

# **SRI LANKA**

Volumess

# Second Quarter 2018

# **EPIDEMIOLOGY UNIT**

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#### 1. POLIOMYELITIS

Nineteen (19) Acute Flaccid cases were notified to the Epidemiology Unit during the 2<sup>nd</sup>quarter 2018. This is high when compared to AFP cases of during the 2<sup>nd</sup> quarter (14) 2017. Reported numbers of AFP cases for the quarter is little lower than the expected number of AFP cases per quarter of the annual surveillance to achieve the target of 2/100,000 under 15-year old population, The non-polio AFP rate for the second quarter of 2018 was 0.43 /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 as 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.

Majority of the cases (21%) notified for the 2<sup>nd</sup> quarter were from Lady Ridgeway Hospital (LRH). Hospitals reporting AFP cases for the 2<sup>nd</sup> quarter are given below in table 1.

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

The highest number of AFP cases (4) were reported from the Kandy district in the central province. The complete list of distribution of AFP cases according to the province, district and MOH area is given below in table 1.

## Table 01 :Notification of AFP cases by sentinel hospitals : 2nd Quarter 2018

Hospital	No: of cases reported
Lady Ridgeway Hospital	4
T.H.Karapitiya	3
G.H.Badulla	1
TH Kurunegala	2
TH Peradeniya	2
CSTH Kalubowila	1
SBSCH	2
BH Homagama	1
TH Kandy	2
TH Jaffna	1
Total	19

Table 02 : Geographical distribution of AFP cases2nd quarter 2018

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Maharagama	1
		CMC	2
	Kalutara	Milleniya	1
Southern	Matara	Malimbada	1
	Hamabantota	Sooriyawewa	1
		Thissamaha- rama	1
Central	Kandy	Gampola	1
		Medamahanu-	1
		Watthegama	1
		Akurana	1
	Matale	Laggala	1
Sabaragamuwa	Kegalle	Dehiowita	1
North Western	Kurunegala	Kobeigane	1
		Rideegama	1
Uva	Monaragala	Bibila	1
	Badulla	Hali ela	1
Nothern	Mannar	Manthai West	1
	Killinochchi	Killinochchi	1
Total			19

#### **Seasonal Distribution of AFP Cases**

Majority of AFP cases were reported during June (47%) compared to the similar proportion (43%) reported during the same month in the  $2^{nd}$  Quarter of 2017.

#### Age and Sex Distribution of AFP cases

Majority (74%) of the cases were males during the  $2^{nd}$  quarter 2018 and this was little higher compared to the trend reported during the  $2^{nd}$  quarter 2017 which was 64 % Majority (63%) of the cases were between 1-9 years during the  $2^{nd}$  quarter this year and the trend was higher compared to the compatible quarter in the previous year(57%).

Table 3 below shows the age distribution in the 2<sup>nd</sup> quarter 2018.

Table 03. Distribution of AFP cases by Age 2ndQuarter 2018.

Age Group	Se	Total	
	Male	Female	
<1 year old	0	0	00
1-4 year old	3	2	05
5-9 year old	5	2	07
10-15 year old	6	1	07
Total	14	5	19

#### Final diagnoses of AFP cases

Majority (84%) of the reported AFP cases were finally diagnosed as Guillain-Barre Syndrome (GBS). Final diagnoses of all 19 cases of AFP are given in table 4.

## Table 04: Final diagnoses of AFP patients reportedduring 2nd quarter 2018.

Final Diagnoses	Frequency
GBS	16
Transverse Myelitis	1
Cerebella	1
Spinal Cord Compressive lesion	1
Total	19

#### 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 the samples of 'good condition'. Out of 19 AFP cases, 18 cases (95%) had both stool samples collected timely and sent to MRI for polio virology.

#### 2. MEASLES: 2<sup>ND</sup> QUARTER 2018

Forty three (43) fever and maculopapular rash Patients suspected of measles and rubella were reported and investigated for confirming measles or rubella. This number was little lower than the number reported for the first guarter which was 47. The number is only satisfying the 50% of the expected number for the quarter, which was 100/100,000 population for the quarter to meet the non-measles, non-rubella discarded rate. Awareness and reminders together with the updated circular was sent to hospitals to inform the requirement of notifying "fever and maculopapular rash" cases, ensuring the strengthened surveillance. 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 better awareness and for detecting cases for the notification. All fever and maculopapular rash cases were field investigated by the respective Medical Officers of Health of the patients' residential areas and special investigation forms were received and reviewed at the Epidemiology Unit.

 Table 05: Number of Measles cases by district: 2<sup>nd</sup> Quarter 2018

District	cases	District	cases
Colombo	5	Batticaloa	1
Gampaha	4	Ampara	0
Kalutara	1	Trincomalee	2
Kandy	4	Kurunegala	4
Matale	8	Puttalam	1
Kalmunai	5	Anuradhapura	9
Galle	0	Polonnaruwa	2
Hambantota	0	Badulla	0
Matara	0	Monaragala	0
Jaffna	1	Ratnapura	0
Vavuniya	0	Kegalle	1
Kilinochchi Kalmunai	0 0	Nuwara Eliya	1

Central 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.

