

Volume 56
January-March
2016

EPIDEMIOLOGICAL BULLETIN

SRI LANKA

First Quarter
2016

EPIDEMIOLOGY UNIT

A publication of the Epidemiology Unit
Ministry Of Health
No. 231, De Saram Place,
Colombo.10
www.epid.gov.lk

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1. POLIOMYELITIS

Fifteen (15) Acute Flaccid cases were notified to the Epidemiology Unit during the 1st quarter 2016. This is lower than the reported AFP cases during the 1st quarter 2015, which is 24. Reported number of AFP cases for the quarter is below the expected number of AFP cases per quarter of the annual surveillance target of 2:100,000 under 15 - year age population, which is 24 according to the current census survey population. The non-polio AFP rate for the first quarter of 2016 was 1.3 :100,000 under 15 year age population.

Notification of AFP Cases from Hospitals

All hospitals where Consultant Paediatricians are available are considered as sentinel sites for AFP surveillance. A total of 75 sentinel sites are currently functioning and last updated in 2015. 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 .

Majority of the cases (20%) were notified from the sentinel site hospital for AFP : Lady Ridgeway Children's Hospital (LRH), and GH Badulla. Most of these government hospitals are tertiary care centers receiving referrals from other hospitals and reported majority of AFP cases. All the hospitals reported AFP cases during January to March are given in table 01.

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 given below in table 1.

Table 01 :Notification of AFP cases by sentinel hospitals : 1st Quarter 2015

Hospital	No: of cases reported
Lady Ridgeway Hospital	3
T.H.Karapitiya	2
G.H.Badulla	3
TH Kurunegala	1
TH Peradeniya	1
GH Mannar	1
SBSCH	1
BH Kuliypitiya	1
GH Ampara	1
Total	15

Table 02 : Geographical distribution of AFP cases 1st quarter 2016

Province	District	MOH Area	Number of AFP cases
Western	Kalutara	Horana	1
Southern	Matara	Welipitiya	1
Central	Kandy	Gampola	1
		Udunuwara	1
		Yatinuwara	1
		Akurana	1
Sabaragamuwa	Ratnapura	Embilipitiya	1
North Western	Kurunegala	Ku;iyapitiya	1
		Kurunegala	1
Uva	Badulla	Welimada	1
		Ella	1
		Uva Paranagama	1
	Monaragala	Madugalla	1
Eastern	Kalmunai	Pottuvil	1
Northern	Mannar	Nanatan	1
Total			15

Seasonal Distribution of AFP Cases

Majority of cases were reported during the month of March (9 cases, 60.0%). No significant seasonal variation observed during the period.

Age and Sex Distribution of AFP cases

Majority of AFP cases (53.33%) were males during the 1st quarter 2016. During the 1st quarter 2014 the trend was different with majority being females.

Majority of AFP cases (60%) were between 1-9 years and the age—sex distribution of reported cases were given in table 03.

Table 03. Distribution of AFP cases by Age 1st Quarter 2016.

Age Group	Sex		Total
	Male	Female	
<1 year old	0	1	1
1-4 year old	0	2	2
5-9 year old	5	2	7
10-15 year old	2	3	5
Total	7	8	15

Final diagnoses of AFP cases

Majority (73.33%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 15 cases of AFP are given in table 04.

Table 04: Final diagnoses of AFP patients reported during 1st quarter 2016

Final Diagnoses	Frequency
GBS	11
Meningoencephalitis	1
Transversmyelitis	1
Meningitis	1
Encephalitis	1
Total	15

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 are the criteria to be completed to make the samples of 'good condition'.

Timely stool collection rate for the quarter was 60.0%. Hospitals contributed for late stool samples were LRH, GH Ampara, SBSCH, GH Badulla, BH Kuliypitiya and reasons identified in majority were transferring from other hospitals to referral centres beyond the expected duration.

2. MEASLES

One hundred and sixty five (166) suspected measles patients were reported during the first quarter 2016 which were compatible with clinical case definition of measles. This number was little higher than the number reported during the previous quarter which was 230 suspected cases.

Measles outbreak situation was started during the 1st quarter 2013 and continued after reduction of the peak with supplementary immunization activity conducted for 6-11 month old infants as an outbreak control measure since major proportion of affected were belonged to 6-11 months. However, transmission of measles in the country was continuing with varying intensity with overall trend of gradual reduction was seen to date.

Western Province reported the highest number of measles cases (64) followed by southern province.

Table 05: Number of measles cases by district: 1st quarter 2016

District	cases	District	cases
Colombo	20	Batticaloa	4
Gampaha	35	Ampara	4
Kalutara	9	Trincomalee	7
Kandy	3	Kurunegala	5
Mannar	4	Puttalam	15
Kalmunai	5	Anuradhapura	11
Galle	12	Polonnaruwa	1
Hambantota	2	Badulla	2
Matara	13	Monaragala	3
Jaffna	2	Ratnapura	5
Vavuniya	1	Kegalle	1
Kilinochchi	1		

Measles vaccination was introduced in 1984 in Sri Lanka at the age of 9 months and the 2nd dose of measles introduced as MR vaccine at the age of 3 years in 2001. With marked reduction of measles transmission in the country, MMR vaccine was introduced with advancing the 1st dose to the 1 year of age and 2nd dose at the age of 3 years in 2011. As with the outbreak of measles from 2013, a higher proportion of cases detected among 6-11 months aged infants. In 2014 this age category was investigated for measles serum antibody levels and detected lack of maternal antibodies for protection. This evidence lead to the decision of bringing down the age at 1st measles vaccination to 9 months of age from April 2015.

Of the total cases 53(31%) were below the age of 9 months and 24 (14%) were above the age of 34 years.

Out of the total cases of 166, 146 have been confirmed through laboratory investigations at the WHO accredited virology laboratory at the Medical Research Institute (MRI) for measles and rubella IgM testing. Out of which 61(41.7%) were positive for measles and none was positive for rubella. Non measles non rubella rate calculated for the quarter was 1.6/100,000 compared to the target of >2/100,000.

