# **EPIDEMIOLOGIC**AL BULLETIN

# **SRI LANKA**

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# *Second Quarter 2017*

# **EPIDEMIOLOGY UNIT**

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### 1. POLIOMYELITIS

Fourteen (14) Acute Flaccid cases were notified to the Epidemiology Unit during the 2<sup>nd</sup>quarter 2017. This was lower compared to AFP cases during the 2<sup>nd</sup> quarter (16) 2016. Reported numbers of AFP cases for the quarter is little lower than the expected number of AFP cases per quarter of the annual surveillance target of 2:100,000 under 15 year age population, which was 20 according to the current census survey population. The non-polio AFP rate for the second quarter 2017 was 1.5 /100,000 under 15 year age group.

### Notification of AFP Cases from Hospitals

All hospitals where Consultant Paediatricians are available are considered as sentinel sites for AFP surveillance. A total of 89 sentinel sites are currently functioning and last updated in 2016. All sentinel sites are expected to report immediately on AFP case admissions to the Epidemiology Unit and to the Regional Epidemiologist of the respective area of patient's residence. All sentinel site hospitals are monitored for the completeness and timeliness of reporting zero weekly notification of AFP cases.

Majority of the cases (50%) were notified from the major sentinel site hospital for AFP, the Lady Ridgeway Hospital (LRH). Particulars of all hospitals which reported AFP

### Table 01

### Notification of AFP cases by sentinel hospitals

Hospital	No: of cases report- ed
Lady Ridgeway Hospital	7
TH Karapitiya	2
TH Kurunegala	1
TH Peradeniya	2
SBSCH	1
DGH Killinochchi	1
Total	14

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

The highest numbers of cases were reported from district of Kurunegala (3), Kandy (3) and Galle (3). The complete list of distribution of AFP cases according to the province, district and MOH area is given below.

# Table 02 : Geographical distribution of AFP cases 2<sup>nd-</sup> quarter 2017

Province	District	MOH Area	Number of AFP cases
Western	Gampaha	Ja ela	1
		Kelaniya	1
Sothern	Galle	Balapitiya	1
		Hikkaduwa	1
		Induruwa	1
Central	Kandy	Hasalaka	1
		Pujapitiya	1
		Pathadum- bara	1
North Western	Kurunegala	Kotawehara	1
		Kuliyapitiya	1
		Pannala	1
	Puttalam	Kalpitiya	1
Northern	Killinochchi	Killinochchi	1
		Killinochchi	1
Total			14

### Seasonal distribution of AFP cases

Majority of AFP cases were reported during May (43%). There is no observable variation of case presentation by month compared to the compatible quarter in the previous year.

#### Age and sex distribution of AFP cases

Majority (64%) of the cases were males during the  $2^{nd}$  quarter 2017 and this was higher compared to the trend reported during the  $2^{nd}$  quarter 2016 which was 36%.

Majority (57%) of the cases was between 1-9 years during the second quarter this year and the trend was lower compared to the compatible quarter in the previous year.

Table 03. Distribution of AFP cases by Age2<sup>nd</sup> Quarter 2017.

Age Group	Se	Total	
	Male	Female	
<1 year	0	0	00
1-4 year	1	1	02
5-9 year	4	2	06
10-15 year	4	2	06
Total	9	5	14

#### Final diagnoses of AFP cases

### Final diagnoses of AFP cases

Majority (57%) of the reported AFP cases were finally diagnosed as Guillain-Barre Syndrome (GBS). Final

Table 04: Final diagnoses of AFP patients reported during  $2^{nd}$  quarter 2017.

Final Diagnoses	Frequency
GBS	08
Transverse Myelitis	03
Viral myositis	01
Polyradiculitis	01
Encephalitis	01
Total	14

### Laboratory Surveillance of 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 are the criteria to be completed to make the samples of 'good condition'. Out of 14 AFP cases, 11 cases (79%) had both stool sample collected timely and sent to MRI for polio virology

### 2. MEASLES

# Measles and Rubella surveillance in elimination: 2<sup>nd</sup> Quarter 2017

Sixty four fever and maculopapular rash patients suspected of measles and rubella were reported and investigated for confirming measles or rubella. This number was lower than the number reported during the previous quarter which was 89 clinical fever and maculopapular rash cases. Requirement of strengthening identification of more suspected cases was highlighted and new circular guidelines were circulated throughout the country in all curative and public health care institutions. Identification and investigation of all fever and maculopapular rash patients at community level during field level activities were highlighted in achieving elimination targets by 2020 and training programmes were conducted for health care staff for more awareness and circulated new guidelines to all.

The clinical possible measles and rubella cases were field investigated by the respective medical officers of the patients' residential areas and these special investigation forms were received and reviewed at the Epidemiology Unit.

# Table 05: Number of Measles cases by district: 2ndQuarter 2017

Western Province reported the highest number of fever rash suspected cases for measles and rubella. The programme identified districts in terms of not satisfying the monitoring indicator of >2 per 100,000 population with non measles non rubella cases after testing at the laboratory for relevant surveillance improvements.

District	cases	District	cases
Colombo	12	Batticaloa	1
Gampaha	4	Kalmunai	0
Kalutara	4	Ampara	1
Kandy	3	Trincomalee	0
Matale	4	Kurunegala	1
Nuwara Eliya	5	Puttalam	2
Galle	1	Anuradhapura	4
Hambnatota	0	Polonnaruwa	4
Matara	1	Badulla	1
Jaffna	2	Moneragala	6
Vavuniya	0	Ratnapura	4
Kilinochchi	2	Kegalle	2

Laboratory investigations of 58 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 programme has identified the laboratory IgM testing rate as 91% in achieving satisfactory levels of monitoring target of >80%. There was one measles IgM positive case confirmed as a measles confirmed case possibly an import related case as no continuation of indigenous transmission of measles in the country. No rubella confirmed cases for the quarter.

