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1. POLIOMYELITIS

Twenty eight (28) Acute Flaccid cases were notified to the Epidemiology Unit during the 2nd quarter 2013. This is little higher in comparing to 22 AFP cases reported during the 2nd quarter 2012. Reported number to the quarter is above 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 2nd quarter of 2013 was 2.3 :100,000.

Notification of AFP Cases from Hospitals

All hospitals where Consultant Paediatricians are available are considered as sentinel sites for AFP surveillance. A total of 69 sentinel sites are currently functioning and last updated in 2013. 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 (43%) were notified from the sentinel site hospital for AFP, the Lady Ridgeway Children's Hospital (LRH), and Provincial General Hospital, Badulla. Particulars of all hospitals which reported AFP cases are given in Table 01.

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

The highest number of cases were reported from districts of Nuwara Eliya and Badulla with 4 cases each. The complete list of distribution of AFP cases according to the province, district and MOH area is given in Table 02.

Age and Sex Distribution of AFP Cases

Majority (18, 64%) of the cases were girls during the 2nd quarter 2013 and this was higher compared to the trend reported during the 2nd quarter 2012 which was 51% of girls in the reported AFP cases.

Majority (71%) of cases were between 1-9 years during the second quarter this year and the trend was higher compared to the compatible quarter in the previous year.

The table 3 shows the age distribution in the 2nd quarter 2013.

Table 01

Notification of AFP cases by sentinel hospitals 2nd Quarter 2013

Hospital	No: of cases reported
LRH	7
P.G.H. Badulla	5
T.H.Jaffna	2
T.H.Kandy	2
GH Matara	2
G.H.Nuwara Eliya	2
TH Karapitiya	1
GH Rathnapura	1
TH Kurunegala	1
National Hospital	1
SBSCH	1
G.H. Polonnaruwa	1
BH Tangalle	1
Central Hospital (Private)	1
Total	28

Table 02.

Geographical distribution of AFP cases 2nd quarter 2013

Province	District	MOH Area	Number of AFP cases
Western	Colombo	CMC	2
	Gampaha	Attanagalle	1
	Kalutara	Matugama	1
Southern	Galle	Yakkalamulla	1
	Matara	Matara, Dikwella	3
Central	Hambantota	Hambantota, Weeraketiya	2
	Nuwara Eliya	Nuwara Eliya	4
	Kandy	Harispattu	1
	Sabaragamuwa	Ratnapura	Embillipitiya
	Kegalle	Dehiowita	1
	North Western	Kurunegala	Ibbagamuwa
Eastern	Ampara	Dehiattakandiya	1
	Bataloa	Eravur	1
North Central	Polonnaruwa	Lamkapura	1
	Uva	Badulla	Kandaketiya
		Badulla	1
		Welimada	1
		Soranatota	1
	Northern	Jaffna	Chavakachcheri
		Puthukudiyiruppu	1
Total			28

Seasonal Distribution of AFP Cases

Majority of AFP cases were reported during April and May (71%) with a peak in May. There is an observable variation of case presentation by month compared to the compatible quarter in the previous year.

**Table 03. Distribution of AFP cases by Age
2nd Quarter 2013**

Age Group	Total
<1 year old	1
1-4 year old	10
5-9 year old	10
10-15 year old	7
Total	28

Final diagnoses of AFP cases

Majority (86%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 28 cases of AFP are given in table 4.

Table 4: Final diagnoses of AFP patients reported during 2nd quarter 2013

Final Diagnoses	Frequency
GBS	24
Transverse Myelitis	1
Bell's Palsy	1
Acute motor axonal polyneuropathy	1
Typhus fever	1
Total	28

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'.

All 22 AFP cases reported (79%) had both stool sample collected timely and sent to MRI for polio virology. The main reason for late stool samples or inadequate stool sample collection was the transferring of patients from small hospitals to specialized care institutions and late in stool sample collection.

2. MEASLES

Eight hundred and eleven (811) suspected measles patients were reported during the 2nd quarter 2013 in continuing the outbreak situation started since January 2013. Four hundred and eighty three (483) of them were clinically confirmed as measles as compatible with clinical surveillance case definition of "fever and maculopapular rash with one of the signs of cough, coryza or conjunctivitis".

This number is in contrast to 14 suspected cases and 3 clinically confirmed cases respectively in the compatible quarter, in the previous year.

These clinical cases were field investigated (93%) by the respective Medical Officers of Health (MOH) of the patients' residential areas and special field investigation reports have been sent to the Epidemiology Unit.

Majority affected (46%) were below the age of 1 year and of them a higher proportion (77%) belonged to 6 - 11 months. Western province reported the highest proportion (46%) followed by Southern province (23%) and Central province (16%). Out of the all clinically confirmed cases 68% were among the unvaccinated category but measles cases among children due for age appropriate vaccination for Measles were minimum.

