

Volume 56
January-March
2018

EPIDEMIOLOGICAL BULLETIN

SRI LANKA

First Quarter
2018

EPIDEMIOLOGY UNIT

A publication of the Epidemiology Unit
Ministry of Health
No. 231, De Saram Place, MoH
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www.epid.gov.lk

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Epidemiology Unit
Ministry of Health



1. POLIOMYELITIS

Thirteen (13) Acute Flaccid Paralysis (AFP) cases were notified to the Epidemiology Unit during the 1st quarter 2018. The numbers' as lower than the reported AFP cases during the 1st quarter 2017 which is 26. Reported number for the quarter was below the expected number of AFP cases per quarter to meet the annual surveillance target of 2/100,000 under 15 year age population. The non-polio AFP rate for the first quarter of 2016 was 0.47/100,000 under 15 - year old population.

Notification of AFP Cases from Hospitals

All hospitals where Consultant Paediatricians are available are considered as sentinel site hospitals for AFP weekly zero reporting surveillance. A total of 91 sentinel sites are currently functioning and last updated in 2017.

AFP notifications from all health care institutions are expected to report immediately on to the Epidemiology Unit, to the Regional Epidemiologist and to the Medical Officer of Health (MOH) of the patient's residential area.

Out of the total 13 cases, 4 cases were reported from Children's hospitals in Colombo and Peradeniya, while six cases were reported from Teaching hospitals of Karapitiya, Anuradhapura, Peradeniya and Kandy. These are tertiary care hospitals where referrals from other hospitals are received. The hospitals reporting AFP cases during January to March are given in Table 1.

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

Central province, districts of Kandy and Matale have reported 4 cases while other districts given in table 2 have reported 1 or 2 cases for the quarter.

Table 01 :Notification of AFP cases by sentinel hospitals : 1st Quarter 2018

Hospital	No: of cases reported
Lady Ridgeway Hospital	3
T.H.Karapitiya	2
G.H.Badulla	1
TH Peradeniya	1
TH Kandy	2
TH Anuradhapura	1
SBSCH	1
BH Homagama	1
BH Wathupitiwala	1
Total	13

Table 02 : Geographical distribution of AFP cases 1st quarter 2018

Province	District	MOH Area	Number of AFP cases
Western	Colombo	CMC	1
		Padukka	1
	Gampaha	Weyangoda	1
Southern	Hambantota	Agunukolapalassa	1
		Sooriyawewa	1
Central	Kandy	Pathadumbara	1
		Gangawtaa korale	1
		Harispathuwa	1
		Matale	Ukuwela
Eastern	Batticaloa	Batticaloa	1
North Western	Kurunegala	Rideegama	1
Uva	Badulla	Passara	1
		Mihintale	1
North Central	Anuradhapura	Mihintale	1
Total			13

Seasonal Distribution of AFP Cases

Majority of cases were reported during the month of February (6 cases, 46%). No significant seasonal variation observed during the period.

Age and Sex Distribution of AFP cases

Majority of AFP cases (54%) was females during the 1st quarter 2018. During the 1st quarter 2017 the trend was not similar as the reported majority being males.

Majority of AFP cases (69%) were in 1-9 year age group and the age sex distribution of reported cases is given in table 3.

Table 03. Distribution of AFP cases by Age 1st Quarter 2018.

Age Group	Sex		Total
	Male	Female	
<1 year old	0	0	00
1-4 year old	2	2	04
5-9 year old	2	3	05
10-15 year old	2	2	04
Total	6	7	13

Final diagnoses of AFP cases

Majority (89%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 13 cases of AFP are given in table 4.

Table 04: Final diagnoses of AFP patients reported during 1st quarter 2018

Final Diagnoses	Frequency
GBS	11
Miller Fisher syndrome	1
Spinal muscular atrophy	1
Total	13

Laboratory exclusion of poliomyelitis in AFP Cases

Two stool samples collected within 14 days of onset of paralysis are required at the Virology laboratory (Medical Research Institute, WHO Regional Reference Laboratory) for exclusion of polio virus.

According to WHO criteria these samples should be of 'good condition' as well as timely. Being of correct quantity (8-10g), being 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 are the criteria to be completed to make samples of 'good condition'. Timely stool collection rate for the quarter was 92%. Hospitals contributed for late stool samples were T.H.Karapitiya, LRH and T.H Kandy and reasons identified in majority of cases were transferring from other hospitals to referral centers and exceeded the expected time period when stool samples were collected.

2. MEASLES

There were 47 "fever and rash cases" reported as suspected measles patients during the first quarter 2018 based on the new elimination case definition updated in 2017. This number was little higher than the number reported during the previous quarter which was 40 suspected measles cases. The clinical case definition of "fever and maculopapular rash with one of the signs of cough, coryza or conjunctivitis" remained to categorize patients for those who have not been laboratory tested for measles. Measles laboratory confirmed cases remained as 1 who has had clear history of contact for a measles case in China and the measles incidence was <0.05/million population. This was considered as an import related outbreak situation. In fact, field investigations have been done with contact testing and outbreak response immunization in curtailing possible community transmission.

All clinical cases were field investigated by the respective Medical Officers of Health (MOH) of the patients' residential areas. Special case based investigation forms were received at the Epidemiology Unit to identify vaccination status, risk categories and exposure status in relevant cases.