### **3. LEPTOSPIROSIS**

During the 2<sup>nd</sup> Quarter 2017, 776 cases and 8 deaths (CFR 1.0 %) due to Leptospirosis were notified to the Epidemiology Unit compared to 636 cases and 9 deaths in the previous quarter and 1094 cases and 12 deaths during the corresponding quarter of 2016.

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

# Table 06: Selected characteristics of Leptospirosis patients (%) – $2^{nd}$ Quarter 2017

	Sex		
Age Group	Male	Female	
0 – 9 years	0.0	0.0	
10 – 19 years	8.3	5.0	
20 – 29 years	15.8	15.0	
30 – 39 years	21.7	20.0	
40 – 49 years	16.7	10.0	
50 – 59 years	20.8	20.0	
> 60 years	16.7	30.0	
Total	100.0	100.0	

### 4. HUMAN RABIES

Six cases of Human Rabies were notified to the Epidemiology Unit in the 2nd quarter 2017 compared to 05 cases in the previous quarter and one case in the corresponding quarter of year 2016. All notified Human Rabies cases have been confirmed.

All notified Human Rabies cases have been confirmed.

#### **Animal Rabies**

During this quarter, 110 dogs were reported positive for rabies, compared to 114 in the previous quarter and 108 positive in the same period in the last year.

### **Rabies Control Activities**

**Dog vaccination** - A total of 317181 dogs were immunized during the Quarter under review when compared to 309791 in the previous quarter and 342,318 in corresponding Quarter of the last year.

### **Animal Birth control**

**Chemical**- A total of 801 female dogs were injected with birth control injections (Progesterone) during the quarter under review. **Surgical** – 15217 female dogs were subjected to sterilization by surgical method during the quarter under review.

### **5. VIRAL HEPATITIS**

In the 2nd Quarter 2017, a total of 115 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 126 cases in the previous quarter and 166 cases in the corresponding quarter of 2016. Badulla district (28 cases) reported the highest number of cases followed by Ratnapura District (24 cases).

### **6. ENTERIC FEVER**

In the 2nd Quarter 2017, a total of 109 cases of Enteric fever were reported to the Epidemiology Unit, compared to 128 cases in the previous quarter and 185 cases in the corresponding quarter of 2016. The district of Nuwara Eliya (11cases) reported the highest number of cases, followed by Vuavnia (8 cases).

### 7. DYSENTERY

In the 2nd Quarter of 2017, a total of 308 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 530 cases in the previous quarter and 668 cases in the corresponding quarter of 2016. Jaffna (52 cases) and Ratnapura (26 cases) reported the highest number of cases.

## 8. MALARIA

There were no indigenous malaria cases reported during the 2nd Quarter 2017.

## 9.JAPANESE ENCEPHALITIS (JE)

During the 2<sup>nd</sup> quarter of 2017, 53 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 35 cases were clinically confirmed by the Public Health Inspectors during their field investigations.

During the 2<sup>nd</sup> quarter of 2017, MRI has reported 2 lab confirmed JE cases. Out of these 2 confirmed JE cases, all (100%) were investigated by the MOH. Up to 2<sup>nd</sup> Quarter (Jan –June) 2017, MRI has reported altogether 22 lab confirmed JE cases

Among them, 12 (55%) were over 50 years of age, another 08 (36%) were between 21 -50 years, none was between 11 - 20 years, another 2 (09%) were 1-10 years while none were less than one year.

The highest number of confirmed JE cases (07) were reported from Ratnapura, and Galle (3), Gampaha (2), Kalutara (2), Colombo(2), Matara (2) districts followed by (01) from Hambantota, Badulla, Matale districts. The majority of the confirmed JE cases have not been immunized

### Table 08

# SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE

	Male	14 (64%)
Sex	Female	08 (36%)
Age group	< 1 y	00 (00%)
	1-10 y	02 (09%)
	11- 20	00 (00%)
	21-50Y	08 (36%)
	> 50 Y	10 (55%)
District	Ratnapura	08( 36%)
	Galle	03(14%)
	Gampaha	02(09%)
	Matara	02 (09%)
	Colombo	02 (09%)
	Kalutara	02 (05%)
	Matale	01 (05%)
	Hambantota	01 (05%)
	Badulla	01(05%)

### Table 07

### Results of Blood smear examination for malaria parasites - 2nd Quarter 2017

	2nd Quarter 2016	2nd Quarter 2017
No. of blood smears examined	254,629	221,153
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%

### Table 09

DISTRIBUTION OF NUMBER OF BLOOD SMEARS EXAM-INED BY DISTRICT RMO- 2ND QUARTER 2017

RMO	July	August	Sept.	Total
Colombo	5293	8699	6666	20658
Gampaha	3787	5002	4647	13436
Kalutara	1395	1451	1356	4202
Kandy	3837	5048	4350	13235
Matale	2492	2342	2861	7695
Nuwara Eliya	197	346	472	1015
Galle	1066	1883	1658	4607
Matara	2090	1990	1441	5521
Hambantota	2204	2438	2085	6727
Jaffna	6146	6184	5742	18072
Kilinochchi	2015	2359	1630	6004
Vavuniya	2154	2316	2336	6806
Mannar	2295	3794	3054	9143
Mullaitivu	2194	2145	2163	6502
Batticaloa	6855	6691	4858	18404
Ampara	1524	1862	1925	5311
Kalmunei	3629	3712	3356	10697
Trincomalie	2256	2681	2329	7266
Kurunegala	5392	7255	5838	18482
Maho	1244	1755	1386	4385
Puttalam	2295	3003	2259	7557
Anuradhapu- ra	4501	4535	4994	14030
Polonnaruwa	3621	3569	3786	10976
Badulla	3315	3711	3718	10744
Monaragala	3404	3897	3420	10721
Rathnapura	3474	3651	3626	10751
Kegalle	2756	3192	2972	8920
TOTAL	81431	95511	84928	261867