Laboratory investigations of suspected measles or rubella patients (976) from January to June who were with fever and maculopapular rash were investigated in the WHO accredited virology laboratory at the Medical Research Institute (MRI) and identified 875 cases were serology positive for Measles IgM antibodies. Outbreaks of measles were considered as continuing during the second quarter also and a supplementary immunization activity of measles was planned to be conducted to protect 6 months to 1 year aged infants as an outbreak response activity.

3. LEPTOSPIROSIS

During the 2nd Quarter 2013, 1171 cases and 16 deaths (CFR 1.37%) due to Leptospirosis were notified to the Epidemiology Unit compared to 1238 cases and 33 deaths in the previous quarter and 595 cases and 08 deaths during corresponding quarter of 2012.

Table 05

SELECTED CHARACTERISTICS OF LEPTOSPIROSIS PATIENTS(%)- 2ND QUARTER 2013

Age Group	Sex	
	Male	Female
0-9 years	0.65	0.0
10-19 years	10.06	2.34
20-29 years	18.83	7.03
30-39 years	23.70	22.66
40-49 years	19.81	28.91
50-59 years	17.05	25.78
>60years	9.90	13.28
Total	100.0	100.0

4. HUMAN RABIES

Seven Human Rabies cases were reported in 2nd quarter 2013 compared to 06 cases previous quarter and 11 cases in the corresponding quarter of the last year.

Animal Rabies

During this quarter 147 dogs were reported positive for rabies, compared to 180 in the previous quarter and 143 positive in the same period in the last year. In addition the following animals were also reported positive;

Cats-09, Cow- 02, Domestic Ruminants-00

Rabies Control Activities

Dog vaccination - A total of 326281 dogs were immunized during the Quarter under review when compared to 196554 in the previous quarter and 309400 in corresponding Quarter of the last year.

Animal Birth control

Chemical- A total of 10719 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical- 42797 female dogs were subjected to sterilization by surgical method during the quarter under review.

5. VIRAL HEPATITIS

In the 2nd Quarter 2013, a total of 372 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 573 cases in the previous quarter and 585 cases in the corresponding quarter of 2012. Rathnapura (71 cases) reported the highest number of cases followed by Kegalle District (59).

6. ENTERIC FEVER

In the 2nd Quarter 2013, a total of 298 cases of Enteric fever were reported to the Epidemiology Unit, compared to 362 cases in the previous quarter and 272 cases in the corresponding quarter of 2012. The district of Jaffna (107) reported the highest number of cases, followed by Colombo (35 cases) and Kalutara (23 cases).

7. DYSENTERY

In the 2nd Quarter 2013, a total of 961 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 860 cases in the previous quarter and 731 cases in the corresponding quarter of 2012. Kalutara (123) and Ratnapura (97 cases) reported the highest number of cases.

8. MALARIA

There were no indigenous malaria cases reported during the 1st quarter of 2013 compared to the number of malaria cases detected during the same period of 2012. (Table 06)

Table 06

Results of Blood smear examination for malaria parasites - 2nd Quarter 2013

	2nd quarter 2012	2nd quarter 2013
No. of blood smears examined	230,262	247,761
No. of positives	3	0
No. of <i>P. vivax</i>	2	0
No. of <i>P. falciparum</i>	1	0
No. of mixed infections	0	0
Slide positivity rate (S.P.R.)	0.00%	0%
P.v. : P.f. ratio	2:1	0
Number of infant positives	0	0
% infant positives	0%	0%

9. JAPANESE ENCEPHALITIS (JE)

During the 2nd quarter of 2013, 56 cases of clinically suspected Encephalitis were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 36 cases were clinically confirmed. During the 2nd quarter of 2013, MRI has reported 08 lab confirmed JE cases. Out of these 08 confirmed JE cases, 06 cases (75%) were investigated by the MOH. Among them 03 (37%) were between 11-20 years, another 02 (25%) were over 50 years age, another one 01 (13%) was 12-50 years, another 01 was 1-10 years while 01 was less than one year.

The highest number of confirmed JE cases were (2) reported from Rathnapura, Gampaha and Kurunegala district followed by 01 cases from Colombo and Galle districts. The majority of confirmed JE cases have not been immunized.