Laboratory investigations of 35 out of the 47 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 for measles IgM testing. The programme has identified the laboratory measles IgM testing rate as 81% and achieved satisfactory levels of monitoring target of >80%.

#### 3. LEPTOSPIROSIS

During the 2<sup>nd</sup> Quarter 2018, 1178 cases and 20 deaths (CFR 1.7 %) due to Leptospirosis were notified to the Epidemiology Unit compared to 938 cases and 19 deaths in the previous quarter and 776 cases and 8 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(%) 2nd QUARTER 2018. Comparison <thComparison</th> <thComparison</th> <thCompariso

Age Group	Sex		
	Male	Female	
0 - 9 years	0.72	0.00	
10 - 19 years	8.96	2.13	
20 - 29years	18.64	6.38	
30 - 39years	19.65	14.89	
40 - 49years	18.79	28.72	
50 - 59 years	18.21	28.72	
>60years	15.03	19.15	
Total	100.00	100.00	

#### 4. HUMAN RABIES

Four cases of Human Rabies were notified to the Epidemiology Unit in the  $2^{nd}$  quarter, 2018 compared to 07 cases in the previous quarter and 6 cases in the corresponding quarter of year 2017. The four notified cases have been confirmed.

#### **Animal Rabies**

During this quarter, 98 dogs were reported positive for rabies, compared to 87 in the previous quarter and 110 positive in the same period in the last year.

#### **Rabies Control Activities**

**Dog vaccination** - A total of 18654 dogs were immunized during the Quarter under review when compared to 134084 in the previous quarter and 317181 in corresponding Quarter of the last year.

#### **Animal Birth control**

**Chemical**- A total of 34 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

n the 2<sup>nd</sup> Quarter 2018, a total of 58 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 53 cases in the previous quarter and 116 cases in the corresponding quarter of 2017. Monaragala district (10 cases) reported the highest number of cases followed by Nuwaraeliya District (9 cases).

#### 6. ENTERIC FEVER

In the 2<sup>nd</sup> Quarter 2018, a total of 63 cases of Enteric fever were reported to the Epidemiology Unit, compared to 85 cases in the previous quarter and 77 cases in the corresponding quarter of 2017. The district of Colombo (12 cases) reported the highest number of cases, followed by Vavuniya (10 cases).

Vol	ume	56

#### 7. DYSENTERY

In the 2<sup>nd</sup> Quarter 2018, a total of 349 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 385 cases in the previous quarter and 318 cases in the corresponding quarter of 2017. Rathnapura district (39 cases) and Kurunegala (32 cases) reported the highest numbers of cases.

#### 8. MALARIA

There were no indigenous malaria cases reported during the  $2^{nd}$  quarter of 2018. Nine imported malaria cases were reported in the  $2^{nd}$  quarter 0f 2018.

## Table 07: SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – UP TO 2<sup>nd</sup> QUARTER 2018

Variable	Category Percentage	
Sex	Male	08 (42%)
	Female	11 (58%)
Age group	< 1 y	01 (05%)
	1-10 y	04 (21%)
	11- 20	01 (05%)
	21-50Y	06 (32%)
	> 50 Y	07 (37%)
District		
	Ratnapura	06(32%)
	Gampaha	01(05%)
	Matara	01 (05%)
	Vavuniya	01 (05%)
	Batticaloa	01 (05%)
	Galle	02(11%)
	Kurunagela	04 (21%)
	Anuradhapura	02 (11%)
	Kandy	01(11 %)

#### 9.JAPANESE ENCEPHALITIS (JE)-2ND QUARTER 2018

During the 2<sup>nd</sup> quarter of 2018, 47 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 38 cases were clinically confirmed by the Public Health Inspectors during their field investigations.

During the 2<sup>nd</sup> quarter of 2018, MRI has reported 05 lab confirmed JE cases. Out of these 05 confirmed JE cases, all (100%) were investigated by the MOH. Up to 2<sup>nd</sup> Quarter (Jan –June) 2018, MRI has reported altogether 19 lab confirmed JE cases

Among them, 07 (37%) were over 50 years of age, another 06 (32%) were between 21 -50 years, another 01(05%) was between 11 - 20 years, another 4 (21%) were 1-10 years while one (5%) was less than one year.

The highest number of confirmed JE cases (06) were reported from Ratnapura, Kurunagela (4), Galle (2), Anuradhapura (2), Gampaha(1) Vauuniya (1), Batticaloa (1) Matara (1),Vavuniya (1) and Kandy (1). The majority of confirmed JE cases have not been immunized

#### Table 08: Results of Blood smear examination for malaria parasites - 2nd Quarter 2018

	2 <sup>nd</sup> quarter 2017	2 <sup>nd</sup> quarter 2018
No. of blood smears examined	221,153	270,024
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 examined by district RMO– 2nd Quarter 2018