# Table 10

### MORBIDITY AND MORTALITY DUE TO DF/DHF - 2ND QUARTER 2017

RDHS Division	Cases	Percentage (%)	Deaths	CFR
Colombo	11275	21.02	46	0.41
Gampaha	10141	18.91	39	0.38
Kalutara	2933	5.47	11	0.38
Kandy	3511	6.55	11	0.31
Matale	721	1.34	4	0.55
N' Eliya	188	0.35	1	0.53
Galle	1282	2.39	8	0.62
Hambantota	989	1.84	1	0.10
Matara	1423	2.65	6	0.42
Jaffna	1088	2.03	0	0.00
Kilinochchi	88	0.16	0	0.00
Mannar	173	0.32	0	0.00
Vavuniya	229	0.43	1	0.44
Mulativu	80	0.15	0	0.00
Batticaloa	2516	4.69	5	0.20
Ampara	252	0.47	0	0.00
Trincomalee	1228	2.29	0	0.00
Kurunagale	3940	7.35	14	0.36
Puttalam	1713	3.19	5	0.29
A'pura	820	1.53	2	0.24
Polonnaruwa	522	0.97	2	0.38
Badulla	739	1.38	1	0.14
Moneragala	739	1.38	2	0.27
Ratnapura	3588	6.69	10	0.28
Kegalle	2977	5.55	15	0.50
Kalmunai	486	0.91	1	0.21
Total	53641	100.00	185	0.34

### Table 11

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 2ND QUARTER 2017

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF
April	192	192 (15.3%)
Мау	201	128 (18.5%)
June	250	80 (30.5%)
Total	643	257 (31.5%)

### 10. DENGUE FEVER (D.F.)/ DENGUE HAEMORRHAGIC FEVER (D.H.F.)

During the  $2^{nd}$  quarter of 2017; 53,641 cases of DF/DHF were reported from all districts (Table 1) while 185 deaths were reported (CFR 0.34%) when compared to 33,181 cases of DF/DHF and 71 deaths (CFR 0.21%) was reported during the  $1^{st}$  quarter of 2017. Proportion of cases notified in April, May and June were 23.31%, 29.68% and 47.02% respectively.

Table 10 shows the distribution of DF/DHF cases and deaths in the  $1^{st}$  quarter of 2017.

Special surveillance data of confirmed cases were received and analyzed for the  $2^{nd}$  quarter of 2017. Age distribution of reported cases were 7.2% in <4 years age group, 13.6% in 5-9 years of age group, 12.3% in 10-14 years of age, 9.6% in 15–19 years of age, 11.0% in 20-24 years of age, 9.6% in 25-29 years of age, 8.8% in 30-34 years of age, 7.5% in 35-39 years of age, 5.8% in 40-44 years of age, 4.4% in 45-49 years of age, 4.0% in 50–54 years of age, 2.1% in 55-59 years of age and 4.0% in >60 years of age.

According to the Special surveillance data on clinical findings majority of the reported cases 61.9% were classified as dengue fever (DF) while 38.1% were classified as dengue Haemorrhagic fever (DHF).

During the 2<sup>nd</sup> quarter of 2017, 643 blood samples were tested using IgM capture ELISA test at the Department of Virology, Medical Research Institute (MRI) and 257 (32%) samples were confirmed as positive. (Table 11)

# 11. RUBELLA AND CONGENITAL RUBELLA SYNDROME (CRS)

There were no congenital rubella cases after adequate investigation of all notified suspected CRS cases and cases investigated at the laboratory for TORCH screening. All cases positive for rubella IgM were thoroughly investigated at field level to identify if any congenital abnormalities in final categorization of congenital rubella infection, congenital rubella syndrome.

### 12. CHOLERA

No of confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2017. Last case of cholera was reported in the country in January 2003.

### **13. TETANUS**

Six tetanus cases were reported during 2nd quarter 2017. Meerigama MOH area of Gampaha, Udunuwara and Doluwa MOH areas of Kandy district Nikaweritiya MOH area of Kurunegala district, MC Jaffna MOH area of Jaffna district and Chenkalady MOH area of Batticaloa district reported the tetanus cases during the quarter.

#### Table 12

### 14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 2<sup>nd</sup> Quarter of 2017 has reached 99.9% of completeness of reports, while 44.2% reports were received in time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Colombo, Gampaha, Kalutara, Kandy, Matale , Nuwara Eliya , Galle , Hambantota ,Matara, Jaffna, Kilinochchi, Mannar, 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 (92.9%) followed by Kilinochchi (75.0%) and Matale (74.4%). (Table 1)

The highest percentage of nil reports were received from Ampara (61.9%) followed by Kalmunai district (41.0%), which more than two fold of the Sri Lanka average (21.1%) indicating the need for more attention for AEFI surveillance. Lowest rate of nil returns reported by Kegalle (3.0%) and Colombo districts (5.9%) indicating the good surveillance system in place. The highest rate (735.8 per 100,000 immunizations) of AEFI was reported from Mullativu district, while Jaffna reported the highest number of 216 AEFI cases in second quarter 2017.

For the second quarter, the highest number of AEFI (n=1295) was reported against Pentavalent vaccine, where as the highest rate of AEFI (1202.9/100,000 doses administered) reported against DTP vaccine. The rate of AEFI for Pentavalent (01<sup>st</sup>, 02<sup>nd</sup> & 03<sup>rd</sup> dose) is 586.8 per 100,000 doses administered. High Fever(931), Allergic Reaction (318), Nodule (501) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (483 cases: 218.9 per 100,000 doses administered) and DPT (377cases: 459.9 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to PVV (103 cases: 46.7 per 100,000 doses administered) and LJE (20 cases: 24.9per 100,000 doses administered).