Table 07

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – 2nd QUARTER 2013

Sex	Male	07
	Female	01
Age group	01<Y	01
	01-10Y	01
	11-20Y	03
	21-50Y	01
	> 50Y	02
District		
	Gampaha	02
	Galle	01
	Kurunegala	02
	Rathnapura	02
	Colombo	01

Table 08

DISTRIBUTION OF BLOOD SMEARS EXAMINATION BY MONTH BY DISTRICT RMO-2ND QUARTER 2013

RMO	April	May	June	Total
Colombo	6521	7541	6849	20911
Gampaha	3231	4064	2379	9674
Kalutara	1076	1564	907	3547
Kandy	3224	3822	3618	10664
Matale	1586	2443	2180	6209
Nuwara Eliya	246	248	237	731
Galle	1419	1886	1344	4649
Matara	1651	2080	1782	5513
Hambantota	1595	2085	2084	5764
Jaffna	5540	5765	6136	17441
Kilinochchi	3659	3753	3546	10958
Vavuniya	2771	3307	4040	10118
Mannar	3265	2497	3278	9040
Mullaitivu	1670	1682	1715	5067
Batticaloa	7153	7299	6068	20520
Ampara	1416	2239	1729	5384
Kalmunei	4012	4431	4480	12923
Trincomalie	3875	4701	4180	12756
Kurunegala	5100	5645	6030	16775
Maho	1452	1910	1742	5104
Puttalam	1947	1878	2238	6063
Anuradhapura	5274	6324	5572	17170
Pollonnaruwa	2899	3456	3141	9496
Badulla	1744	2140	2039	5923
Monaragala	2062	1917	2569	6548
Rathnapura	1834	2345	2225	6404
Kegalle	777	607	1025	2409
TOTAL	76999	87629	83133	247761

Table 09

MORBIDITY AND MORTALITY DUE TO DF/DHF - 2ND QUARTER 2013

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	2188	30.60%	8
Gampaha	804	11.24%	3
Kalutara	419	5.86%	1
Kandy	425	5.94%	5
Matale	99	1.38%	0
N' Eliya	52	0.73%	0
Galle	265	3.71%	0
Hambantota	73	1.02%	0
Matara	95	1.33%	0
Jaffna	215	3.01%	0
Kilinochchi	16	0.22%	0
Mannar	16	0.22%	0
Vavuniya	17	0.24%	0
Mullaitivu	50	0.70%	0
Batticaloa	194	2.71%	0
Ampara	33	0.46%	0
Trincomalee	48	0.67%	0
Kurunegala	523	7.31%	1
Puttalam	176	2.46%	0
A'pura	111	1.55%	0
Polonnaruwa	88	1.23%	0
Badulla	124	1.73%	0
Moneragala	58	0.81%	0
Ratnapura	655	9.16%	2
Kegalle	308	4.31%	1
Kalmunai	98	1.37%	1
Total	7150	100.00%	22

Table 10**DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI 2ND QUARTER 2013**

Month	Total No	Positive by IgM
April	395	149
May	285	114
June	578	227
Total	1258	490

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

During the 2nd quarter 2013, 7150 cases of DF/DHF and 22 deaths were reported (0.30% CFR) when compared to 9,714 cases of DF/DHF and 26 deaths (0.26% CFR) reported during the 2nd quarter 2013. Proportion of cases notified in April, May and June was 29.49%, 36.56%, and 33.94% respectively Table 09 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 2nd quarter.

Special surveillance data on 1477 confirmed cases shows that the age distribution of reported cases were <4 years of age in 186 (12.59%), 5- 9 years of age in 268 (18.14%), 10 - 14 years of age in 164 (11.10%) 15 – 19 years of age in 103 (6.97%), 20 - 24 years of age in 185 (12.53%), 25 - 29 years of age in 130 (8.8%), 30 - 34 years of age in 111 (7.51%), 35 - 39 years of age in 65 (4.4%), 40 - 44 years of age in 79 (5.34%), 45 - 49 years of age in 48 (3.25%), 50 – 54 years of age in 51 (3.45%), 55 - 59 years of age in 32 (2.17%), >60 years of age in 47(3.18%) .

According to the clinical findings majority of the reported cases (89.98%) were classified as dengue fever , (9.88%) were classified as DHF with 5.48%, 2.7%, 1.3%, 0.34% falling into DHF I, DHF II, DHF III, DHF IV categories respectively.

During the 2nd quarter 2013, 1258 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. From the total, 490 (38.95%) samples were confirmed as positive (Table 10).

11. RUBELLA AND CONGENITAL RUBELLA SYNDROME

During the whole quarter 9 suspected Rubella disease cases were reported and all 9 were compatible with surveillance case definition [fever and maculopapular rash, with arthralgia/arthritis, lymphadenopathy (suboccipital, post auricular and cervical) or conjunctivitis] during field investigations and were laboratory confirmed. Of the total confirmed, 7 of them were adult males above 25 years. Comparing the compatible quarter in the previous year only 6 cases of suspected Rubella cases were reported and 5 of them were compatible with surveillance case definition. Outbreaks were not reported during the quarter for rubella infection.

Congenital Rubella Syndrome

Four cases 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. Three of these cases were identified with congenital abnormalities and considered as Congenital Rubella Syndrome. They were reported from GH Kandy (1) and LRH (2) and belonged to districts of Ratnapura and Nuwara Eliya.