Table 05: Distribution of notified suspected measles with "fever-maculopapular rash" cases by district: 1st Quarter 2018

District	cases	District	cases
Colombo	8	Batticaloa	1
Gampaha	8	Ampara	3
Kalutara	3	Trincomalee	2
Kandy	1	Kurunegala	2
Mannar	1	Puttalam	2
Kalmunai	1	Anuradhapura	4
Galle	2	Polonnaruwa	2
Hambantota	1	Badulla	0
Matara	0	Monaragala	0
Jaffna	1	Ratnapura	2
Vavuniya	0	Kegalle	0
Kilinochchi	0	Nuwara Eliya	3

Western Province has reported the highest number (n=19) of fever and maculopapular rash cases suspected of measles cases. Guidelines for measles and rubella elimination have been changed since February 2017 which includes broadening the case definition to identify all possible measles and rubella cases to be tested and excluded as non measles and non rubella cases. This is a requirement in heading for elimination targets which is expected to be achieved by 2020.

Laboratory investigations of 39 “fever and maculopapular rash” patients suspected of measles or rubella were carried out in the WHO accredited virology Laboratory at the Medical Research Institute (MRI) for Measles or Rubella IgM testing. The testing rate of suspected cases for measles and rubella was 83%, satisfying the expected target of 80%.

3. LEPTOSPIROSIS

During the 1st Quarter 2018, 938 cases and 19 deaths (CFR 2.0 %) due to Leptospirosis were notified to the Epidemiology Unit compared to 1437 cases and 23 deaths in the previous quarter and 636 cases and 9 deaths during the corresponding quarter of 2017.

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

Table 06: SELECTED CHARACTERISTICS OF LEPTOSPIROSIS PATIENTS(%)- 1st QUARTER 2018.

Age Group	Sex	
	Male	Female
0 - 9 years	0.00	0.00
10 - 19 years	6.59	0.00
20 - 29years	22.53	8.00
30 - 39years	18.13	28.00
40 - 49years	20.33	12.00
50 - 59 years	17.03	32.00
>60years	15.38	20.00
Total	100.00	100.00

4. HUMAN RABIES

Seven cases of Human Rabies were notified to the Epidemiology Unit in the 1st quarter, 2018 compared to 07 cases in the previous quarter and 5 cases in the corresponding quarter of year 2017. The seven notified cases have been confirmed.

Animal Rabies

During this quarter, 87 dogs were reported positive for rabies, compared to 114 in the previous quarter and 114 positive in the same period last year.

Rabies Control Activities

Dog vaccination - A total of 134084 dogs were immunized during the Quarter under review when compared to 375931 in the previous quarter and 309791 in corresponding Quarter of last year.

Animal Birth control

Chemical- A total of 362 female dogs were injected with birth control injections (Progesterone) during the quarter under review. **Surgical**- No female dogs were subjected to sterilization by surgical method during the quarter under review.

5. VIRAL HEPATITIS

In the 1st Quarter 2018, a total of 53 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 102 cases in the previous quarter and 126 cases in the corresponding quarter of 2017. Badulla district (8 cases) reported the highest number of cases followed by Nuwaraeliya District (6 cases).

6. ENTERIC FEVER

In the 1st Quarter 2018, a total of 85 cases of Enteric fever were reported to the Epidemiology Unit, compared to 129 cases in the previous quarter and 109 cases in the corresponding quarter of 2017. The district of Colombo (14 cases) reported the highest number of cases, followed by Vavuniya (12 cases).

7. DYSENTERY

In the 1st Quarter 2018, a total of 385 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 775 cases in the previous quarter and 530 cases in the corresponding quarter of 2017. Rathnapura district (46 cases) and Batticaloa (43 cases) reported the highest numbers of cases.

8. MALARIA

There were no indigenous malaria cases reported during the 1st quarter of 2018. Fourteen imported malaria cases were reported in the 1st quarter of 2018.

Table 07:SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE –1st QUARTER 2018

Variable	Category	Percentage
Sex	Male	06 (43%)
	Female	08 (57%)
Age group	< 1 y	00 (00%)
	1-10 y	03 (21%)
	11- 20	01 (07%)
	21-50Y	04 (29%)
	> 50 Y	06 (43%)
District	Ratnapura	06(43%)
	Gampaha	01(07%)
	Matara	01 (07%)
	Vavuniya	01 (07%)
	Batticaloa	01 (07%)
	Galle	02(14%)
	Kurunagela	02 (14%)

Table 08: Results of Blood smear examination for malaria parasites - 1st Quarter 2018

	1st quarter 2017	1st quarter 2018
No. of blood smears examined	244,463	273,163
No. of positives	0	0
No. of <i>P. vivax</i>	0	0
No. of <i>P. falciparum</i>	0	0
No. of mixed infections	0	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.00	0.00
P.v. : P.f. ratio	0	0
Percentage of infant positives	0	0

9.JAPANESE ENCEPHALITIS (JE) - 1ST

QUARTER 2018

During the 1st quarter of 2018, 69 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 43 cases were clinically confirmed by the Public Health Inspectors during their field investigations.

During the 1st quarter of 2018, MRI has reported 14 lab confirmed JE cases. Out of these 14 confirmed JE cases, all (100%) were investigated by the MOOH.