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVI-SIONS

RDHS	% com- pletene ss	% Timely re- turns	% Nil Re- turns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	100.0	43.1	5.9	196	137.7
Gampaha	100.0	46.7	6.7	130	96.5
Kalutara	100.0	50.0	16.7	124	154.4
Kandy	100.0	40.3	12.5	174	168.5
Matale	100.0	74.4	20.5	42	111.7
N" Eliya	100.0	28.2	25.6	101	179.9
Galle	100.0	40.0	25.0	111	145.8
Hambantota	100.0	30.6	8.3	172	319.9
Matara	100.0	41.2	13.7	86	153.7
Jaffna	100.0	92.9	7.1	216	626.2
Kilinochchi	100.0	75.0	16.7	35	379.6
Mannar	100.0	66.7	40.0	46	532.2
Vavuniya	91.7	63.6	27.3	58	461.6
Mullativu	100.0	22.2	33.3	55	735.8
Batticaloa	100.0	42.9	38.1	64	138.4
Ampara	100.0	28.6	61.9	17	82.7
Trincomalee	100.0	41.7	27.8	68	175.4
Kurunegala	100.0	45.2	33.3	160	423.7
Puttalam	100.0	15.4	35.9	70	62.0
Anuradhapura	100.0	26.3	19.3	136	221.1
Polonnaruwa	100.0	28.6	19.0	55	75.1
Badulla	100.0	66.7	14.6	115	351.1
Moneragala	100.0	54.5	18.2	79	124.6
Ratnapura	100.0	44.4	14.8	134	326.7
Kegalle	100.0	54.5	3.0	93	121.3
Kalmunai	100.0	15.4	41.0	38	69.4
Sri Lanka	99.9	44.2	21.1	2575	174.9

2nd Quarter

April-June

# Table 13 : Number of Selected Adverse Events by Vaccines – 2nd Quarter 2017

	BCG	ΟΡV	PVV	DPT	MMR	UE	DT	Π	aTd	Total num- ber of AEFI reported
Total Number of AEFI	4		4205	000	425	62	10		46	25.40
Reported AEFI reporting rate/100,000 doses administered	4 4.9		1295 586.8	986 1202.9	125 73.5	62 77.3	49 57.1	11 7.7	16 21.4	2548
High Fever (>39°C)	1		483	377	39	23	8			931
Reporting rate/100,000 doses administered	1.2		218.9	459.9	22.9	28.7	9.3			
Allergic reactions			103	125	52	20	13		5	318
Reporting rate/1 00,000 doses adminis- tered			46.7	152.5	30.6	24.9	15.1		6.7	
Severe local reactions			30	50			2	2	1	85
Reporting rate/100,000 doses administered			13.6	61.0			2.3	1.4	1.3	
Seizure (Febrile/ Afebrile)			16	84	6	11	1			118
Reporting rate/100,000 doses administered			7.2	102.5	3.5	13.7	1.2			
Nodules	1		354	130	1	1	8	2	4	501
Reporting rate/100,000 doses administered	1.2		160.4	158.6	0.6	1.2	9.3	1.4	5.3	
Injection site abscess	1		108	23	2		1			133
Reporting rate/100,000 doses administered	1.2		48.9	28.1	1.2		1.2			
ННЕ			2	1						3
Reporting rate/100,000 doses administered			0.9	1.2						

### 2nd Quarter

### 15. TUBERCULOSIS

A total of 2129 Tuberculosis patients were registered for 2nd Quarter 2017. Of this total 2023 were New TB Patients. Out of all TB cases 1014 (50.1%) were New Smear Positive Pulmonary TB, while the balance 496 (24.0%) were New Smear Negative Pulmonary TB Patients and 523 (25.9%) New Extra Pulmonary cases.

There were 102 (4.8%) Retreatment Cases and among them 53 (2.5%) were patients with relapse. There were 06 HIV/TB positive patients found in the quarter. Six Multi Drug Resistant TB patients detected. The distribution of Tuberculosis patients by RDHS division is given in Table 14.

# Table 14: Distribution of Tuberculosis patients byRDHS division 2nd Quarter 2017

RDHS		Nev	Retreat- ment &	Total		
DIVISION	PTB sp+ve	PTB sp-ve	ЕРТВ	Total	other	Total
Colombo	242	109	127	478	33	511
Gampaha	131	70	37	238	16	254
Kalutara	73	23	36	132	6	138
Kandy	36	31	44	111	4	115
Matale	18	12	13	43	2	45
Nuwara Eliya	23	15	27	65	4	69
Galle	52	12	18	82	1	83
Matara	35	8	23	66	2	68
Hambantota	11	7	8	26	2	28
Jaffna	30	34	19	83	3	86
Vavuniya	7	1	1	9	0	9
Batticaloa	22	8	8	38	4	42
Ampara	11	13	2	26	1	27
Kalmunai	17	20	8	45	1	46
Trincomalee	23	7	11	41	4	45
Kurunegala	57	33	22	112	4	116
Puttalam	23	13	13	49	2	51
Anuradhapura	41	10	13	64	3	67
Polonnaruwa	8	5	9	22	0	22
Badulla	23	8	16	47	4	51
Monaragala	14	3	5	22	0	22
Rathnapura	61	18	42	121	3	124
Kegalle	37	20	17	74	6	80
Mannar	8	3	1	12	0	12
Mulathivu	7	1	0	8	1	9
Kilinochchi	4	2	3	9	0	9
Total	1014	486	523	2023	106	2129

PTB-Pulmonary Tuberculosis

EPTB– Extra Pulmonary Tuberculosis SP + ve - Sputum Positive SP – ve - Sputum Negative Data from Central TB Register Source - National TB Register

# **16. SURVEILLANCE AT SEA PORT**

Details of the vaccinations carried out by the Assistant Port Health Office during the 2nd Quarter 2017, is as follows;

		Total
Α.	Yellow fever	676
В.	Meningococcal meningitis	145
C.	Oral polio	505

## **17. SURVEILLANCE AT AIRPORT**

Surveillance activities carried out at the Inter national Airport, Katunayake during the 2nd Quarter 2017 is given below.