3. LEPTOSPIROSIS

During the 1st Quarter 2016, 1318 cases and 22 deaths (CFR 1.67%) due to Leptospirosis were notified to the Epidemiology Unit compared to 1771 cases and 26 deaths in the previous quarter and 1132 cases and 23 deaths during corresponding quarter of 2015.

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 2016.

Age Group	Sex	
	Male	Female
0 - 9 years	0.00	2.10
10 - 19 years	6.06	4.20
20 - 29years	18.31	9.09
30 - 39years	22.47	20.28
40 - 49years	20.96	24.48
50 - 59 years	20.83	25.87
>60years	11.36	13.99
Total	100.00	100.00

4. HUMAN RABIES

Eight cases of Human Rabies were notified to the Epidemiology Unit in the 1st quarter 2016 compared to 06 cases in the previous quarter and 10 cases in the corresponding quarter of year 2015.

Animal Rabies

During this quarter, 122 dogs were reported positive for rabies, compared to 127 in the previous quarter and 124 positive in the same period in the last year.

Rabies Control Activities

Dog vaccination - A total of 364,389 dogs were immunized during the Quarter under review when compared to 377,448 in the previous quarter and 365,080 in corresponding Quarter of the last year.

Animal Birth control

Chemical- A total of 316 female dogs were injected with birth control injections (Progesterone) during the quarter under review. **Surgical-** 34924 female dogs were subjected to sterilization by surgical method during the quarter under review.

5. VIRAL HEPATITIS

In the 1st Quarter 2016, a total of 282 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 602 cases in the previous quarter and 363 cases in the corresponding quarter of 2015. Rathnapura (56 cases) reported the highest number of cases followed by Monaragala District (47 cases).

6. ENTERIC FEVER

In the 1st Quarter 2016, a total of 185 cases of Enteric fever were reported to the Epidemiology Unit, compared to 156 cases in the previous quarter and 218 cases in the corresponding quarter of 2015. The district of Jaffna (30 cases) reported the highest number of cases, followed by Nuwara Eliya (17 cases).

7. DYSENTERY

In the 1st Quarter 2016, a total of 552 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 118 cases in the previous quarter and 732 cases in the corresponding quarter of 2015. Rathnapura (68 cases) and Batticaloa (64 cases) reported the highest number of cases.

8. MALARIA

There were no indigenous malaria cases reported during the 1st quarter of 2016. Fifteen imported malaria cases were reported in the 1st quarter Of 2016.

9. JAPANESE ENCEPHALITIS (JE)

During the first quarter 2016, 70 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this 63 cases were clinically confirmed by the Public Health Inspector during their field investigations.

During the 1st quarter 2016, no laboratory confirmed JE cases were reported.

Table 07: Results of Blood smear examination for malaria parasites - 1st Quarter 2016

	1st quarter 2015	1st quarter 2016
No. of blood smears examined	269,255	281,524
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 08

DISTRIBUTION OF NUMBER OF BLOOD SMEARS EXAMINED BY DISTRICT RMO- 1ST QUARTER 2016

RMO	Jan	Feb	Mar	Total
Colombo	7,314	6,193	5,748	19,255
Gampaha	4,339	5,280	5,671	15,290
Kalutara	1,303	1,544	1,953	4,800
Kandy	4,773	4,779	4,279	13,831
Matale	2,927	2,673	2,844	8,444
Nuwara Eliya	398	223	303	924
Galle	1,537	1,539	1,466	4,542
Matara	1,831	2,156	1,472	5,459
Hambantota	2,013	2,079	1,883	5,975
Jaffna	6,008	5,519	5,761	17,288
Kilinochchi	3,026	3,437	3,920	10,383
Vavuniya	3,883	1,627	1,816	7,326
Mannar	4,241	4,761	3,808	8,805
Mullaitivu	2,106	2,125	2,362	6,593
Batticaloa	3,477	3,063	3,531	10,071
Ampara	2,015	2,487	2,962	7,464
Kalmunei	3,273	4,145	3,565	10,983
Trincomalee	2,991	3,006	2,808	8,805
Kurunegala	6,213	6,309	6,115	18,637
Maho	2,764	2,464	2,462	7,690
Puttalam	2,267	3,191	3,390	8,848
Anuradhapura	6,651	6,081	5,642	18,374
Polonnaruwa	3,289	3,425	3,632	10,346
Badulla	3,797	4,144	3,533	11,474
Monaragala	4,483	3,844	4,270	12,597
Rathnapura	4,221	4,407	3,489	12,117
Kegalle	3,392	3,881	3,879	11,152
TOTAL	94,532	94,382	92,610	281,524

Table 09

MORBIDITY AND MORTALITY DUE TO DF/DHF - 1ST QUARTER 2016

RDHS Division	Cases	Percentage (%)	Deaths	CFR
Colombo	4769	34.49	2	0.04
Gampaha	1737	12.56	5	0.29
Kalutara	812	5.87	2	0.25
Kandy	635	4.59	1	0.16
Matale	126	0.91	0	0.00
N' Eliya	86	0.62	0	0.00
Galle	521	3.77	0	0.00
Hambantota	223	1.61	0	0.00
Matara	274	1.98	2	0.73
Jaffna	1075	7.77	1	0.09
Kilinochchi	36	0.26	0	0.00
Mannar	62	0.45	0	0.00
Vavuniya	110	0.80	0	0.00
Mulativu	66	0.48	0	0.00
Batticaloa	223	1.61	0	0.00
Ampara	75	0.54	1	1.33
Trincomalee	203	1.47	0	0.00
Kurunagale	516	3.73	1	0.19
Puttalam	429	3.10	2	0.47
A'pura	196	1.42	0	0.00
Polonnaruwa	132	0.95	0	0.00
Badulla	180	1.30	0	0.00
Moneragala	113	0.82	0	0.00
Ratnapura	515	3.72	0	0.00
Kegalle	417	3.02	0	0.00
Kalmunai	298	2.15	0	0.00
Total	13829	100.0	17	0.12

Table 10

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 1ST QUARTER 2016

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF
January	103	64 (62.1%)
February	96	58 (60.4%)
March	94	26(27.6%)
Total	293	148 (50.5%)

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

During the 1st quarter of 2016, 13,829 cases of DF/DHF were reported from all districts (Table 09) while 17 deaths were reported (CFR =0.12%) when compared to 8,664 cases of DF/DHF and 16 deaths (CFR= 0.18%) reported during the 4th quarter of 2015. Proportion of cases notified in January, February and March were 48%,32%, and 20% respectively.