Among them, 06 (43%) were over 50 years of age, another 04 (29%) were between 21 -50 years, another 01(07%) was between 11 - 20 years, another 3 (21%) were 1-10 years while none were less than one year.

The highest number of confirmed JE cases (06) were reported from Ratnapura, and Galle & Kurunagela (2) each, Gampaha (1) Vavuniya (1), Batticaloa (1) Matara (2),. The majority of confirmed JE cases have not been immunized

Table 09: Distribution of number of blood smears examined by district RMO– 1st Quarter 2018

RMO	January	February	March	Total
Ampara	2081	2346	1930	6357
Anuradhapura	4433	4623	4879	13935
Badulla	3660	3525	3427	10612
Batticaloa	6474	6325	6402	19201
Colombo	7971	7019	7451	22441
Embilipitiya	3688	4060	3885	11633
Galle	2063	1881	1736	5680
Gampaha	3529	5271	5524	14324
Hambantota	1711	1465	1872	5048
Jaffna	6408	5096	5386	16890
Kalmune	4404	4380	4543	13327
Kalutara	1676	1236	2046	4958
Kandy	5016	5331	5273	15620
Kegalle	1612	1573	2783	5968
Kilinochchi	2532	2160	2258	6950
Kurunegala	6580	6201	6188	18969
Maho	1625	1454	1625	4704
Mannar	2218	2547	2011	6776
Matale	2820	3222	2816	8858
Matara	1999	1596	2419	6014
Moneragala	3720	4072	3636	11428
Mulativu	2254	1935	2258	6447
Nuwara eliya	537	535	526	1598
Polonnaruwa	3722	3523	3734	10979
Puttalam	2547	2919	3694	9160
Trincomalee	3099	2731	2737	8567
Vavuniya	2503	2170	2046	6719
Sri Lanka	90882	89196	93085	273163

Table 10:**MORBIDITY AND MORTALITY DUE TO DF/DHF - 1ST QUARTER 2018**

RDHS	No of Cases reported in 2nd Quarter 2017	%	Deaths	CFR
Colombo	2274	15.01	3	0.13
Gampaha	1354	8.94	1	0.07
Kalutara	1050	6.93	1	0.10
Kandy	933	6.16	1	0.11
Matale	276	1.82	0	0.00
Nuwara Eliya	49	0.32	0	0.00
Galle	368	2.43	0	0.00
Hambantota	371	2.45	0	0.00
Matara	351	2.32	0	0.00
Jaffna	1157	7.64	0	0.00
Kilinochchi	97	0.64	0	0.00
Mannar	20	0.13	0	0.00
Vavuniya	167	1.10	1	0.60
Mulativu	25	0.17	1	4.00
Batticaloa	1642	10.84	3	0.18
Ampara	52	0.34	0	0.00
Trincomalee	254	1.68	0	0.00
Kurunegala	990	6.54	0	0.00
Puttalam	931	6.15	2	0.21
Anuradhapura	291	1.92	1	0.34
Polonnaruwa	86	0.57	0	0.00
Badulla	144	0.95	0	0.00
Moneragala	386	2.55	0	0.00
Ratnapura	531	3.51	0	0.00
Kegalle	406	2.68	0	0.00
Kalmunai	943	6.23	1	0.11
Total	15148	100.00	15	0.10

Table 11

DF/DHF STATISTICS FROM THE DEPARTMENT OF VIROLOGY, MRI - 1ST QUARTER 2018

Month	Clinically Suspected Cases Tested for DF/DHF	Serologically Confirmed Cases as DF/DHF
January	155	39 (25.2%)
February	145	22 (15.2%)
March	134	42 (31.3%)
TOTAL	434	103 (23.7%)

10. DENGUE FEVER (DF) / DENGUE HAEMORRHAGIC FEVER (DHF) – 1st QUARTER 2018

During the 1st quarter of 2018; 15,148 cases of DF/DHF were reported from all districts (Table 1) while 15 deaths were reported (CFR 0.10%) when compared to 26,235 cases of DF/DHF reported with 37 deaths (CFR 0.14%) reported during the 4th quarter of 2017. Proportion of cases notified in January, February and March were 48.05%, 29.64% and 22.31% respectively.

Special surveillance data of confirmed cases were received and analyzed for the 1st quarter of 2018. Age distribution of reported cases were 4.7% in <4 years age group, 12.7% in 5-9 years of age group, 13.9% in 10-14 years of age, 8.2% in 15-19 years of age, 9.1% in 20-24 years of age, 8.8% in 25-29 years of age, 7.4% in 30-34 years of age, 7.5% in 35-39 years of age, 5.5% in 40-44 years of age, 3.9% in 45-49 years of age, 5.9% in 50-54 years of age, 2.7% in 55-59 years of age and 5.0% in >60 years of age.

According to the Special surveillance data on clinical findings majority of the reported cases 79.2% were classified as dengue fever (DF) while 20.5% were classified as dengue Haemorrhagic fever (DHF).

During the 1st quarter of 2018, 434 blood samples were tested using IgM capture ELISA test at the Department of Virology, Medical Research Institute (MRI) and 103 (23.7%) samples were confirmed as positive. (Table 10).