Emerging and remerging disease (Ebola/MERS CoV/ SARS Etc)	
Ebola	
No. Of passengers screened	33
No. Of suspected cases transferred	-
Zika	
No. Of passengers screened	-
No. Of suspected cases transferred	-
Malaria	
No. of passengers visited to Health office	210
No. of passengers drug issued	03
No. of blood films done (R.D.T.)	205
Referred to I.D.H./Other unit	-
Yellow Fever	
No. of yellow fever cards inspected	25
No. Invalid/without Yellow Fever cards	01
Referred to I.D.H/Other units	01

# **18. LEPROSY**

### QUARTERLY RETURN OF LEPROSY STATISTICS - 2ND QUARTER 2017

### Table 15

### 1. National

	At th	e end of the qua	rter	Cumulative for end of the quarter			
	2nd quarter 2017	2nd quarter 2016	Diff (%)	2017	2016	Diff (%)	
New patients detected	424	438	-14 (-3.2)	883	861	22 (2.5)	
Children	49	36	13 (36.1)	95	77	18 (23.4)	
Grade 2 Deformities	31	27	4 (14.8)	64	70	-6 -(8.6)	
Multi-Bacillary	245	265	-20 (-7.5)	502	504	-2 (-0.39)	
Females	167	166	1 (0.6)	361	327	34 (10.4)	

### 2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	13	2	1	10	7
Kandy	7	1	1	6	6
Matale	4	1	0	3	1
NuwaraEliya	2	0	0	1	0
Eastern	61	3	8	39	30
Ampara	15	0	0	6	9
Batticaloa	22	1	3	14	15
Kalmunai	14	2	4	10	4
Trincomalee	10	0	1	9	2
Northern	12	0	0	5	6
Jaffna	4	0	0	2	3
Kilinochchi		-			
Mannar	2	0	0	1	1
Vavuniya	5	0	0	1	1
Mullaitivu	1	0	0	1	1
North Central	28	2	2	20	10
Anuradhapura	14	1	2	9	7
Pollonnaruwa	14	1	0	11	3
North Western	49	8	8	25	19
Kurunegala	31	4	6	15	11
Puttalam	18	4	2	10	8
Sabaragamuwa	24	4	1	16	9
Kegalle	3	1	0	3	1
Rathnapura	21	3	1	13	8
Southern	54	3	6	31	19
Galle	18	2	3	7	9
Hambanthota	19	1	0	14	6
Matara	17	0	3	10	4
Uva	9	0	0	4	3
Baddulla	6	0	0	3	2
Monaragala	3	0	0	1	1
Western	174	9	23	95	64
Colombo	55	2	10	29	19
CMC	23	4	6	14	7
Gampaha	67	2	7	37	27
Kalutara	29	1	0	15	11
Sri Lanka	424	31	49	245	167

Source : Anti Leprosy Campaign

## **19. SEXUALLY TRANSMITTED DISEASES**

### Table 16

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

### 2ND QUARTER 2017

Disease		New cas sodes du	es or new di uring the quar	isease epi- ter	Total new cases or new episodes for the calendar year up to end of the quar- ter **			
		Male	Female	Total	Male	Female	Total	
HIV positive	es <sup>1</sup>	45	13	58	101	30	131	
AIDS		10	3	13	16	5	21	
	Early Syphilis <sup>2</sup>	13	4	17	31	6	37	
Syphilis	Late Syphilis <sup>3</sup>	105	56	161	235	115	350	
	Congenital Syphilis <sup>4</sup>	1	2	3	2	3	5	
Gonorrhoea	a <sup>5</sup>	43	9	52	112	27	139	
Ophthalmia	Neonatorum <sup>6</sup>	0	0	0	0	1	1	
Non specifi	c cervicitis/urethritis	139	390	529	288	875	1163	
Chlamydial	infection	0	1	1	1	1	1	
Genital Her	pes	268	435	703	561	878	1439	
Genital Wa	rts	268	190	458	553	443	996	
Pelvic Infla	mmatory dis.	-	23	23	-	40	40	
Trichomoni	asis	1	19	20	2	32	34	
Candidiasis	3	231	374	605	484	788	1272	
Bacterial Va	aginosis	-	298	298	-	649	649	
Other sexua	ally transmitted diseases <sup>7</sup>	64	29	93	136	64	200	
Non STD/ l	Jncertain	600	397	997	1262	1038	2300	

Source: NSACP

- 1-Includes AIDS cases
- 2-Diagnosed within 2years 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 Lympho granuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabis, Tinea, Hepatitis-B etc

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

<sup>\*</sup>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

# 20. BACTERIOLOGY REPORT, MEDICAL RESEARCH I NSTITUTE

### Table 17: Bacteriological report, MRI 2nd Quarter 2017

	Apr	Мау	June
(A) CHOLERA			
No. of stool specimens Examined	53	43	31
No. of positive El.Tor Cholera	2	0	0
Ogawa	0	0	0
Inaba	0	0	0
Cholera o139	0	0	0
(B) SALMONELLA			
Blood– No. Examined	1	0	0
S.typhi	0	0	0
S.paratyphi	0	0	0
Stools—No. examined	106	91	84
S.typhi	1	1	0
S.paratyphi	0	0	0
Others	34	19	19
(C) SHIGELLA			
No. of specimens Examined	106	91	84
Sh.flexneri I	0	0	0
Sh.flexneri II	0	0	0
Sh.flexneri III	0	0	0
Sh.flexneri IV	0	0	0
Sh.flexneri V	0	0	0
Sh.flexneri VI	0	0	0
S.sonnei	0	0	0
S.dysenteriae	0	0	0
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	106	91	84
No.+ve	6	9	8
(E) CAMPYLOBACTER			
No.Examined	53	43	31
No. Positive	0	0	1
(F) SPECIAL	53	48	53

### 21. SURVEILLANCE OF MENINGITIS

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 2<sup>nd</sup> quarter 2017, 359 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system.