#### 2nd Quarter

April — June

#### Table 10:

#### MORBIDITY AND MORTALITY DUE TO DF/DHF - 2ND QUARTER 2018

0	April	May	June	Total				- 2ND QUARTER 2018
Ampara Anuradha-	1526	2022	2167	5715	RDHS	No of Cas- es reported in 2 <sup>nd</sup> Quar- ter 2018	RDHS es reported %	RDHS es reported % Deaths in 2 <sup>nd</sup> Quar-
pura	3539	4711	3961	12211	Colombo			
Badulla	3351	3667	3535	10553	Gampaha	Gampaha 1076	Gampaha 1076 9.20	Gampaha 1076 9.20 0
atticaloa	5405	5911	5208	16524	Kalutara	Kalutara 632	Kalutara 632 5.41	Kalutara 632 5.41 0
Colombo	7354	8999	9878	26231	Kandy	Kandy 847	Kandy 847 7.24	Kandy 847 7.24 0
Embilipiti-					Matale			
а	3363	4610	3948	11921	Nuwara Eliya			
ialle	1559	1858	1745	5162	Galle			
ampaha	4052	5390	5464	14906	Hambanto- ta	140		
am-	1776	1850	1756	5202	Matara	Matara 134	Matara 134 1.15	Matara 134 1.15 1
antota	1776		1756	5382	Jaffna	Jaffna 625	Jaffna 625 5.35	Jaffna 625 5.35 0
affna	5060	4687	5210	14957	Kilinochchi	Kilinochchi 83		
almune	4026	4663	4743	13432	Mannar			
Kalutara	1552	995	910	3457	Vavuniya			
andy	4210	6038	5308	15556	Mulativu			
egalle	1862	2550	2268	6680	Batticaloa			
linochchi	2391	2240	2434	7065	Ampara Trincoma-	Trincomo	Trincomo	Trincomo
urunega-	2331	2240	2434	7005	lee	lee 402	lee 402 3.44	lee 402 3.44 1
а	5388	7572	6934	19894	Kurunegala	-		
Maho	1465	1359	1735	4559	Puttalam Anuradha-	Anuradha	Anuradha	Anuradha
Mannar	2039	3994	3020	9053	pura Pol-	pura 209	pura 209 1.79	pura 209 1.79 3
Matale	2364	2881	2790	8035	onnaruwa	onnaruwa <sup>78</sup>	onnaruwa 78 0.07	onnaruwa 78 0.67 0
Matara	1963	1972	2333	6268	Badulla Moneraga-		Monoraga	Monoraga
Mon-					la Ratnapura			
eragala	3147	4039	4650	11836				
Mulativu Nuwara	2098	2519	2297	6914				
eliya	576	584	612	1772				
ol-								
onnaruwa	2919	2652	2808	8379				
Puttalam Trincoma-	2547	2922	3188	8657				
lee	2830	2804	2841	8475				
Vavuniya	1898	2276	2256	6430 6				
Sri Lanka	80260	95765	93999	270024				

2nd Quarter

#### Table 11

#### DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 2ND QUARTER 2018

Month	Clinically Suspected Cases Tested for DF/DHF	Serologically Confirmed Cases as DF/DHF
April	67	6 (9.0%)
Мау	156	21 (13.5%)
June	172	28 (16.3%)
Total	395	55 (13.9%)

#### 10. DENGUE FEVER (DF) / DENGUE HAEMOR-RHAGIC FEVER (DHF) – 2nd QUARTER 2018

During the  $2^{nd}$  quarter of 2018; 11,691 cases of DF/DHF were reported from all districts (Table 10) while 17 deaths were reported (CFR 0.15%) when compared to 15,148 cases of DF/DHF reported with 15 deaths (CFR 0.10%) being reported during the 1<sup>st</sup> quarter of 2018. Proportion of cases notified in April, May and June were 22.39%, 30.45% and 47.16% respectively.

Special surveillance data of confirmed cases were received and analyzed for the  $2^{nd}$  quarter of 2018. Age distribution of reported cases were 3.4% in <4 years age group, 11.3% in 5-9 years of age group, 11.1% in 10-14 years of age, 9.2% in 15 -19 years of age, 10.6% in 20-24 years of age, 9.4% in 25-29 years of age, 8.9% in 30-34 years of age, 8.5% in 35-39 years of age, 5.4% in 40-44 years of age, 4.8% in 45-49 years of age, 3.9% in 50–54 years of age, 3.7% in 55-59 years of age and 6.4% in >60 years of age groups.

According to the Special surveillance data on clinical findings majority of the reported cases 81.3% were classified as dengue fever (DF) while 18.6% were classified as dengue Haemorrhagic fever (DHF).

During the 2<sup>nd</sup> quarter of 2018, 395 blood samples were tested using IgM capture ELISA test at the Department of Virology, Medical Research Institute (MRI) and 55 (13.9%) samples were confirmed as positive. (Table 10)

#### 11. RUBELLA AND CONGENITAL RUBELLA SYN-DROME (CRS) Rubella:

#### upella.

The same suspected 43 fever and maculopapular rash cases were tested for rubella. There was no continuation of indigenous transmission of measles in the country. No rubella confirmed cases for the quarter.

#### 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 and excluded as not congenital rubella syndrome.

#### 12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2018. Last case of cholera was reported in the country in January 2003.