11. RUBELLA AND CONGENITAL RUBELLA SYNDROME (CRS) 1st quarter 2018**Rubella:**

Laboratory confirmed rubella cases were not reported for the whole quarter, based on the suspected fever and maculopapular rash cases notified. All cases suspected of measles and reported were tested for rubella and excluded as non-rubella cases for the quarter.

CRS:

There were no CRS cases for the quarter based on the TORCH screening and notified suspected cases with any congenital abnormalities

12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 1st Quarter 2018. Last case of cholera was reported in the country in January 2003.

13. TETANUS

All reported Tetanus cases (7) were clinically confirmed during the 1st quarter 2018. Colombo, Kandy, Matale, Galle, Anuradhapura, Ratnapura and Kulmunai were the reporting districts during the 1st Quarter and reported one Tetanus case per district. All clinically confirmed Tetanus cases were above 60 years of age (100%) and the majority was male (80%).

14. SURVEILLANCE REPORT ON AEFI- 1ST QUARTER 2018

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 1st Quarter of 2018 has reached 100.0% of completeness of reports, while 58.5% reports were received in time at the Epidemiology Unit indicating good compliance for the system by MOOH. Colombo, Gampaha, Kalutara, Kandy, Matale, Nuwara Eliya, Galle, Hambantota, Matara, Jaffna, Kilinochchi, Mannar, Vavuniya, Mullativu, Batticaloa, Ampara, Trincomalee, Kurunegala, Puttalam, Anuradhapura, Polonnaruwa, Badulla, Moneragala, Rathnapura, Kegalle, Kalmunai were able to send all reports. The best timeliness was reported from the Jaffna district (93.4%) followed by Vavuniya (91.7%) and Kilinochchi (75.0%). (Table 1)

The highest percentage of nil reports were received from Ampara (58.9%) followed by Mullativu district (38.0%), which is more than two fold of the Sri Lanka average (25.0%) indicating the need for more attention for surveillance. followed by Kegalle (6.0%) and Kalutara districts (6.3%) indicating the good surveillance of the system in place. The highest rate (666.2 per 100,000 immunizations) of AEFI was reported from Jaffna district, while Colombo reported the highest number of 295 AEFI cases in the first quarter 2018.

For the first quarter, the highest number of AEFI (n=1671) was reported against Pentavalent vaccine, whereas the highest rate of AEFI (1267/100,000 doses administered) was reported against DTP vaccine. The rate of AEFI for Pentavalent (01st, 02nd & 03rd dose) is 703.7 per 100,000 doses administered. High Fever (923), Allergic Reaction (434), Nodule (601) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (523 cases: 223.9 per 100,000 doses administered) and DPT (337 cases: 417.6 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to DPT (168 cases: 205.5 per 100,000 doses administered) and PVV (149 cases: 63.3 per 100,000 doses administered).

Table 12:

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 1ST QUARTER 2018

DPDHS	% completeness	% Timely returns	% Nil Returns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	100.0	62.9	8.9	295	219.6
Gampaha	100.0	56.0	7.7	205	152.0
Kalutara	100.0	48.5	15.7	132	159.2
Kandy	100.0	31.9	16.5	250	237.7
Matale	100.0	64.1	23.5	78	196.0
Nuwara Eliya	100.0	33.8	26.6	74	130.8
Galle	100.0	62.3	26.0	110	156.8
Hambantota	100.0	52.2	6.3	147	308.6
Matara	100.0	57.0	12.7	145	247.4
Jaffna	100.0	93.9	8.1	222	666.4
Kilinochchi	100.0	78.0	19.7	32	382.5
Mannar	100.0	77.3	34.0	32	353.6
Vavuniya	100.0	91.7	28.0	66	492.1
Mullativu	100.0	40.9	38.3	56	646.8
Batticaloa	100.0	40.1	40.1	52	118.9
Ampara	100.0	35.0	58.9	20	97.9
Trincomalee	100.0	45.4	26.8	65	174.4
Kurunegala	100.0	50.6	34.3	180	474.2
Puttalam	100.0	45.6	36.9	52	44.0
Anuradhapura	100.0	45.1	18.3	172	284.3
Polonnaruwa	100.0	22.0	20.0	72	97.1
Badulla	100.0	57.2	17.6	95	277.2
Moneragala	100.0	66.7	16.2	64	101.1
Ratnapura	100.0	58.6	15.8	180	431.3
Kegalle	100.0	63.6	5.0	123	157.7
Kalmunai	100.0	43.8	38.0	52	92.5
Sri Lanka	100.0	58.5	25.0	2971	202.3