Table 09 shows the distribution of DF/DHF cases and deaths in the 1st quarter of 2016.

Special surveillance data of confirmed cases were received and analyzed for the first quarter of 2016. Age distribution of reported cases were Age distribution of reported cases were 4.4%in <4 years age group, 8.8% in 5-9 years of age group,9.8% in 10-14 years of age, 12.9% in 15–19 years of age, 13.7% in 20-24 years of age, 12.5% in 25-29 years of age,8.8% in 30-34 years of age, 7.2% in 35-39 years of age,7.0% in 40-44 years of age,4.7% in 45-49 years of age,2.3% in 50–54 years of age,3.1% in 55-59 years of age and 3.1% in >60 years of age.

According to the clinical findings majority of the reported cases (85%) were classified as Dengue Fever while 15% were classified as Dengue Haemorrhagic Fever.

During the 1st quarter of 2016, 294 blood samples were tested using IgM capture ELIZA test at the Department of Virology, Medical Research Institute (MRI) and 148 (50.5%) samples were confirmed as positive((Table 10).

11. RUBELLA AND CONGENITAL RUBELLA SYNDROME (CRS)

One case of Rubella IgM positive babies were reported from the laboratory from serological investigations received at the Virology Laboratory for TORCH screen or from suspected CRS cases. This baby was identified without any congenital abnormalities and considered as Congenital Rubella Infection.

12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 1st Quarter 2016. Last case of cholera was reported in the country in January 2003.

13. TETANUS

No tetanus cases were reported to the Epidemiology Unit during 1st quarter 2016.

14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 1st Quarter of 2016, has reached 99.8 % of completeness of reports, while only 49.2 % reports were received in time at the Epidemiology Unit indicating that compliance for the system by the MOOH yet to be improved. Except Kalutara (97.2%) and Puttalam(97.2) all other districts, were able to send all reports. The best timeliness was reported from the Jaffna district (94.4%) followed by Mannar (93.3%) and Kegalle (84.8 %). (Table 11)

The highest percentage of nil reports were received from both Mullativu and Batticaloa (40% and 40.5% respectively) followed by Kalmunai district (35.9 %), compared to the Sri Lanka average (18.9%) indicating the need for more attention for surveillance reporting form both MOH staff and hospitals. Polonnaruwa district and Kegalle district had no 'Nil return', followed) indicating the good surveillance system in place. The highest rate (920.1 per 100,000 immunizations) of AEFI was reported from Mullativu district, while Colombo reported the highest number of 226 AEFI cases in the forth quarter of 2015.

For the first quarter, the highest number of AEFI (n= 1524) was reported against Pentavalent vaccine, whereas the highest rate of AEFI (1130.6/100,000 doses administered) reported against DTP vaccine (Table 13). The rate of AEFI for Pentavalent (01st, 02nd & 03rd dose) is 611.6 per 100,000 doses administered. High Fever (982), nodules (522), allergic reactions (473) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (540 cases: 216.7 per 100,000 doses administered) and DPT (392 cases: 461.7 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to PVV (149 cases: 59.8 per 100,000 doses administered), and DPT (145 cases : 170.8 per 100,000 doses administered).

Table 11

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 1ST QUARTER 2016

DPDHS	% completeness	% Timely returns	% Nil Returns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	100.0	52.9	9.8	226	183.8
Gampaha	100.0	53.3	6.7	214	166.0
Kalutara	97.6	46.3	17.1	137	174.7
Kandy	100.0	47.2	20.8	185	181.1
Matale	100.0	56.4	12.8	76	198.8
Nuwara Eliya	100.0	46.2	28.2	96	181.3
Galle	100.0	61.7	23.3	137	196.1
Hambantota	100.0	63.9	11.1	146	310.9
Matara	100.0	62.7	13.7	157	275.8
Jaffna	100.0	94.4	2.8	180	481.8
Kilinochchi	100.0	50.0	16.7	35	399.5
Mannar	100.0	93.3	13.3	40	437.5
Vavuniya	100.0	50.0	8.3	55	476.4
Mullativu	100.0	46.7	40.0	74	920.1
Batticaloa	100.0	26.2	40.5	71	172.3
Ampara	100.0	14.3	28.6	30	151.6
Trincomalee	100.0	66.7	24.2	73	217.8
Kurunegala	100.0	51.9	19.8	166	496.6
Puttalam	97.2	22.9	25.7	51	46.0
Anuradhapura	100.0	10.5	33.3	114	195.2
Polonnaruwa	100.0	14.3	0.0	96	138.8
Badulla	100.0	52.1	12.5	110	351.9
Moneragala	100.0	66.7	9.1	85	139.7
Ratnapura	100.0	44.4	22.2	205	508.9
Kegalle	100.0	84.8	0.0	112	149.1
Kalmunai	100.0	12.8	35.9	64	119.5
Sri Lanka	99.8	49.2	18.9	2935	209.7

