	0
<b>Total</b>	<b>322</b>	<b>40</b>	<b>18</b>	<b>279</b>	<b>7</b>	<b>1825</b>	<b>496</b>	<b>25</b>	<b>1</b>	<b>227</b>	<b>78</b>	<b>3</b>	<b>15456</b>	<b>2270</b>	<b>1596</b>	<b>69</b>	<b>470</b>	<b>1029</b>

No polio cases. (from AFP surveillance system).

## ON STATE SERVICE

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