Table 13: Number of Selected Adverse Events by Vaccines – 1st Quarter 2018

	BCG	OPV	PVV ¹	DPT	MMR	LJE	DT	TT	aTd	Total number of AEFI reported
Total Number of AEFI Reported	8	3	1671	989	118	65	59	22	39	2971
AEFI reporting rate/1,000,000 doses administered	9.8	1.3	703.7	1266.9	72.9	79.6	71.3	14.6	48.2	
High Fever (>39°C)		0	523	337	20	23	12		8	923
Reporting rate/1,000,000 doses administered		0	223.9	413.6	12.9	32.0	13.7		4.2	
Allergic reactions		0	149	168	62	18	26	6	5	434
Reporting rate/1,000,000 doses administered		0	63.3	205.5	39.1	21.3	29.3	4.7	6.2	
Severe local reactions			33	43	2	1	5		1	84
Reporting rate/1,000,000 doses administered			14.4	49.9	0.8	1.5	5.7		1.2	
Seizure (Febrile/Afebrile)			28	88	4	8	3			131
Reporting rate/1,000,000 doses administered			11.3	103.0	2.5	8.6	2.2			
Nodules			454	125	3	1	9	3	14	609
Reporting rate/1,000,000 doses administered			194.7	152.1	1.9	1.3	9.6	2.1	14.4	
Injection site abscess	1		170	32				4		205
Reporting rate/1,000,000 doses administered	1.9		69.5	31.9				1.4		
HHE			2			1				3
Reporting rate/1,000,000 doses administered			0.9			1.3				

1-PentaValent Vaccine

Note: Total given only for nine vaccines listed in the table

15. TUBERCULOSIS

A total of 1925 TB patients were notified to the NPTCCD by H816A (TB notification form) for the first quarter 2018, while 2106 patients were registered at chest clinics during the same quarter according to the Quarterly Report on Case Finding (TB 08). Out of this, 1970 TB patients (93.5%) were new TB cases, 134 (6.4%) were 're-treatment cases' and there wasn't any cases identified for 'previous treatment history unknown' category. Out of the new TB cases, 967 (49.1%) were bacteriologically confirmed TB, 438 (22.2%) were clinically diagnosed (sputum negative) TB and 565 (28.7%) were new extra pulmonary TB cases. Out of this 're-treatment' cases, 85 (63.4%) patients were 'relapse', 17 (12.7%) patients were 'Treatment After Failure', 26 (19.4%) patients were 'loss to follow-up' and 06 (4.5%) patients were 'other previously treated'. A total of 1999 TB patients were screened for HIV, out of these four were positive for HIV. A total of 06 patients were TB/HIV co-infection. Four Multi-Drug Resistant TB patients were detected during the above quarter. Distribution of TB patients by RDHS division is given in table 14.

Table 14: TUBERCULOSIS PATIENTS BY RDHS DIVISIONS

RDHS DIVISION	New				Retreatment & previous history un-	Total
	PTB sp+ve	PTB sp-ve	EPTB	Total		
Colombo	240	81	119	440	43	483
Gampaha	128	63	67	258	13	271
Kalutara	73	38	36	147	5	152
Kandy	72	44	52	168	6	174
Matale	11	8	8	27	3	30
Nuwara Eliya	24	15	33	72	6	78
Galle	58	10	21	89	6	95
Matara	23	5	15	43	1	44
Hambantota	14	6	12	32	3	35
Jaffna	19	19	24	62	6	68
Vavuniya	5	2	1	8	2	10
Batticaloa	18	6	10	34	2	36
Ampara	2	4	8	14	2	16
Kalmunai	13	22	13	48	2	50
Trincomalee	19	4	6	29	2	31
Kurunegala	45	19	22	86	6	92
Puttalam	14	14	12	40	4	44
Anuradhapura	30	1	18	49	1	50
Polonnaruwa	11	3	9	23	1	24
Badulla	27	9	19	55	5	60
Monaragala	18	12	5	35	1	36
Rathnapura	52	12	30	94	9	103
Kegalle	32	26	18	76	5	81
Mannar	8	1	3	12	2	14
Mulathivu	4	5	3	12	0	12
Kilinochchi	7	9	1	17	0	17
Total	967	483	565	1970	136	2106

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 15: TB/HIV status

TB/HIV States	Number
TB patients screened for HIV in the 1st quarter	1999
No of patients found to be positive for HIV in the same semester	4
Known positive HIV patients in 1st quarter	2
Total HIV/TB co infection	3

16. SURVEILLANCE AT SEA PORT

Details of vaccinations carried out by the Assistant Port Health Office during the 1st quarter 2018, is as follows;

Table 16: Surveillance at sea port : 1st quarter 2018

	Vaccination data	Total
A.	Yellow fever	1133
B.	Meningococcal meningitis	405
C.	Oral polio	123

17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 1st Quarter 2018 is given below.

Table 17: Surveillance at airport : 1st quarter 2018

Emerging and reemerging disease (Ebola/MERS CoV/ SARS.... Etc)	
Ebola	
No. Of passengers screened	00
No. Of suspected cases transferred	00
Zika	
No. Of passengers screened	00
No. Of suspected cases transferred	00
Malaria	
No. of passengers visited the Health office	241
No. of passengers drug issued	07
No. of blood films done (R.D.T.)	217
Referred to I.D.H./Other unit	00
Yellow Fever	
No. of yellow fever cards inspected	1460
No. Invalid/without Yellow Fever cards	31
Referred to I.D.H/Other units	00

18. LEPROSY**QUARTERLY RETURN OF LEPROSY STATISTICS - 1ST QUARTER 2018****1.NATIONAL****Table 18**

	At the end of the quarter			Cumulative for end of the quarter		
	1st quarter 2018	1st quarter 2017	Diff (%)	2018	2017	Diff (%)
New patients detected	430	469	-(8.31)	430	469	-(8.31)
Children	34	47	-(27.65)	34	47	-(27.65)
Grade 2 Deformities	26	33	-(21.21)	26	33	-(21.21)
Multi-Bacillary	256	266	-(3.75)	256	266	-(3.75)
Females	173	194	-(10.82)	173	194	-(10.82)