Table 12: Number of Selected Adverse Events by Vaccines – 1st Quarter 2016

	BCG	OPV	PVV ¹	DPT	MMR	LJE	DT	TT	aTd	Total number of AEFI reported
Total Number of AEFI Reported	8	21	1524	960	185	49	80	20	29	2876
AEFI reporting rate/1,000,000 doses administered										
High Fever (>39°C)		5	540	392	23	9	11		2	982
Reporting rate/1,000,000 doses administered		1.2	216.7	461.7	13.9	11.6	14.0		2.2	
Allergic reactions	1	6	149	145	100	25	28	12	7	473
Reporting rate/1,000,000 doses administered	1.3	1.4	59.8	170.8	60.4	32.2	35.7	15.9	7.6	
Severe local reactions		1	67	52	4	4	5	1	2	136
Reporting rate/1,000,000 doses administered		0.2	26.9	61.2	2.4	5.2	6.4	1.3	2.2	
Seizure (Febrile/Afebrile)		1	43	75	7	4				130
Reporting rate/1,000,000 doses administered		0.2	17.3	88.3	4.2	5.2				
Nodules	1	2	406	98	2		6		7	522
Reporting rate/1,000,000 doses administered	1.3	0.5	162.9	115.4	1.2		7.7		7.6	
Injection site abscess	3	2	135	22	2		5	1	1	171
Reporting rate/1,000,000 doses administered	3.9	0.5	54.2	25.9	1.2		6.4	1.3	1.1	
HHE			1	1						2
Reporting rate/1,000,000 doses administered			0.4	1.2						

1-PentaValent Vaccine

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

15. TUBERCULOSIS

A total of 2254 TB patients were notified to the NPTCCD by H816A (TB notification form) for the first quarter 2016, while 2281 patients were registered at chest clinics during the same quarter according to the Quarterly Report on Case Finding (TB 08). Out of this, 2163 TB patients (94.8%) were new TB cases, 118 (5.2%) were 're-treatment cases' and there wasn't any cases identified for 'previous treatment history unknown' category. Out of new TB cases, 1068 (46.8%) were bacteriologically confirmed TB, 467 (20.5%) were clinically diagnosed (sputum negative) TB and 628 (27.5%) were new extra pulmonary TB cases. Out of this 're-treatment' cases, 80 (3.5%) patients were 'relapse', 17 (0.7%) patients were 'Treatment After Failure', 17 (0.7%) patients were 'loss to follow-up' and 04 (0.1%) patients were 'other previously treated'. A total of 1964 TB patients were screened for HIV, out of three were positive for HIV. There were two patients with known positive HIV status at the time of TB diagnosis. A total of 05 patients were TB/HIV co-infection. One Multi-Drug Resistant TB patient was detected during above quarter. Distribution of TB patients by RDHS division is given in table 13.

Table 13: TUBERCULOSIS PATIENTS BY RDHS DIVISIONS

RDHS DIVISION	New				Retreatment & previous history un-	Total
	PTB sp+ve	PTB sp-ve	EPTB	Total		
Colombo	244	83	138	465	45	510
Gampaha	152	59	59	270	5	275
Kalutara	70	22	36	128	10	138
Kandy	49	43	52	144	9	153
Matale	27	9	14	50	1	51
Nuwara Eliya	25	23	17	65	1	66
Galle	63	19	37	119	3	122
Matara	23	9	24	56	3	59
Hambantota	7	11	21	39	1	40
Jaffna	28	29	23	80	4	84
Vavuniya	17	2	1	20	0	20
Batticaloa	17	2	11	30	1	31
Ampara	11	10	3	24	2	26
Kalmunai	20	32	9	61	5	66
Trincomalee	9	15	13	37	2	39
Kurunegala	45	10	37	92	4	96
Puttalam	26	5	16	47	2	49
Anuradhapura	41	8	12	61	5	66
Polonnaruwa	14	2	8	24	0	24
Badulla	24	15	22	61	2	63
Monaragala	16	5	2	23	2	25
Rathnapura	64	31	40	135	7	142
Kegalle	60	17	25	102	3	105
Mannar	7	2	1	10	0	10
Mulathivu	3	1	3	7	0	7
Kilinochchi	6	3	4	13	1	14
Total	1068	467	628	2163	118	2281

PTB-Pulmonary Tuberculosis EPTB- Extra Pulmonary Tuberculosis SP + ve - Sputum Positive SP - ve - Sputum Negative 10
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 1st quarter 2016, is as follows;

		Total
A.	Yellow fever	908
B.	Meningococcal meningitis	138
C.	Oral polio	203

17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 1st Quarter 2016 is given below.

Table 14: Surveillance at airport : 1st quarter 2016

Emerging and re-emerging disease (Ebola/MERS CoV/ SARS.... Etc)	
Ebola	
No. Of passengers screened	02
No. Of suspected cases transferred	00
Zika	
No. Of passengers screened	08
No. Of suspected cases transferred	00
Malaria	
No. of passengers visited to Health office	32
No. of passengers drug issued	06
No. of blood films done (R.D.T.)	45
Referred to I.D.H./Other unit	00
Yellow Fever	
No. of yellow fever cards inspected	39
No. Invalid/without Yellow Fever cards	03
Referred to I.D.H./Other units	00

18. LEPROSY**QUARTERLY RETURN OF LEPROSY STATISTICS - 1ST QUARTER 2016****Table 15****1. National**

	At the end of the quarter			Cumulative for end of the quarter		
	1st quarter 2016	1st quarter 2015	Diff (%)	2016	2015	Diff (%)
New patients detected	423	568	-145 (25.5)	423	568	-145 (25.5)
Children	41	50	-9 (18)	41	50	-9 (18)
Grade 2 Deformities	43	53	-10 (18.9)	43	53	-10 (18.9)
Multi-Bacillary	239	280	-41 (14.6)	239	280	-41 (14.6)
Females	158	211	-53 (25.1)	158	211	-53 (25.1)

2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	15	2	0	10	7
Kandy	4	2	0	5	1
Matale	9	0	0	5	5
NuwaraEliya	2	0	0	0	1
Eastern	43	4	4	32	16
Ampara	1	0	0	3	0
Batticaloa	27	1	1	20	12
Kalmunai	9	1	3	6	2
Trincomalee	6	2	0	3	2
Northern	14	0	1	9	5
Jaffna	10	0	1	6	3
Kilinochchi	1	0	0	1	1
Mannar	1	0	0	1	0
Vavuniya	2	0	0	1	1
Mullaitivu	0	0	0	0	0
North Central	45	3	5	24	16
Anuradhapura	15	0	2	10	5
Pollonnaruwa	30	3	3	14	11
North Western	44	4	8	23	17
Kurunegala	29	3	4	15	9
Puttalam	15	1	4	8	8
Sabaragamuwa	18	7	1	16	5
Kegalle	3	2	0	2	0
Rathnapura	15	5	1	14	5
Southern	60	6	3	37	27
Galle	19	2	1	10	9
Hambanthota	17	1	2	9	4
Matara	24	3	0	18	14
Uva	14	1	2	6	3
Baddulla	5	1	0	1	0
Monaragala	9	0	2	5	3
Western	170	16	17	82	62
Colombo	47	2	4	23	17
CMC	26	2	6	13	8
Gampaha	55	9	2	33	23
Kalutara	42	3	5	13	14
Sri Lanka	423	43	41	239	158