#### **13. TETANUS**

Out of 4 reported Tetanus cases 3 were clinically confirmed (75%) during the  $2^{nd}$  Quarter 2018. Kandy, Jaffna, Trincomalee and Anuradhapura were the reporting districts during the  $2^{nd}$  Quarter and reported one Tetanus case per district. All reported cases were 30 - > 60 years of age and males (100%).

#### 2nd Quarter

#### 14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 2<sup>nd</sup> Quarter of 2018 has reached 100% of completeness of reports, while 56.2% 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 (94.9%) 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 was more than two fold of the Sri Lanka average (21.1%) indicating the need for better attention for surveillance. followed by Kegalle (3.0%) and Colombo districts (5.9%) indicating the good surveillance system in place. The highest rate (762.8 per 100,000 immunizations) of AEFI was reported from Mullativu district, while Colombo reported the highest number of 206 AEFI cases in the second quarter 2018.

For the second quarter, the highest number of AEFI (n=1350) was reported against Pentavalent vaccine, whereas the highest rate of AEFI (1232.9/100,000 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> dose) is 596.8 per 100,000 doses administered. High Fever (937), Allergic Reaction (323), Nodule (494) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (489 cases: 220.9 per 100,000 doses administered) and DPT (372cases: 458.9 per 100,000 doses administered) and DPT (130 cases: 148.5 per 100,000 doses administered) and PVV (105cases: 46.3per 100,000 doses administered).

#### Table 12

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVI-SIONS - 2ND QUARTER 2018

	% complete-	% Timely	% Nil Re-	No. of	AEFI Rate (100,000 vaccine
DPDHS	ness	returns	turns	AEFI	doses)
Colombo	100.0	53.1	5.9	206	144.8
Gampaha	100.0	48.7	6.7	128	95.0
Kalutara	100.0	55.0	16.7	124	154.4
Kandy	100.0	42.3	12.5	178	172.4
Matale	100.0	74.4	20.5	52	138.2
Nuwara Eliya	100.0	28.2	25.6	107	190.6
Galle	100.0	42.0	25.0	122	160.3
Hambantota	100.0	36.6	8.3	178	331.0
Matara	100.0	48.2	13.7	92	164.4
Jaffna	100.0	94.9	7.1	220	637.8
Kilinochchi	100.0	75.0	16.7	35	379.6
Mannar	100.0	72.7	40.0	48	555.3
Vavuniya	100.0	67.6	27.3	60	477.6
Mullaitivu	100.0	21.2	33.3	57	762.5
Batticaloa	100.0	42.9	38.1	67	144.9
Ampara	100.0	30.6	61.9	19	92.5
Trincomalee	100.0	42.7	27.8	70	180.5
Kurunegala	100.0	48.2	33.3	172	455.4
Puttalam	100.0	29.4	35.9	67	59.4
Anuradhapura	100.0	35.3	19.3	138	224.3
Polonnaruwa	100.0	32.6	19.0	60	81.9
Badulla	100.0	68.7	14.6	121	369.4
Monaragala	100.0	58.5	18.2	69	108.9
Ratnapura	100.0	49.4	14.8	134	326.7
Kegalle	100.0	58.5	3.0	88	114.8
Kalmunai	100.0	25.4	41.0	36	65.7
Sri Lanka	100.0	56.2	21.1	2648	179.9

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Table 13: Number of Sel	ected A	dverse	Events by	y Vaccine	es – 2nd	Quarter	2018			
	BCG	OPV	PVV <sup>1</sup>	DPT	MMR	LJE	DT	тт	aTd	Total num- ber of AEFI reported
Total Number of AEFI Reported	5		1350	1031	126	60	48	10	18	2648
AEFI reporting rate/1,000,000 doses administered	4.0		506.9	1000.0	74 5	77.0	EQ 1	77	22.4	
	4.9		596.8	1232.9	74.5	77.3	58.1	7.7	22.4	007
High Fever (>39°C)	1		489	372	40	25	10			937
Reporting rate/1,000,000 doses administered	1.2		220.9	458.9	22.9	29.7	9.3			
Allergic reactions			105	130	48	22	12		6	323
Reporting rate/1,000,000 doses administered			46.7	148.5	28.6	25.9	15.1		7.7	
Severe local reactions			25	45			2	2	1	75
Reporting rate/1,000,000 doses administered			11.6	58.0			2.3	1.4	1.3	
Seizure (Febrile/ Afebrile)			18	86	7	12	1			124
Reporting rate/1,000,000 doses administered			8.2	104.5	4.5	14.7	1.2			
Nodules	0		360	120	1	1	7	2	3	494
Reporting rate/1,000,000 doses administered	0		160.4	148.6	0.6	1.2	8.3	1.4	4.3	
Injection site abscess	0		100.4	25	2	1.2	1	T.7	т.0	133
Reporting rate/1,000,000 doses administered	0		47.9	23	1.2		1.2			133
ННЕ			2	1						3
Reporting rate/1,000,000 doses administered			0.9	1.2						5