Out of this 250 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Kalutara district (37) followed by Rathnapura (33) and Badulla (29) districts.

Thirty two percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 23% belonged to the age group 1-5 years and 23% belonged to age group 6 - 14 years. Sixty three percent of the clinically confirmed cases were males and 37% were females.

### Table 18

Summary findings for special investigations carried out for clinically confirmed cases of Meningitis up to 30<sup>th</sup> June 2017

CSF Culture Report						
CSF Culture	Number	(%)				
CSF Reports available	168	44%				
No Growth	(164)					
Coliform	01					
Strep.Pneumonia Pseudomonas	(01)					
rseudomonas	(02)					
Culture results not known	195	51%				
Not done	18	05%				
Total	381	100%				
Final outcome of the patient						
Outcome	Number	(%)				
Cured	370	97%				
Died	03	01%				
Information not available	08	02%				
Total	381	100%				
Final Diagnosis (based on cli	nical and la	b findings)				
Diagnosis	Number	(%)				
Culture confirmed	04	01%				
Probable bacterial meningitis	27	10%				
Probable viral meningitis	37	10%				
Suspected Meningitis	314	82%				
Total	381	100%				

### 22. INFLUENZA SURVEILLANCE-1<sup>st</sup> quarter 2017

### Human Influenza surveillance

Surveillance of human influenza is carried out under 2 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 respiratory samples are collected from 13 sentinel hospitals. Under SARI surveillance more detailed epidemiological data and respiratory samples are collected from 4 sentinel hospitals. Respiratory samples are analyzed at the National Influenza Center (NIC), Medical Research Institute (MRI).

#### **Epidemiological Component**

### **ILI Surveillance**

In the 2nd quarter of the year 2017, sixteen hospitals out of nineteen have reported ILI data with a reporting rate of 84.2%. A total of 21986 ILI cases were reported, accounting for 2.19% of the all OPD visits (n=1003525). The highest number of ILI cases were reported from Teaching Hospital Kurunagala (n=5305, 24.13%) and the majority of the patients were in the age group 15—49 years (n=7784, 35.4%).

### SARI Surveillance

A total of 361 SARI cases were reported for the 2<sup>nd</sup> quarter of 2017 from two sentinel hospitals (General Hospital Matara and Teaching Hospital Peradeniya). Out of 18252 all hospital admissions during the 2<sup>nd</sup> quarter, 1.98% were due to SARI. The highest number of SARI cases were reported from Teaching Hospital Peradeniya (n=293, 81.16%).

#### Laboratory Component - ILI/ SARI Surveillance

Respiratory samples were not sent to the MRI in April, May and June during the 2nd quarter of year 2017 by the ILI and SARI sentinel hospitals due to the outbreak situation in the country. Only clinical samples received from the hospitals all over the country were tested by the MRI. Influenza A was the predominant circulating Influenza viral strain identified (Table 21).

Table 19: Monthly reporting of sentinel hospital in the epi-	
demiological component of the ILI surveillance in the 2nd	
quarter of the year 2017 (No. of ILI patients reported)	

Sentinel Site	April	Мау	June	Total
TH Karapitiya	405	356	522	1283
GH Matara	460	663	766	1889
LRH	386	597	415	1398
IDH	162	NA	NA	162
NHSL	16	20	18	54
TH Kalubowila	NA	NA	NA	NA
TH Peradeniya	566	356	781	1703
TH Ratnapura	421	311	415	1147
TH Kurunegala	1948	1819	1538	5305
GH Vavunia	654	438	309	1401
GH Nuwara Eliya	205	227	351	783
GH Badulla	12	15	8	35
TH Anuradhapura	1018	957	1180	3155
GH Polonnaruwa	951	611	722	2284
TH Ragama	281	186	183	650
GH Chilaw	167	116	227	510
TH Batticoloa	97	61	69	227
GH Ampara	NA	NA	NA	NA
TH Jaffna	NA	NA	NA	NA
Total	7749	6733	7504	21986

Table 20: Monthly reporting of sentinel hospital in the epidemiological component of the SARI surveillance in the 2nd quarter of the year 2017 (No. of SARI patients reported)

Sentinel Site	April	May	June	Total	
GH Matara	48	13	7	68	
TH Peradeniya	180	65	48	293	
LRH	NA	NA	NA	NA	
TH Ragama	NA	NA	NA	NA	
Total	228	78	306	361	

Month	Total Tested	Total tested positive	Proportion test- ed positive (Yield)	Influenza A N(%)	Influenza B N(%)
April	1492	607	40.7%	488 (80.4%)	119 (19.6%)
Мау	552	226	40.9%	185 (81.9%)	412 (18.1%)
June	302	48	15.9%	40 (83.3%)	8 (16.7%)
Total	2346	881	37.6%	713(80.9%)	168(19.1%)

### Table 21 Types of Respiratory Viruses Isolated in Respiratory Samples in the 2nd quarter 2017

#### **Bird Influenza Surveillance**

Sri Lanka has been recognizes 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 fecal samples collected from migratory bird hotspots during the two migratory seasons, where fifteen fecal samples are collected from each bird hotspot, pooled in bottles with five samples in each and analyzed at the virology laboratory at Polgolla.