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**1ST QUARTER 2016**

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	53	15	68	53	15	68
AIDS	8	3	11	8	3	11
Early Syphilis ²	30	8	38	30	8	38
Syphilis Late Syphilis ³	118	69	187	118	69	187
Congenital Syphilis ⁴	1	1	2	1	1	2
Gonorrhoea ⁵	61	25	86	61	25	86
Ophthalmia Neonatorum ⁶	0	1	1	0	1	1
Non specific cervicitis/urethritis	150	390	540	150	390	540
Chlamydial infection	0	3	3	0	3	3
Genital Herpes	359	440	799	359	440	799
Genital Warts	263	236	499	263	236	499
Chancroid	0	0	0	0	0	0
Trichomoniasis	7	29	36	7	29	36
Candidiasis	0	0	0	0	0	0
Bacterial Vaginosis	0	332	332	0	332	332
Other sexually transmitted diseases ⁷	84	49	133	84	49	133
Non venereal	725	441	1166	725	441	1166

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 2016**
Table 17: Bacteriological report, MRI 1st Quarter 2016.

	Jan	Feb	Mar
(A) CHOLERA			
No. of stool specimens Examined	50	34	10
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</i> o139	0	0	0
(B) SALMONELLA			
Blood— No. Examined	0	0	0
<i>S.typhi</i>	0	0	0
<i>S.paratyphi A</i>	0	0	0
Stools—No. examined	65	52	32
<i>S.typhi</i>	0	0	0
<i>S.paratyphi A</i>	0	0	0
Others	2	4	6
(C) SHIGELLA			
No. Examined	65	52	32
<i>S.flexneri</i> I	0	0	0
<i>S.flexneri</i> ii	0	0	0
<i>S.flexneri</i> iii	0	0	0
<i>S.flexneri</i> iv	0	0	0
<i>S.flexneri</i> v	0	0	0
<i>S.flexneri</i> vi	0	0	0
<i>S.Sonnei</i>	1	0	0
<i>S.dysenteriae</i>	0	0	0
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	1	0	2
No. positive	0	0	0
(E) CAMPYLOBACTER			
No.Examined	15	18	12
No. Positive	0	0	0
(F) Special			
	28	17	28

**21. SURVEILLANCE OF MENINGITIS—
1st quarter 2016**

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 1st quarter 2015, 185 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 161 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Nuwara Eliya district (17) followed by Gampaha (13) and Kalutara (12) districts.

Forty seven percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 24% belonged to the age group 1-5 years and 11% belonged to age group 6 – 14 years. Sixty eight percent of the clinically confirmed cases were males and 32% were female.

Table 18
Summary findings for special investigations
carried out for clinically confirmed cases of Meningitis up to 30th March 2016

CSF Culture Report		
CSF Culture	Number	(%)
CSF Reports available	60	35%
No Growth	57	
Group B Streptococci	02	
Coliform	01	
Culture results not known	110	65%
Not done	01	01%
Total	171	100%
Final outcome of the patient		
Outcome	Number	(%)
Cured	167	98%
Died	02	02%
Information not available	01	01%
Total	171	100%
Final Diagnosis (based on clinical and lab findings)		
Diagnosis	Number	(%)
Culture confirmed	03	02%
Probable bacterial meningitis	18	10%
Probable viral meningitis	13	08%
Suspected Meningitis	137	80%
Total	171	100%

22. INFLUENZA SURVEILLANCE-1st quarter 2016

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 1st quarter of year 2016, seventeen hospitals out of nineteen have reported ILI data with a reporting rate of 89.5%. A total of 27,633 ILI cases were reported, accounting for 2.21% of the total OPD visits (n=1,250,157).

The highest number of ILI cases were reported from General Hospital Vavuniya (n= 12,842, 46.47%) and the majority of the patients were in the age group 15 – 49 years (n= 10688, 38.67%).

SARI Surveillance

A total of 124 ILI respiratory samples were received by the MRI from sentinel hospitals during the 1st quarter of 2016; 28 samples in January, 39 in February and 47 in March. NHSL (n=30) AND Ratnapura (n=30) had sent the highest number of SARI Cases were reported from Teaching Hospital Peradeniya (n=126,76.82%)

Laboratory Component

ILI Surveillance

A total of 124 ILI respiratory samples were received by the MRI from sentinel hospitals during the 1st quarter of 2016; 38 samples in January, 39 in February and 47 in March. NHSL and GH Ratnapura had sent the highest number of samples (n=30), followed by GH Nuwara Eliya (n=5), Teaching Hospital Batticaloa (n=5), IDH (n=12) and GH Polonnaruwa (n=12), Teaching Hospital Jaffna (n= 2), General Hospital Badulla (n=12) and Teaching Hospital Kurunegala (n=4) (Table 19).

All ILI sentinel hospitals except TH Anuradhapura, Teaching Hospital Karapitiya, General Hospital Chillaw and Teaching Hospital Kalubowila had sent samples within the quarter. Influenza A was the predominant circulating Influenza viral strain identified during the quarter, Table 21).

SARI Surveillance

A total of 65 respiratory samples were sent to the MRI during the 1st quarter of 2016, by four SARI sentinel hospitals. General Hospital Matara (N=39), had sent the highest number of samples followed by Lady Ridgeway Hospital (n=29) and teaching Hospital Peradeniya (n=2) (Table 19). Influenza A was predominant circulating influenza viral strain identified (Table 22).