1-PentaValent Vaccine

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

#### 2nd Quarter

April — June

Number

#### 15. TUBERCULOSIS

A total of 2066 TB patients were notified to the NPTCCD by H816A (TB notification form) for the second quarter 2018, while 2040 patients were registered at chest clinics during the same quarter according to the Quarterly Report on Case Finding (TB 08). Out of this, 1930 (94.8%) TB patients were new TB cases,110 (5.4%) were 'retreatment cases' and there wasn't any cases identified for 'previous treatment history unknown' category. Out of new TB cases, 990(51.3%) were bacteriologically confirmed TB, 364 (18.9%) were clinically diagnosed (sputum negative )TB and 576 (29.8%) were new extra pulmonary TB cases. Out of this're-treatment' cases, 71 (64.5%) patients were 'relapse', 22(20%) patients were 'Treatment After Failure', 16 (14.5%) patients were 'loss to follow-up' and 01 (0.9%) was 'other previously treated'. A total of 1914 TB patients were screened for HIV, out of which two were positive for HIV. A total of 03 patients were TB/HIV co-infection. Three Multi-Drug Resistant TB patients were detected during the above quar-

#### Table 14: TUBERCULOSIS PATIENTS BY RDHS DIVISIONS

Colombo Gampaha Kalutara	249 139	91			un- known	
•	139	01	127	467	14	481
Kalutara		46	65	250	24	274
	67	19	25	111	8	119
Kandy	56	27	42	125	3	128
Vlatale	13	0	16	29	4	33
Nuwara Eliya	25	11	14	50	0	50
Galle	36	12	24	72	6	78
Vatara	31	13	28	72	2	74
Hambantota	11	6	10	27	1	28
Jaffna	20	19	19	58	10	68
/avuniya	12	1	3	16	0	16
Batticaloa	20	5	8	33	2	35
Ampara	8	11	7	26	2	28
Kalmunai	13	22	10	45	2	47
Frincomalee	25	1	8	6	32	34
Kurunegala	47	12	31	90	4	94
Puttalam	20	6	12	38	2	40
Anuradhapura	40	4	20	64	5	69
Polonnaruwa	22	19	6	47	1	48
Badulla	34	5	12	51	4	55
Monaragala	15	4	7	26	1	27
Rathnapura	39	6	47	92	5	97
Kegalle	36	20	29	85	7	92
Mannar	2	0	3	5	1	6
Mullaitivu	2	3	1	6	0	6
Kilinochchi	8	1	4	13	0	13
Fotal	990	364	576	1930	110	2040

#### TB/HIV States

Table 15 : TB/HIV status

TB patients screened for HIV in the 2nd quarter	1914
No. of patients found to be positive for HIV in the same semester	2
Known positive HIV patients in 1st quarter	1
Total HIV/TB co infection	3

#### **16. SURVEILLANCE AT SEA PORT**

Details of the vaccinations carried out by the Assistant Port Health Office during the 2nd quarter 2018, is as follows;

#### Table 16: Surveillance at SEA port : 2nd Quarter 2018

	Vaccination data	Total
Α.	Yellow fever	1031
В.	Meningococcal meningitis	376
C.	Oral polio	223

#### 17. SURVEILLANCE AT AIRPORT

Details of surveillance activities carried out at the Inter national Airport, Katunayake during the 2nd Quarter 2018 are given below.

#### Table 17: Surveillance at airport : 2nd Quarter 2018

#### Emerging and remerging 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 to Health office	286
No. of passengers drug issued	02
No. of blood films done (R.D.T.)	285
Referred to I.D.H./Other unit	00
Yellow Fever	
No. of yellow fever cards inspected	985
No. Invalid/without Yellow Fever cards	33
Referred to I.D.H/Other units	01

PTB-Pulmonary Tuberculosis EPTB– Extra Pulmonary Tuberculosis SP + ve - Sputum Positive SP – ve - Sputum Negative

April — June

### 18. LEPROSY

#### QUARTERLY RETURN OF LEPROSY STATISTICS - 2ND QUARTER 2018 1. NATIONAL

Table 18

	At t	At the end of the quarter			Cumulative for end of the quarter		
	2 <sup>nd</sup> quarter 2018	2 <sup>nd</sup> quarter 2017	Diff (%)	2018	2017	Diff (%)	
New patients detected	383	460	-(16.73)	813	929	-(12.48)	
Children	35	53	-(33.96)	69	100	-(31.00)	
Grade 2 Deformities	23	33	-(30.30)	49	66	-(25.75)	
Multi-Bacillary	245	266	-(7.89)	501	532	-(5.82)	
Females	142	184	-(22.82)	315	378	-(16.66)	
2. Districts							