2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	13	1	1	8	6
Kandy	9	1	1	5	5
Matale	4	0	0	3	1
NuwaraEliya	0	0	0	0	0
Eastern	54	1	6	37	24
Ampara	14	0	0	11	4
Batticaloa	20	0	3	13	11
Kalmunai	14	1	1	8	7
Trincomalee	6	0	2	5	2
Northern	18	1	2	9	14
Jaffna	7	0	0	4	6
Kilinochchi	1	0	1	1	1
Mannar	2	0	0	0	1
Vavuniya	5	1	1	3	4
Mullaitivu	3	0	0	1	2
North Central	31	3	1	19	11
Anuradhapura	25	3	0	14	8
Pollonnaruwa	6	0	1	5	3
North Western	42	2	2	27	19
Kurunegala	29	2	1	21	12
Puttalam	13	0	1	6	7
Sabaragamuwa	28	0	1	12	6
Kegalle	9	0	0	4	2
Rathnapura	19	0	1	8	4
Southern	54	8	4	39	18
Galle	18	4	2	13	7
Hambanthota	10	2	1	8	1
Matara	26	2	1	18	10
Uva	17	2	0	9	3
Baddulla	11	0	0	7	2
Monaragala	6	2	0	2	1
Western	173	8	17	96	72
Colombo	56	2	5	27	30
CMC	18	0	3	11	6
Gampaha	56	4	6	34	20
Kalutara	43	2	3	24	16
Sri Lanka	430	26	34	256	173

19. SEXUALLY TRANSMITTED DISEASES

Table 19

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA

1ST QUARTER 2018

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 ¹	75	15	90	75	15	90
AIDS	13	2	15	13	2	15
Early Syphilis ²	6	2	8	6	2	8
Syphilis Late Syphilis ³	140	60	200	140	60	200
Congenital Syphilis ⁴	0	0	0	0	0	0
Gonorrhoea ⁵	43	14	57	43	14	57
Ophthalmia Neonatorum ⁶	0	0	0	0	0	0
Non specific cervicitis/urethritis	205	446	651	205	446	651
Chlamydial infection	0	0	0	0	0	0
Genital Herpes	304	433	737	304	433	737
Genital Warts	302	274	576	302	274	576
Pelvic inflammatory disease	0	22	22	0	22	22
Trichomoniasis	3	8	11	3	8	11
Candidiasis	319	480	799	319	480	799
Bacterial Vaginosis	0	349	349	0	349	349
Other sexually transmitted diseases ⁷	101	66	167	101	66	167
Non venereal	938	547	1485	938	547	1485

Source: NSACP

(Includes cases diagnosed and reported to the 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 venereum, 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 1st QUARTER 2018
Table 20: Bacteriological report, MRI 1st Quarter 2018.

	1 st Quarter 2018		
	JANU-ARY	FEBRU-ARY	MARC H
(A) CHOLERA			
No. of stool specimens Examined	20	0	8
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) SALMONELLA			
Blood— No. Examined	2	3	3
<i>S.typhi</i>	0	0	0
<i>S.paratyphi</i>	0	0	0
Stools—No. examined	75	25	41
<i>S.typhi</i>	0	0	0
<i>S.paratyphi</i>	0	0	0
Others	2	0	1
(C) SHIGELLA			
No. of specimens examined	75	25	41
<i>Sh.flexneri I</i>	0	0	0
<i>Sh.flexneri II</i>	0	0	0
<i>Sh.flexneri III</i>	0	0	0
<i>Sh.flexneri IV</i>	1	0	0
<i>Sh.flexneri V</i>	0	0	0
<i>Sh.flexneri VI</i>	0	0	0
<i>S. sonnei</i>	0	0	0
<i>S.dysenteriae</i>	0	0	0
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	1	1	3
No.+ve	1	0	0
(E) CAMPYLOBACTER			
No.Examined	75	25	41
No. Positive	1	1	0
(F) SPECIAL			
	18	170	120

21. SURVEILLANCE OF MENINGITIS— 1st quarter 2018

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 1st quarter 2018, 261 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 203 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Ratnapura district (32) followed by Badulla (22) and Kurunegala (21) districts.

Forty two percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 14% belonged to the age group 1-5 years and 08% belonged to age group 6 – 14 years. Fifty two percent of the clinically confirmed cases were males and 47% were females.

Table 21 Summary findings for special investigations carried out for clinically confirmed cases of Meningitis up to 30th March 2018

CSF Culture Report		
CSF Culture	Number	(%)
CSF Reports available	75	51
No Growth	73	
Group B Streptococci pneumonia	01	
TB	01	
Culture results not known	68	46
Not done	04	03
	147	100
Final outcome of the patients		
Outcome	Number	(%)
Cured	138	94
Died	06	04
Information not available	03	02
Total	147	100
Final Diagnosis (based on clinical and lab findings)		
Diagnosis	Number	(%)
Culture confirmed	02	01
Probable bacterial meningitis	11	07
Probable viral meningitis	09	06
Suspected Meningitis	125	85
Total	229	100

22. INFLUENZA SURVEILLANCE-1st quarter 2018

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 are collected from 19 sentinel hospitals throughout the country, out of which 13 sentinel hospitals were selected for the laboratory surveillance where respiratory samples are collected. Under SARI surveillance epidemiological data and respiratory samples are collected from four sentinel hospitals. These respiratory samples are tested and analyzed at the National Influenza Centre (NIC), Medical Research Institute (MRI).