Table 19: The monthly performance of sentinel hospitals in the laboratory component of the ILI surveillance in the 1st quarter of the year 2016.

	January	February	March	Total
NHSL	10	10	10	30
CSTH	0	0	0	0
IDH	8	4	0	12
GH Nuwara Eliya	5	3	9	17
TH Karapitiya	0	0	0	0
TH Jaffna	0	0	2	2
TH Batticaloa	0	5	0	5
TH Kurunegala	0	0	4	4
GH Chillaw	0	0	0	0
TH Anuradhapura	0	0	0	0
GH Polonnaruwa	0	4	8	12
GH Badulla	5	3	4	12
GH Ratnapura	10	10	10	30
Total	38	39	47	124

Table 20: Monthly performance of sentinel hospital in the laboratory component of the SARI surveillance in the 1st quarter of the year 2016

Institution	January	February	March	Total
CNTH Ragama	0	0	0	0
TH Peradeniya	0	0	2	2
GH Matara	1	20	13	34
LRH	10	10	9	29
Total	11	30	24	65

Table 21: Types of Respiratory Viruses Isolated in ILI samples in the 1st quarter of the year 20156

Month	Total Tested	Influenza A	A (H1N1)	A(H3N2)	A Un-typed	Influenza B
January	38	3	0	3	0	0
Feb	39	1	0	0	0	2
March	47	0	0	0	0	1
Total	124	4	0	3	0	3

Table 22: Types of Respiratory Viruses Isolated in SARI Samples in the 1st quarter of the year 2016

Month	Total Tested	Influenza A	A (H1N1)	A (H3N2)	A Un-typed	Influenza B
January	11	1	0	1	0	0
February	30	0	0	0	0	1
March	24	1	1	0	0	0
Total	65	2	1	1	0	1

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 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.

Table 23: Animal samples collected by month and district for the 1st quarter of the year 2016

Month	Pooled Samples for embryonated Chicken Egg Passage	Districts from which samples were collected	Serum samples for Eliza	Districts from which samples were collected
Jan.	1221	Colombo, Gampaha, Puttalam, Kegalle, Anuradhapura, Jaffna, Vavuniya, Trincomalee	272	Colombo, Kandy, Monaragala, Vavuniya, Trincomalee, Badulla
Feb.	1470	Colombo, Gampaha, Puttalam, Jaffna, Vavuniya,	570	Colombo, Gampaha, Rathnapura, Polonnaruwa, Galle, Jaffna, Matara, Badulla
Mar.	833	Colombo, Gampaha, Hambantotota, Kalutara, Trincomalee, Anuradhapura	560	Colombo, Gampaha, Kandy, Polonnaruwa, Galle, Trincomalee, Anuradhapura, Vavuniya, Pannala, Nuwara Eliya, Badulla, Monaragala, Matara
Total	3524		1402	

Special Report

Severe Acute Respiratory Infections (SARI) Surveillance Laboratory Component

A total of 157 samples from 4 SARI sentinel hospitals were received by the NIC/MRI for the year. General Hospital Matara had sent in the highest number of samples (n=83). Table 25 below shows the performance of the 4 SARI sentinel hospitals in the laboratory component of the SARI surveillance for 2016.

Table 24: Performance of sentinel hospitals in the laboratory component of the SARI surveillance for-2015

SARI Lab Data for year 2015													
Institution	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
LRH	14	7	4	5	5	Lab component of the sentinel surveillance was temporarily suspended during this period as per a decision taken at the avian influenza technical committee meeting. (Influenza Pandemic period)			5	2	5	5	52
NCTH	2	0	2	4	2				0	0	0	0	10
TH Peradeniya	0	0	0	6	3				0	0	1	0	10
GH Matara	2	2	13	5	25				1	6	23	6	83
Total Received	18	9	19	20	35				2	6	8	29	11
Total Tested	0	9	0	20	35	0	0	2	6	8	29	11	120
Total Positive	0	1	0	3	13	0	0	0	1	2	9	5	35

Along with ILI samples, the SARI samples are processed at the NIC/MRI. Results of these samples tested in 2015 are shown in table 25.

Table 25: Types of respiratory viruses isolated in SARI samples in the year 2015

Month	Total Samples tested	Number positive	%	Influenza A	A H1N1 pdm09	A H3N2	A Untyped	Influenza B
January	0	0	0	0	0	0	0	0
February	9	1	11.1	1	0	0	0	0
March	0	0	0	0	0	0	0	0
April	20	3	15	2	2	0	0	1
May	35	13	37.1	12	0	0	0	1
June*	0	0	0	0	0	0	0	0
July*	0	0	0	0	0	0	0	0
August*	2	0	0	0	0	0	0	0
September	12	1	8.3	0	0	0	0	1
October	8	2	25	2	0	1	0	0
November	23	9	39.1	0	0	7	0	0
December	11	5	45.4	4	0	3	0	1
Total	120	35	29.2	20	2	11	0	2

Similar to the pattern seen in ILI results, Influenza A was the predominant virus subtype observed in 2015. A peak of Influenza A was also seen during May and Influenza B was occasionally isolated throughout the year. Emerging trend of Influenza A (H3N2) was also seen towards the end of the year.

Laboratory surveillance findings in SARI component show that 29.2% of SARI patients tested within this year as having an influenza viral strain. However the positivity rate over the months shows comparable changes. Figure 01 below shows the seasonal changes in the influenza positivity within the laboratory component of the SARI surveillance in 2015.

Figure 01: Seasonal changes in the influenza positivity within the laboratory component of the SARI surveillance in 2015.