District	New patients	G2-Deformity	Children	MB	Females
Central	14	1	1	8	4
Kandy	6	0	0	3	1
Matale	7	1	1	4	3
NuwaraEliya	1	0	0	1	0
Eastern	43	1	6	30	17
Ampara	7	1	1	4	2
Batticaloa	24	0	4	16	11
Kalmunai	11	0	1	9	4
Trincomalee	1	0	0	1	0
Northern	17	1	2	9	10
Jaffna	12	1	2	7	8
Kilinochchi	0	0	0	0	0
Mannar	1	0	0	0	1
Vavuniya	2	0	0	1	0
Mullaitivu	2	0	0	1	1
North Central	26	2	3	18	10
Anuradhapura	16	2	2	11	8
Pollonnaruwa	10	0	1	7	2
North Western	31	2	1	18	10
Kurunegala	20	1	0	12	8
Puttalam	11	1	1	6	2
Sabaragamuwa	26	2	0	17	7
Kegalle	10	1	0	6	3
Rathnapura	16	1	0	11	4
Southern	24	5	1	16	6
Galle	11	2	1	7	2
Hambanthota	4	0	0	2	2
Matara	9	3	0	7	2
Uva	19	0	1	11	7
Baddulla	9	0	1	6	3
Monaragala	10	0	0	5	4
Western	183	9	20	118	71
Colombo	60	3	6	36	27
CMC	15	1	1	10	3
Gampaha	54	3	6	38	20
Kalutara	54	2	7	34	21
Sri Lanka	383	23	35	245	142

Source : Anti Leprosy Campaign

#### **19. SEXUALLY TRANSMITTED DISEASES**

#### Table 19

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

#### 2ND QUARTER 2018

Disease			es or new di uring the quar		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>	69	17	86	144	32	176
AIDS		13	1	14	26	3	29
	Early Syphilis <sup>2</sup>	13	1	14	19	3	22
Syphilis	Late Syphilis <sup>3</sup>	125	61	186	265	121	386
	Congenital Syphilis <sup>4</sup>	1	1	2	1	1	2
Gonorrhoea	5	47	16	63	90	30	120
Ophthalmia	Ophthalmia Neonatorum <sup>6</sup>		0	1	1	0	1
Non specifi	c cervicitis/urethritis	207	461	668	412	907	1319
Chlamydial	infection	6	2	8	6	2	8
Genital Her	pes	324	452	776	628	885	1513
Genital Wa	rts	348	252	600	650	526	1176
Pelvic inflar	nmatory diseas	0	25	25	0	47	47
Trichomoniasis		3	11	14	6	19	25
Candidiasis		299	463	762	618	943	1561
Bacterial Vaginosis		0	351	351	0	700	700
Other sexua	ally transmitted diseases <sup>7</sup>	130	70	200	231	136	367
Non venere	al	830	495	1325	1768	1042	2810

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
- <sup>1</sup> Includes AIDS cases
- <sup>2</sup> Diagnosed within 2 years of infection and considered to be infectious
- <sup>3</sup> Diagnosed after 2 years of infection and considered to be non-infectious
- <sup>4</sup> Includes both early and late cases
- <sup>5</sup> Includes presumptive Gonorrhoea
- <sup>6</sup> Includes both gonococcal and chlamydial conjunctivitis in neonatal period
- Includes Lymphogranuloma venerium, Granuloma inguinalae, 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 I NSTITUTE 2nd QUARTER 2018

#### Table 20: Bacteriological report, MRI 1st Quarter 2018.

		2 <sup>nd</sup> Quarter 2018				
		APRI L	MAY	JUNE		
(A) CHOI	ERA	L				
1 N N N	ol specimens					
Examined	-	0	10	23		
No. of pos <i>Cholera</i>	itives El. Tor	0	0	0		
Ogawa		0	0	0		
Inaba		0	0	0		
Cholera O	139	0	0	0		
	IONELLA	-	0	0		
	. Examined	5	0	0		
S.typhi		0	0	0		
S.paratyph	l	0	0	0		
Stools—N	o. examined	49	94	47		
S.typhi		0	0	0		
S.paratyph	i	0	0	0		
Others		4	3	0		
			-			
(C) SHIG	ELLA					
ined	cimens exam-	49	94	47		
Sh.flexner i	Ī	0	0	0		
Sh.flexner i	Î II	0	0	0		
Sh.flexner i	111	0	0	0		
Sh.flexner i		0	0	0		
Sh.flexner i	r	0	0	0		
Sh.flexner i	<sup>'</sup> VI	0	0	0		
S. sonnei		1	1	1		
S.dysenter	iae	0	0	0		
(D) ENT GENIC	EROPATHO-					
E.COLI						
No.Examii	ned	4	6	6		
No.+ve		1	1	0		
(E) CAMI	PYLOBACTER					
No.Examii	ned	49	94	47		
No. Positiv	/e	0	0	2		
(F) SPEC	IAL	69	71	128		

#### 21. SURVEILLANCE OF MENINGITIS-

#### 2nd quarter 2018

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 2<sup>nd</sup> quarter 2018, 279 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 243 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Monaragala district (32) followed by Badulla (25) and Kurunegala (25) districts.

Fourty four percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 16% belonged to the age group 1-5 years and 11% belonged to age group 6 - 14 years. Fifty seven percent of the clinically confirmed cases were males and 43% 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	140	46
No Growth	138	
Streptococcial pneumonia	01	
ТВ	01	
Culture results not known	152	50
Not done	08	03
	302	100
Total		

#### **Final outcome of the patient**

Outcome	Number	(%)
Cured	290	96
Died	07	02
Information not available	05	02
Total	302	100

#### Final Diagnosis (based on clinical and lab findings)

Diagnosis	Number	(%)
Culture confirmed	02	01
Probable bacterial meningitis	24	08
Probable viral meningitis	29	10
Suspected Meningitis	247	82
Total	302	100

#### 2nd Quarter

#### 22. INFLUENZA SURVEILLANCE-2nd 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  $2^{st}$  quarter of year 2018, all sentinel sites (19 hospitals) have reported ILI data with a reporting rate of 100%. A total of 32510 ILI cases were reported, accounting for 2.7 % of all OPD visits (n=1182997). The highest number of ILI cases were reported from District General Hospital, Vavuniya (n=5281, 6.7%) and the majority of the patients were in the age group 15 — 49 years (n=1928, 6.6 %). For the  $2^{nd}$  quarter highest proportion (14.7%) of patients reported from DGH Matara from the infants.