Month	No. of	samples	Districts from which samples were collected
	Pooled fecal sam-	Serum samples	
April	629	520	Colombo, Gampaha, Puttalam, Ratnapura, Polonnaruwa, Kurunegala, Anuradhapura, Jaffna, Trincomalee, Kalutara, Badulla, Hambantota,
Мау	723	377	Colombo, Gampaha, Anuradhapura, Kegalle, Polonnaruwa, Ampara, Vavuniya .
June	999	1335	Colombo, Gampaha, Anuradhapura, Jaffna, Polonnaruwa, Trincomalee, Puttalam, Kandy, Moneragala, Batticaloa, Kurunegala, Vavuniya , Jaffna, Mulaitivu.
Total	2351	2232	

### Table 22: Animal samples collected by month and district for the 2nd quarter of the year 2017

#### 23. SPECIAL REPORT - Leishmaniasis

Leishmaniasis is a vector borne zoonotic disease caused by intracellular parasitic organisms of genus Leishmania and transmitted by Sand flies. The disease appears in two main forms, Cutaneous Leishmaniasis (skin leasions) which is the emerging issue in Sri Lanka and Visceral Leishmaniasis. The disease has been listed as one of the eight major neglected tropical diseases. The zoonotic nature and the large genetic diversity of both parasite and vector make the control of the disease very difficult. Early diagnosis and effective case management are essential to prevent the spread and disabilities of the disease. Each year approximately 1000 to 1300 cases are notified to the Epidemiology Unit from the entire country.

### Surveillance of Leishmaniasis

Leishmaniasis is mandatory to be notified by law in Sri Lanka in National communicable disease surveillance system since 2008. Individual case based field investigations of notified cases help to identify possible geographical variations and epidemiology of the disease which would help to formulate specific preventive measures.

# Distribution of confirmed Leishmaniasis cases in 2016

Highest numbers of Leishmaniasis cases were reported from Hambantota district followed by Anuradhapura, Matara and Polonnaruwa.

## 2nd Quarter

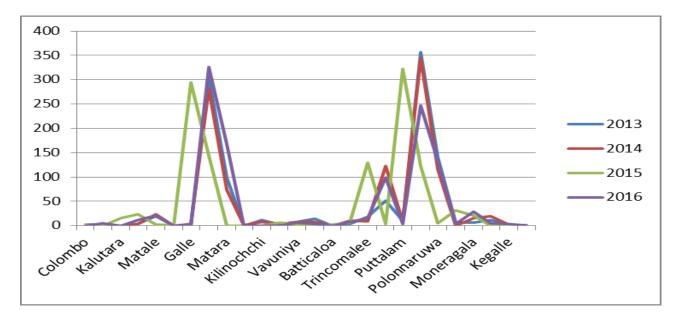
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Colombo	0	0	0	0	0	0	0	0	0	0	0	0	0
Gampaha	0	2	0	1	0	0	1	1	0	0	0	0	5
Kalutara	0	0	0	0	0	0	0	0	0	0	0	0	0
Kandy	3	2	1	1	0	0	2	0	1	0	1	1	12
Matale	8	4	1	0	0	1	1	0	0	2	0	4	21
Nuwara-Eliya	0	0	0	0	0	0	0	0	0	0	0	0	0
Galle	0	1	0	0	0	0	1	0	0	0	0	0	2
Hambantota	34	42	37	5	9	4	55	20	21	30	25	44	326
Matara	32	20	27	10	12	7	11	12	13	7	4	13	168
Jaffna	0	0	0	0	0	0	0	0	0	0	0	0	0
Kilinochchi	0	0	0	0	0	0	0	0	0	0	0	0	0
Mannar	0	0	0	0	0	0	0	0	0	0	0	0	0
Vavuniya	1	0	0	0	1	1	1	0	0	0	1	1	6
Mullaitivu	0	1	1	0	0	0	0	1	1	0	0	0	4
Batticaloa	0	0	0	0	0	0	0	0	0	0	0	0	0
Ampara	1	0	2	1	1	0	0	0	1	2	0	0	8
Trincomalee	0	1	0	1	0	1	0	0	5	0	3	5	16
Kurunegala	12	7	10	6	7	10	4	4	14	11	3	11	99
Puttalam	0	0	0	0	0	2	0	2	0	0	0	0	4
Anuradhapura	33	23	15	14	16	14	26	21	28	11	16	30	247
Polonnaruwa	15	17	15	11	17	4	4	11	7	9	9	14	133
Badulla	0	0	0	0	1	1	1	0	0	0	0	0	3
Moneragala	1	0	5	3	5	2	7	2	0	2	2	0	29
Ratnapura	4	0	0	0	1	0	0	0	0	0	0	0	5
Kegalle	0	0	0	0	0	0	1	1	0	0	0	1	3
Kalmunai	0	0	0	0	0	0	0	0	0	0	0	0	0
Tatal	1 4 4	100	444	50	70	47	115	75	01	74	64	104	1001
Total	144	120	114	53	70	47	115	75	91	74	64	124	1091

## Table 23: Distribution of confirmed Leishmaniasis cases in 2016

Source - Notification data (H-399) Epidemiology unit

Highest numbers of Leishmaniasis cases were reported from Hambantota district followed by Anuradhapura, Matara and Polonnaruwa.