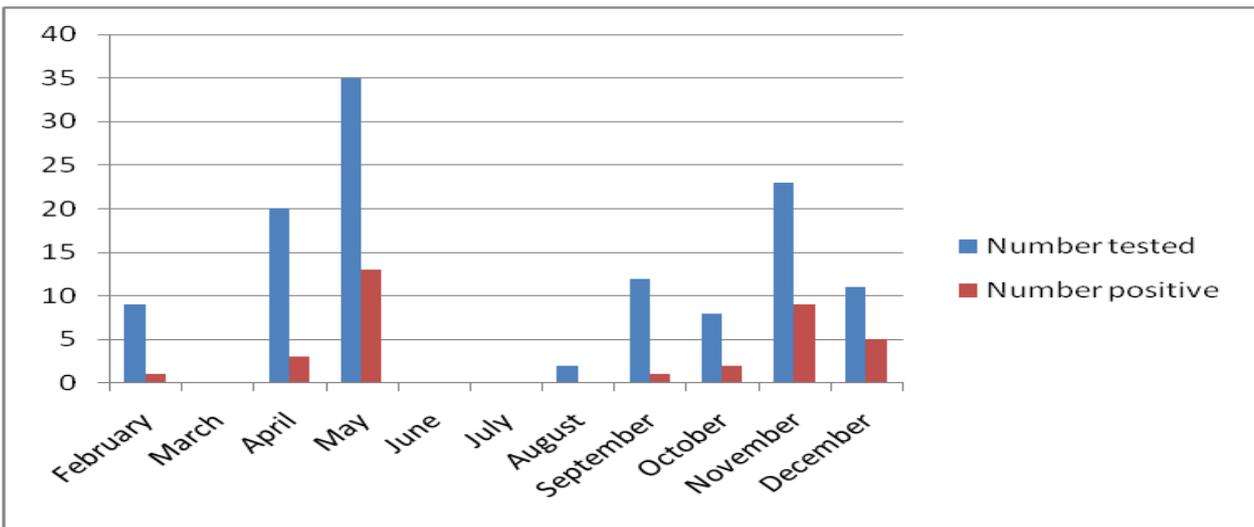
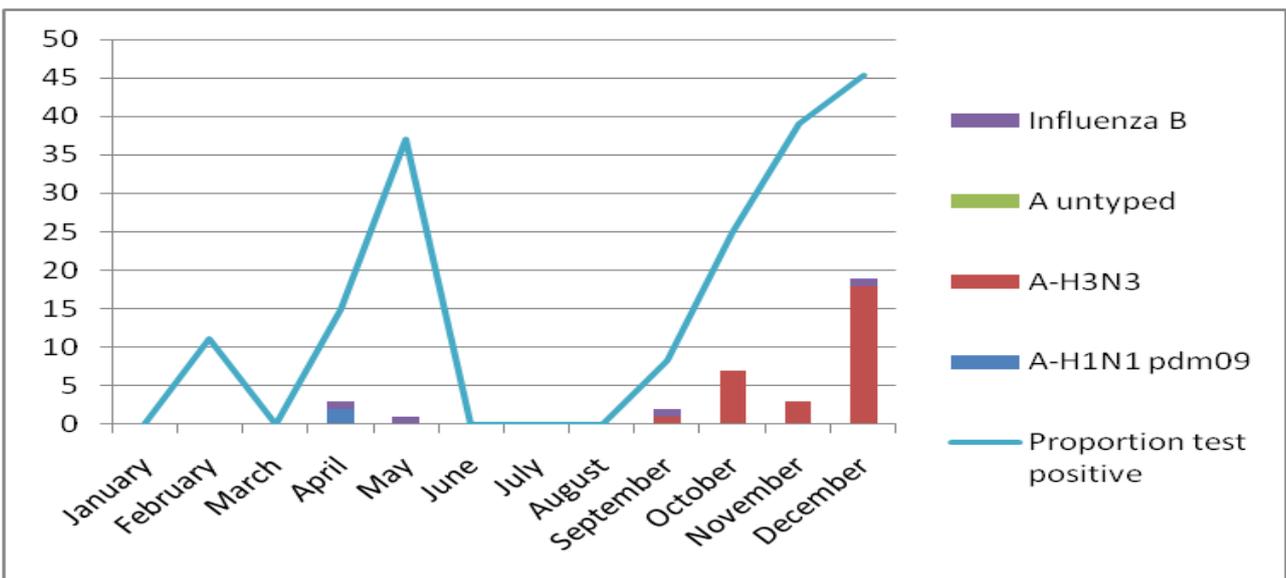


Figure 02 below shows Influenza test positive samples according to the viral strain and the proportion tested positive

Figure 02: Influenza test positive samples according to the viral strain and the positivity rate within the SARI surveillance laboratory component for year 2015



In comparison to ILI surveillance, the positivity rate shows a much similar pattern. Higher peak is towards the end of the year. The other peak is from April to May.

Epidemiological Component

There were total of 6082 patients treated in ward for severe respiratory tract infections in the said 4 hospitals within 2015. The highest numbers (4134) were reported from GH Matara. The highest number of patients were reported in June (n=1036) and July (n=936). High numbers were seen between May – July. Table 26 below shows the distribution of SARI patients in the 4 hospitals by month in 2015.

Table 26: Distribution of SARI patients in the 4 hospitals by month in 2015

Hospital	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
GH Matara	360	401	359	350	586	680	614	288	239	257	0	0	4134
LRH	0	0	80	96	131	164	121	64	55	58	0	0	769
TH Peradeniya	60	51	81	95	169	106	119	44	33	23	50	52	883
TH Ragama	0	0	21	17	37	86	82	9	6	38	0	0	296
Total	420	452	541	558	923	1036	936	405	333	376	50	52	6082

An increasing trend of disease activity can be clearly observed from a mid-year peak towards the end of the year. This compares well with influenza positivity.

Animal Influenza Surveillance

In 2015 there were 12269 pooled samples and 5852 serum samples collected and tested at the VRI for HPAI. The following table 29 shows the number of samples collected by month and the districts they were collected from.