Epidemiological Component

ILI Surveillance

In the 1st quarter of year 2018, all sentinel sites (19 hospitals) have reported ILI data with a reporting rate of 100%. A total of 22125 ILI cases were reported, accounting for 1.8 % of all OPD visits (n=1221733). The highest number of ILI cases were reported from District General Hospital, Vavuniya (n=5176, 6.0%) and the majority of the patients were in the age group 15 — 49 years (n=1936, 7.6 %), for the first quarter highest proportion

SARI Surveillance

A total of 787 SARI cases were reported for the 1st quarter of 2018 from four sentinel hospitals (Teaching Hospital Ragama, District General Hospital Matara, Teaching Hospital Peradeniya and LRH). Out of 43324 admissions during the 1st quarter, to the medical and paediatrics wards in the relevant hospitals 1.8 % were due to SARI. The highest number of SARI cases were reported from LRH (n=518, 3.3 %).

Laboratory Component

ILI Surveillance

A total of 51 ILI respiratory samples were received at the MRI from sentinel hospitals during the 1st quarter of 2018. There were no samples received for the month of January. Twenty seven samples were received for the month of February and 24 for the month of March.. Two samples were positive for influenza A and six were positive for Influenza B. Therefore influenza A and B were the predominant circulating Influenza viral strains identified.

Samples for ILI were sent from 13 sentinel sites namely, NHSL, CSTH, NIID, DGH Nuwaraeliya, TH Karapitiya, TH Jaffna, TH Batticaola, TH Kurunegala, DGH Chilaw, TH Anuradhapura, GH Polonnaruwa, PGH Badulla and PGH Ratnapura (Table 21)

SARI Surveillance

A total of 73 respiratory samples were sent to the MRI during the 1st quarter of year 2018, by four SARI sentinel hospitals. General Hospital Matara, Lady Ridgeway Hospital, Teaching Hospital Ragama and LRH. Five samples were positive and two were influenza A and three were influenza B. Influenza A and B were the predominant circulating Influenza viral strains identified.

Samples for SARI were sent from all SARI sentinel sites namely, CNTH Ragama, TH Peradeniya, DGH Matara and LRH. (Table 22).

Table 22: Types of Respiratory Viruses Isolated in ILI samples in the 1st quarter of the year 2018

Month	Total Tested	Total positives	Influenza A	A (H1N1)	A (H3N2)	Not typed	Influenza B
January*	-	-	-	-	-	-	-
February	27	4	1	1	-	-	3
March	24	4	1	1	0	0	3
Total	51	8	2	2	0	0	6

(Source: NIC/MRI) *routine surveillance has not been performed as there were huge clinical samples from all over the island.

Total positive rate for influenza A and B was 8 (15.6%). Influenza A and B were the predominant strains identified for the 1st quarter of 2018.

Table 23: THE LABORATORY COMPONENT OF SARI SURVEILLANCE FOR THE 1st QUARTER OF THE YEAR 2018

Month	Total Tested	Total positives	Influenza A	A(H1N1)	A(H3N2)	Not typed	Influenza B
January*	-	-	-	-	-	-	-
February	33	2	-	-	-	-	2
March	40	3	2	0	0	2	1
Total	73	5	2	0	0	2	3

(Source: NIC/MRI) *routine surveillance has not been performed as there were huge clinical samples from all over the island.

Influenza A and B were the predominant circulating Influenza viral strains 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 add 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 on a monthly basis and faecal samples collected from migratory bird hotspots during the two migratory seasons, where fifteen faecal samples are collected from each bird hotspot, pooled in bottles with five samples in each and analyzed at the virology laboratory at Polgolla.

Table 24: Animal samples collected by month and district for the 1st quarter of the year 2018

Month	Pool samples for embryonated chicken egg passage	District samples collected from	Serum Samples for ELISA	District samples collected from
January	789	Colombo, Gampaha, Polonnaruwa, Vavuniya, Kurunegala, Badulla, Nuwara Eliya, Jaffna, Hambantota	421	Colombo, Gampaha, Polonnaruwa, Mata- ra, Kurunegala, Badulla, Nuwara Eliya, Hambantota
February	784	Colombo, Gampaha, Kaluthara, Kilinochchi, Hambantota, Polonnaruwa, Mullitivu, Jaffna	472	Colombo, Gampaha, Batticaloa, Trincomalee, Kilinochchi, Ratnapura, Polonnaruwa, Anuradhapura, Jaffna, Kurunegala, Vavuniya, Badulla
March	885	Colombo, Gampaha, Kaluthara, Nuwaraeliya, Polonnaruwa,, Rathnapura, Trincomalee, Mullitivu, Anuradhapura, Vavuniya	435	Colombo, Gampaha, Kalutara, Nuwaraeliya, Polonnaruwa,, Ratnapura, Trincomalee, Mullitivu
Total	2458		1330	

All samples were negative for AI virus isolation for the 1st quarter of 2018.