# Leishmaniasis cases by month 2013 – 2016



Graph 1: Leishmaniasis cases by month 2013 - 2016

Notification data/Epidemiology Unit

### Table 24: Districts of highest reported cases

District	2013	2014	2015	2016
Hambantota	305	281	144	326
Anuradhapura	356	344	322	247
Matara	099	074	036	168
Polonnaruwa	141	116	123	133

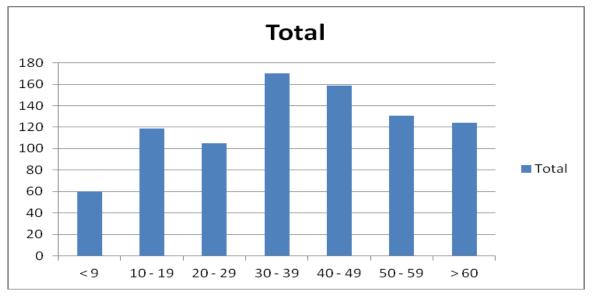
### Table 25 : MOH areas with highest reported cases: 2016

Hambantota	Anuradhapura	Matara
Beliatte	Rajanganaya	Devinuwara
Ambalantota	Anuradhapura (NPE)	Matara (PS)
Hambantota	Nochchiyagama	Kirinda (Puhulwella)

2nd Quarter

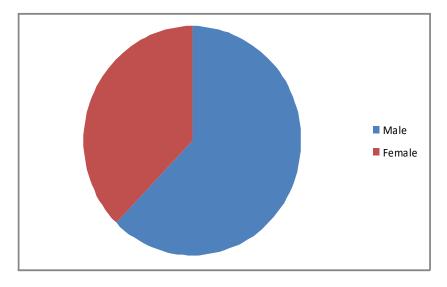
### CHARACTERISTICS OF LEISHMANIASIS PATIENTS





Source - Special surveillance data/ Epidemiology unit

Graph 3: Sex distribution of Leptospirosis cases 2016



Source - Notification data (H-399) Epidemiology unit

Almost all reported cases were Cutaneous Leishmaniasis (CL) and no visceral Leishmaniasis. Majority of patients were in the middle age group.

### **Prevention and control**

Early case detection and treatment mainly in dermatological clinics by Dermatologists is the mainstay of treatment. Early notification on suspicion and case based investigations (special investigations) by PHI for further case detection and referral for treatment is currently being practiced. Improvement of diagnostic and treatment facilities in hospitals is also needed.

### Table 31

### 24. SUMMARY OF NOTIFIABLE DISEASES - 2nd QUARTER 2017

				BLE	DISEA			Id QUARTER 2017										
Health Region	Dengue Fever	Dysentery	Encephalities	Enteric Fever	Food Poison- ing	Leptospirosis	Typhus Fever	Viral Hepa <del>titi</del> s	Human Rabies	Chickenpox	Meningitis	Leishmaniasis	Mumps	Measles	Tetanus	Whooping Cough	Tuberculosis	Simple Contd.Fever
Colombo	11275	8	1	7	18	40	0	5	0	93	6	0	3	4	0	0	324	1
Gampaha	10141	6	1	5	0	8	2	1	0	70	5	1	5	0	0	0	154	1
Kalutara	2330	12	1	3	4	74	3	1	0	117	27	0	2	0	0	0	45	11
Kandy	3598	29	1	3	9	11	36	3	0	47	12	4	5	2	1	0	106	0
Matale	721	4	1	1	6	3	1	1	0	19	14	1	1	0	0	0	34	0
Nuwaraeliya	188	8	5	12	9	8	65	10	0	179	11	0	2	0	0	0	58	3
Galle	1282	11	1	4	3	94	3	1	1	113	19	0	2	2	0	0	81	13
Hambantota	989	1	2	1	1	20	11	1	0	48	6	58	4	1	0	0	24	0
Matara	1423	6	1	1	2	87	5	1	1	72	2	34	2	4	0	0	51	1
Jaffna	1088	57	4	9	21	3	33	0	0	49	11	0	4	2	0	0	90	10
Kilinochchi	88	4	1	3	1	1	3	0	0	3	5	2	0	0	0	0	9	0
Mannar	173	1	0	0	0	2	0	0	0	8	0	0	1	0	0	0	6	0
Vavuniya	229	3	0	9	1	12	3	0	0	3	1	3	0	0	0	0	8	0
Mullativu	80	6	1	0	1	3	1	0	1	8	0	0	0	1	0	1	9	0
Batticaloa	2516	19	0	4	13	8	0	0	1	48	8	о	1	2	0	0	36	4
Ampara	252	5	1	0	0	2	0	1	0	60	17	1	2	1	0	0	18	0
Trincomalee	1228	8	1	1	15	7	5	10	0	47	8	2	0	2	0	0	36	0
Kurunegala	3940	20	6	0	12	7	3	9	1	135	13	44	5	1	0	2	119	2
puttalam	1713	7	1	1	0	10	1	0	0	28	14	0	5	0	0	0	30	0
Anuradhapura	820	11	0	0	6	18	3	3	0	136	25	49	5	6	0	1	57	0
Kalmunai	486	14	0	2	266	1	0	2	0	30	5	0	4	0	0	0	38	1
Polonnaruwa	522	3	1	4	0	15	1	4	0	61	4	35	5	3	0	0	17	0
Badulla	739	20	1	3	0	36	45	29	0	128	52	4	3	1	0	1	49	1
Monaragala	739	23	0	0	7	43	20	5	1	22	12	7	0	2	0	1	21	4
Ratnapura	3588	26	15	1	4	214	6	24	0	82	48	15	6	2	0	0	99	1
Kegalle	2977	5	4	2	2	28	20	5	0	62	17	2	12	1	0	0	80	0
NIHS Kalutara	603	2	0	2	14	24	0	0	0	25	15	0	2	0	0		-	
Total	53728	319	50	78	415	779	270	116	6	1693	357	262	81	37	1	6	1624	53

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

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# ON STATE SERVICE

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