Table 27: Animal samples collected by month and district – 2015

Month	Pool Samples for Embryonated Chicken Egg Passage	Districts	Serum Samples for ELISA	Districts
January	1130	Colombo, Gampaha, Puttalam, Rathnapura, Anuredhapura, Jaffna, Vavuniya, Trincomalee, Kaluthara	873	Colombo, Gampaha, Puttalam, Rathnapura, Polonnaruwa, Kurunegala, Anuredhapura, Trincomalee, Kaluthara, Bedulle
February	1203	Colombo, Gampaha, Puttalam, Kegalle, Polonnaruwa, Kurunegala, Anuredhapura, Jaffna, Vavuniya, Kandy, Kaluthara, Matale, Bedulle	798	Colombo, Gampaha, Puttalam, Polonnaruwa, Kurunegala, Trincomalee, Jaffna, Kaluthara, Matale, Bedulle
March	1023	Colombo, Gampaha, Puttalam, Kegalle, Kurunegala, Jaffna, Hambantota, Kaluthara	352	Colombo, Gampaha, Puttalam, Polonnaruwa, Kurunegala, Trincomalee, Jaffna
April	1390	Colombo, Gampaha, Vavuniya, Hambantota, Chilaw, Jaffna, Anuredhapura	572	Colombo, Gampaha, Rathnapura, Bedulle, Vavuniya, Hambantota, Trincomalee
May	845	Colombo, Gampaha, Puttalam, Vavuniya, Anuredhapura	275	Colombo, Gampaha, Puttalam, Kaluthara, Vavuniya, Dambulla, Polonnaruwa
June	531	Colombo, Gampaha, Kegalle, Anuredhapura, Ampara	666	Colombo, Gampaha, Rathnapura, Kaluthara, Kegalle, Anuredhapura, Jaffna, Polonnaruwa, Bedulle, Kurunegala, Trincomalee, Matale, Kandy, Matara
July	642	Colombo, Gampaha, Rathnapura, Kandy, Kegalle, Jaffna, Puttalam, Matale	155	Colombo, Gampaha, Kandy, Kegalle, Puttalam
August	552	Colombo, Gampaha, Anuredhapura, Hambantota, Kaluthara	368	Colombo, Gampaha, Matale, Kaluthara, Trincomalee, Vavuniya, Kurunegala
September	1032	Colombo, Gampaha, Anuredhapura, Vavuniya, Puttalam, Hambantota, Kaluthara	461	Colombo, Gampaha, Anuredhapura, Kegalle, Bedulle, Puttalam, Hambantota, Kaluthara
October	1021	Colombo, Gampaha, Ampara, Kandy, Hambantota, Anuredhapura, Kegalle, Puttalam	511	Colombo, Gampaha, Ampara, Trincomalee, Matara, Jaffna, Moneragala
November	1354	Colombo, Gampaha, Hambantota, Jaffna, Kegalle, Rathnapura, Puttalam	400	Colombo, Gampaha, Nuwara Eliya, Kurunegala, Jaffna, Moneragala, Colombo, Gampaha, Nuwara Eliya, Hambantota, Jaffna, Kegalle, Ampara, Matale, Trincomalee, Kandy, Vavuniya, Galle
December	1546	Colombo, Gampaha, Kurunegala, Hambantota, Jaffna, Kegalle, Ampara, Anuredhapura, Vavuniya, Galle, Puttalam	421	
Total	12269		5852	

Table 31

24. SUMMARY OF NOTIFIABLE DISEASES - 1ST QUARTER 2016

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	37	0	18	8	0	58	13	1	0	3	14	0	4769	268	140	7	12	0
Gampaha	26	5	11	2	0	95	19	0	0	6	15	2	1737	243	148	4	19	3
Kalutara	24	2	12	7	0	171	14	2	1	4	10	0	812	73	82	3	23	0
Kandy	32	9	9	17	0	57	8	0	0	32	27	1	635	164	40	5	13	6
Matale	10	1	5	2	0	41	0	1	0	10	11	0	126	49	14	0	35	12
Nuwara-Eliya	16	1	18	8	0	15	1	0	0	18	8	0	86	49	45	3	10	0
Galle	18	3	1	2	0	100	15	16	0	32	4	0	521	103	87	7	19	1
Hambantota	13	1	0	35	0	51	3	1	0	29	12	4	223	35	81	3	4	123
Matara	21	2	4	30	0	52	19	2	0	19	11	3	274	52	67	9	5	87
Jaffna	73	1	38	17	0	7	3	17	0	484	4	0	1075	97	85	9	13	1
Kilinochchi	15	0	19	2	0	11	0	3	0	16	0	0	36	15	2	0	6	0
Mannar	4	4	10	1	0	8	3	1	0	33	0	1	62	16	7	0	1	0
Vavuniya	3	0	7	9	0	10	0	1	0	6	3	1	110	21	15	2	2	2
Mullaitivu	6	0	12	4	0	16	0	0	0	4	0	0	66	4	1	0	3	4
Batticaloa	87	0	7	83	0	18	10	3	0	4	4	0	223	33	23	4	3	1
Ampara	8	0	0	13	0	17	4	0	0	0	4	0	75	29	26	3	0	3
Trincomalee	16	0	7	8	1	3	2	3	0	7	28	1	203	45	64	6	5	1
Kurunegala	57	6	1	5	1	52	5	1	0	6	14	1	516	84	93	9	20	32
Puttalam	18	1	3	0	0	23	68	0	0	51	0	2	429	23	30	3	11	0
Anuradhapura	24	1	2	20	0	133	8	0	0	12	10	3	196	63	70	12	13	63
Polonnaruwa	11	2	9	5	0	47	4	0	0	1	2	0	132	26	42	1	7	50
Badulla	27	7	2	5	0	45	2	0	0	29	45	1	180	80	55	4	67	0
Moneragala	16	1	2	0	2	107	1	1	0	40	58	0	113	25	19	3	12	10
Ratnapura	75	12	14	14	0	108	3	4	0	10	56	1	515	96	58	5	39	0
Kegalle	15	8	14	10	0	65	3	0	0	7	9	0	417	116	121	8	16	0
Kalmunai	23	3	3	7	4	8	1	2	1	0	1	1	298	68	27	2	8	0
Total	675	70	228	314	8	1318	209	59	2	863	350	22	13829	1877	1442	112	366	399

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

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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.

ON STATE SERVICE

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ISSN NO: 2345-9352