#### SARI Surveillance

A total of 2789 SARI cases were reported for the 2<sup>nd</sup> quarter of 2018 from four sentinel hospitals (Teaching Hospital Ragama, District General Hospital Matara, Teaching Hospital Peradeniya and LRH). Out of 47831 admissions during the 2<sup>nd</sup> quarter, to the medical and paediatrics wards in the relevant hospitals 5.8 % were due to SARI. The highest number of SARI cases were reported from DGH Matara (n=1449, 14.1 %).

#### Laboratory Component

ter. Distribution of TB patients by RDHS division is as under

ILI Surveillance

A total of 65 ILI respiratory samples were received at the MRI from sentinel hospitals during the 2<sup>nd</sup> quarter of 2018. Nine samples were positive for influenza A and two were positive

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 530 respiratory samples were received at MRI from all over the island for the 2<sup>nd</sup> quarter of year 2018. 101 samples were positive and 94 were influenza A and 06 were influenza B.

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

Month	T o t a l tested	Total posi- tives	Influenza A	A (H1N1)	A (H3N2)	Not typed	Influenza B
		5					
April	15		3	-	-	-	2
		2					
May	31		2	-	-	-	0
		4					
June	19		4	-	-	-	0
Total	65	11	9	-	-	-	2

#### Table 22: Types of Influenza Viruses Isolated in ILI samples in the 2nd quarter of the year 2018.

#### (Source: NIC/MRI)

Total positive rate for influenza A was 9 (13.8%) and were the predominant strains identified for the  $2^{nd}$  quarter of 2018.

Month	T o t a l Test- ed	Total posi- tives	Influenza A	A(H1N1)	A(H3N2)	Not typed	Influenza B
April	60	12	11	-	-	1	-
May	263	53	48	-	-	-	5
June	207	36	35	-	-	-	1
Total	530	101	94	-	-	-	6

	Table 23: Types of Influenza	a Viruses Isolated in SARI Sam	ples in the 2nd o	quarter of the year 2018
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#### (Source: NIC/MRI)

Influenza A was the predominant circulating Influenza viral strain identified for the 2<sup>nd</sup> quarter of 2018.

#### **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 foecal samples collected from migratory bird hotspots during the two migratory seasons, where fifteen foecal samples are collected from each bird hotspot, pooled in bottles with five samples in each and analyzed at the virology laboratory at Polgolla.

#### 2nd Quarter

Month	Pool samples for embryo-	District samples collected from	Serum Samples	District samples collect- ed from
	nared chicken		for ELI-	
	egg passage		SA	
April	1853	Colombo, Gampaha, Put- talam,Kandy, Moneraga- la,Polonnaruwa, Ratnapura, Trincomalee, Mullaitivu, Kegalle, Batticaloa,, Anura- dhapura, Kurunegala, Jaff- na,Hambantota, Ampara Vavuniya	974	Colombo, Gampaha, Matale, Badulla, Trinco- malee,Kandy, Moneraga- la,Polonnaruwa, Ratnapu- ra, Trincomalee, Mul- laitivu,Kegalle, Battica- loa,, Anuradhapura, Ku- runegala, Jaff- na,Hambantota, Ampara Vavuniya
May	1165	Colombo, Gampaha, Kalu- tara, Kandy, Matale, , Kegalle, Polonnaruwa,, Batti- caloa, Trincomalee, ,Anuradhapura, Vavuniya, Kurunegala, Hambanto- ta,Ampara	720	Colombo, Gampaha, Kalutara, Kandy, , Mon- eragala, Kegalle, Pol- onnaruwa,, Batticaloa, Trincomalee, ,Anuradhapura, Vavuniya, Kurunegala, ,Ampara
June	1950	Colombo, Gampaha, Kalu- tara, Kandy, Matale, , Mul- laitivu, Polonnaruwa,, Kilino- chchi, Trincomalee, ,Anuradhapura, Badul- la,Vavuniya, Kurunegala, , Nuwaraeliya,Ampara	810	Colombo, Gampaha, Matale, , Mullaitivu, Pol- onnaruwa,, Kilinochchi, Trincomalee, Vavuniya, Kurunegala, , Jaffna, Nu- waraeliya,Ampara
Total		4968	2504	

#### Table 24: Animal samples collected by month and district for the 2nd quarter of the year 2018

All samples were negative for Al virus isolation for the 2<sup>nd</sup> quarter of 2018.