Special Report

SURVEILLANCE OF CHICKENPOX

Out of the 2343 notified Chickenpox cases, 2060 (87.9%) were confirmed for the 1st quarter 2018. Highest district reporting was Gampaha (240) followed by Colombo (222), Badulla (196), Kalutara (175) Kurunegala (161) and Anuradhapura (122). March was the highest month reporting (1071) in the 1st quarter. According to case based investigation, maximum presentation of cases were 21 - 40 years of age (47.7%) and male (50.5%). Majority (97%) was found as no complications. Secondary bacterial infection 2 cases, Pneumonia 1 case and septicaemia 1 case were found as complications.

SURVEILLANCE OF MUMPS

Out of the 104 notified Mumps cases, 79 (76%) were confirmed for the 1st quarter, 2018. Highest district reporting was Trincomalee (12) followed by Kurunegala (10) Jaffna (9), Kalutara (9), Anuradhapura (8) and Matara (8). March (55) was the highest month reporting in the 1st quarter. According to case based investigation, maximum presentation of cases were 21 - 40 years of age (42.9%) and male (59.5%). All cases (100%) were found as no complications.

SURVEILLANCE OF LEISHMANIASIS Out of 668 notified Leishmaniasis cases, 588 (88.0%) were confirmed for the 1st quarter 2018. Highest district reporting was Hambantota (162) followed by Matara (111), Anuradhapura (104) and Ratnapura (94). March was the highest month reporting (250) in the 1st quarter. According to case based investigation, maximum presentation of cases were 30 - 59 years of age (75.6%) and male (59%).

Table 31

25. SUMMARY OF NOTIFIABLE DISEASES - 1ST QUARTER 2018

Health Region	Dysentery	Encephalitis	Enteric Fever	Food Poisoning	Human Rabies	Leptospirosis	Measles	Simple Con. Fever	Tetanus	Typhus Fever	Viral Hepatitis	Whooping Cough	Dengue Fever /DHF	Tuberculosis	Chickenpox	Mumps	Meningitis	Leishmaniasis
Colombo	19	3	16	5	0	50	7	0	1	3	2	0	2274	492	222	6	18	1
Gampaha	13	3	8	9	0	75	2	0	0	2	4	0	1354	241	240	5	11	3
Kalutara	19	2	1	32	0	114	3	1	0	2	4	1	1050	239	175	9	24	1
Kandy	19	4	1	5	0	12	1	0	1	31	7	0	933	165	106	3	7	6
Matale	5	1	0	10	0	14	0	0	1	1	3	1	276	25	11	2	3	30
Nuwara-Eliya	4	1	5	2	0	8	1	0	0	47	8	0	49	78	85	2	11	0
Galle	13	5	0	2	1	122	2	2	1	11	1	0	368	68	81	4	15	4
Hambantota	4	0	1	4	0	15	0	0	0	20	0	2	371	40	86	1	2	162
Matara	11	3	3	20	0	52	1	1	0	12	2	0	351	51	102	8	3	111
Jaffna	41	0	18	177	0	4	1	4	0	191	0	0	1157	73	104	9	5	0
Kilinochchi	7	1	8	0	1	1	0	1	0	3	0	0	97	16	20	0	0	0
Mannar	10	0	2	2	0	1	0	0	0	0	0	1	20	13	13	0	1	0
Vavuniya	2	3	19	7	1	13	0	0	0	6	0	0	167	10	14	1	1	2
Mullaitivu	2	0	5	9	0	5	0	0	0	2	0	0	25	7	2	0	0	1
Batticaloa	56	4	2	9	1	11	3	0	0	1	1	1	1642	36	43	3	7	0
Ampara	12	0	1	1	0	18	2	0	0	0	3	0	52	15	65	3	4	1
Trincomalee	18	0	2	7	0	15	2	0	0	9	1	0	254	32	75	12	1	7
Kurunegala	38	5	4	2	1	36	2	0	0	6	6	1	990	101	161	10	27	65
Puttalam	14	4	3	4	0	10	2	1	0	6	1	0	931	44	43	6	26	1
Anuradhapura	15	2	1	7	0	45	3	0	1	12	2	0	291	50	122	8	6	104
Polonnaruwa	9	1	0	6	0	48	0	0	0	0	1	0	86	20	64	0	4	58
Badulla	37	1	5	5	0	45	1	1	0	21	8	0	144	58	196	5	27	2
Moneragala	31	2	1	2	0	94	1	0	0	45	5	0	386	36	52	2	6	12
Ratnapura	49	19	7	2	1	98	0	3	1	13	5	1	531	107	97	0	36	94
Kegalle	18	5	2	54	0	31	0	0	0	28	6	1	406	79	108	5	13	2
Kalmunai	15	0	1	13	0	1	0	0	1	0	1	0	943	41	56	0	3	1
Total	481	69	116	396	6	938	34	14	7	472	71	9	15148	2137	2343	104	261	668

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by :

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This document is available on the internet www.epid.gov.lk.

Figures given may be subject to revision.

The editor welcomes accounts of interesting cases, outbreaks or other public health problems of current interest to health officials.

Such reports should be addressed to:

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ISSN NO: 2345-93522