#### 23. SPECIAL REPORT

#### SURVEILLANCE OF CHICKENPOX

Out of the1965 notified Chickenpox cases, 1,752 (89.2%) were confirmed for the 2<sup>nd</sup> quarter, 2018. Highest district reporting was Gampaha (183) followed by Colombo (181), Kalutara (162) Kurunegala (136) and Anuradhapura (129). May was the highest month reporting (703) in the 2<sup>nd</sup> quarter. According to case based investigation, maximum presentation of cases were 21 - 40 years of age (45.2%) and male (53.8%). Majority (96.9%) was found as no complications. Secondary bacterial infection 3 cases, Myocarditis 4 cases and Pneumonia 1 case were found as complications

#### SURVEILLANCE OF MUMPS

Out of the 82 notified Mumps cases, 71 (86.6%) were confirmed for the 2<sup>nd</sup> quarter. Highest district reporting was Ampara (12) followed by Colombo (10), Kandy (7), Kalutara, Ratnapura and Kurunegala reporting 6 cases each. June (31) was the highest month reporting in the 2<sup>nd</sup> quarter. According to case based investigation, maximum presentation of cases were 21 - 40 years of age (33.9%) and male (55.9%). Majority (94.9%) was found as no complications. One orchitis case was found as a complication.

#### SURVEILLANCE OF LEISHMANIASIS

Out of 647 notified Leishmaniasis cases, 522 (80.7%) were confirmed for the  $2^{nd}$  quarter 2018. Highest district reporting was Hambantota (187) followed by Matara (102), Anuradhapura (99) and Polonnaruwa(63). May was the highest month reporting (234) in the  $2^{nd}$  quarter. According to case based investigation, maximum presentation of cases were 30 - above 60 years of age (66.2%) and male (62.7%).

Table 31

#### 25 SUMMARY OF NOTIFIABLE DISEASES - 2nd QUARTER 2018

25 SUMMAR Health Region	Dengue Fever	Dysentery	Encephalities	Enteric Fever	Food Poison- ing	2nd Leptospirosis	UART Typhus Fever	Viral Hepatitis	Human Rabies	Chickenpox	Meningitis	Leishmaniasis	Mumps	Measles	Tetanus	Whooping Cough	Tuberculosis	Simple Contd.Fever
Colombo	2310	25	2	14	18	54	3	1	0	181	8	1	10	8	0	2	502	0
Gampaha	1076	22	2	4	5	51	2	6	0	183	12	16	3	2	0	2	200	0
Kalutara	480	21	1	2	4	138	3	0	0	133	10	3	5	2	0	4	68	3
Kandy	847	24	0	2	4	19	33	8	0	78	10	8	7	1	1	0	128	0
Matale	276	3	0	1	21	35	1	0	0	10	4	26	2	5	0	0	30	1
Nuwaraeliya	45	29	2	4	7	8	37	9	0	52	12	0	1	0	0	0	45	0
Galle	196	15	2	0	0	112	6	1	0	94	16	1	4	0	0	0	71	3
Hambantota	140	6	3	1	0	15	3	2	1	70	0	187	0	0	0	1	30	7
Matara	134	14	2	1	1	73	10	4	0	63	2	102	2	1	0	2	52	16
Jaffna	625	52	1	13	31	4	43	1	2	84	4	3	2	0	1	0	67	0
Kilinochchi	83	12	0	0	1	1	5	0	0	8	2	1	1	0	0	0	16	0
Mannar	16	5	0	0	0	0	0	0	0	13	0	2	1	0	0	1	6	0
Vavuniya	137	12	0	11	4	11	1	0	0	23	2	1	3	0	0	0	14	0
Mullaitivu	26	3	0	3	1	3	1	0	0	4	1	0	1	0	0	0	6	1
Batticaloa	2074	39	1	0	11	18	0	1	1	41	4	0	1	1	0	0	29	0
Ampara	61	18	1	0	1	12	0	1	1	67	8	0	12	0	0	0	11	0
Trincomalee	402	15	1	2	3	22	8	0	0	62	3	11	2	2	1	0	27	0
Kurunegala	404	37	3	6	1	37	5	5	0	136	21	61	6	4	0	0	77	0
Puttalam	260	9	0	0	0	11	0	1	0	45	17	0	2	1	0	0	22	0
Anuradhapura	209	13	4	1	31	39	2	2	1	129	16	99	3	4	1	2	54	0
Kalmunai	375	9	0	0	7	2	0	0	0	61	4	0	0	0	0	0	37	0
Polonnaruwa	78	6	1	0	6	22	0	2	0	74	4	63	1	2	0	0	37	0
Badulla	117	30	4	1	5	48	18	10	0	86	36	3	0	0	0	1	36	0
Monaragala	176	15	0	0	0	103	31	10	0	45	39	10	4	0	0	4	31	0
Ratnapura	657	44	7	8	2	205	8	7	0	88	26	41	6	0	0	0	98	0
Kegalle	335	19	2	2	17	89	21	2	0	106	13	3	2	0	0	1	81	0
NIHS Kalutara	152	0	0	2			0	2	0	29	5	5	1	0	0		19	
Total	11691	497	39	78	181	1178	241	75	6	1965	279	647	82	33	4	20	1794	31

No polio cases. (from AFP surveillance system).

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