12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2013. Last case of cholera was reported in the country in January 2003.

13. TETANUS

Five tetanus cases were reported during 2nd quarter 2013. Colombo (MC Colombo) , Nuwara Eliya (MC Nuwara Eliya), Jaffna (Karaveddy), Polonnaruwa (Hingurakgoda) and Badulla (Girandurukotte) were the district which reported. Out of Notified, two cases were clinically confirmed as Tetanus cases.

14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 2nd Quarter of 2013 has reached 97.5% of completeness of reports, while 58.6% reports were received in time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Ampara, Badulla, Kalutara, Kegalle, Killinochchi, Monaragala, Mullativu, Polonnaruwa and, Trincomalee were able to send all reports. The best timeliness was reported from the Jaffna district (94.3%) followed by Kegalle (84.8%), Vavuniya (81.8%) and Badulla (81.3%). (Table 11)

The highest percentage of nil reports were received from Kalmunai (63.2%) followed by Mannar district (61.5%), which more than two fold of the Sri Lanka average (30.8%) indicating the need for more attention for surveillance. Jaffna district has no 'Nil return', followed by Gampaha (4.5) and Kegalle districts (6.1%) indicating the good surveillance system in place. The highest rate (640.7 per 100,000 immunizations) of AEFI was reported from Jaffna district, while Kurunegala reported the highest number of 243 AEFI cases in second quarter 2013.

For the second quarter, the highest number of AEFI (n=960) was reported against Pentavalent vaccine, where as the highest rate of AEFI (507.9/100,000 doses administered) reported against DTP vaccine. The rate of AEFI for Pentavalent (01st, 02nd & 03rd dose) is 377.9 per 100,000 doses administered. High Fever (798), Allergic Reaction (471), Nodule (210) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (452 cases: 177.9 per 100,000 doses administered) and DPT (217 cases: 240.1 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to PVV (137 cases: 53.9 per 100,000 doses administered) and LJE (128 cases: 118.7 per 100,000 doses administered).

Table 11

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 2ND QUARTER 2013

DPDHS	% completeness	% Timely re-returns	% Nil Re-returns	No. of AEFI	AEFI Rate (100,000 vaccine)
Colombo	97.6	61.0	14.6	212	167.2
Gampaha	97.8	52.3	4.5	120	90.7
Kalutara	100.0	35.9	41.0	58	76.6
Kandy	94.4	45.6	33.8	122	124.6
Matale	97.4	52.6	23.7	67	177.2
Nuwara Eliya	92.3	55.6	58.3	39	70.3
Galle	96.5	58.2	45.5	67	97.3
Hambantota	97.2	74.3	14.3	76	164.1
Matara	96.1	79.6	24.5	98	177.7
Jaffna	97.2	94.3	0.0	233	640.7
Kilinochchi	100.0	41.7	25.0	16	160.0
Mannar	86.7	69.2	61.5	19	230.0
Vavuniya	91.7	81.8	36.4	34	266.9
Mullativu	100.0	41.7	58.3	29	385.0
Batticaloa	97.6	53.7	51.2	61	141.9
Ampara	100.0	28.6	57.1	11	56.0
Trincomalee	100.0	45.5	45.5	33	106.9
Kurunegala	96.3	69.2	15.4	243	205.0
Puttalam	97.2	48.6	28.6	76	121.9
Anuradhapura	96.5	58.2	41.8	72	106.5
Polonnaruwa	100.0	66.7	23.8	43	138.4
Badulla	100.0	81.3	16.7	115	191.3
Moneragala	100.0	66.7	27.3	40	113.1
Ratnapura	92.6	30.0	36.0	84	110.5
Kegalle	100.0	84.8	6.1	88	155.7
Kalmunai	97.4	42.1	63.2	22	68.3
Sri Lanka	97.5	58.6	30.8	2078	148.0

Table 12: Number of Selected Adverse Events by Vaccines – 2nd Quarter 2013

	BCG	OPV	PVV	DPT	MMR	LJE	DT	TT	aTd	Total number of AEFI reported
Total Number of AEFI Reported	13	5	960	459	207	224	120	20	55	2063
AEFI reporting rate/1,000,000 doses administered	14.8	1.2	377.9	507.9	122.1	207.7	134.0	23.6	63.9	
High Fever (>39°C)	1	1	452	217	57	38	25	3	4	798
Reporting rate/1,000,000 doses administered	1.1	0.2	177.9	240.1	33.6	35.2	27.9	3.5	4.6	
Allergic reactions			137	60	88	128	34	10	14	471
Reporting rate/1,000,000 doses administered			53.9	66.4	51.9	118.7	38.0	11.8	16.3	
Severe local reactions	1		27	21		4	9		2	64
Reporting rate/1,000,000 doses administered	1.1		10.6	23.2		3.7	10.0		2.3	
Seizure (Febrile/Afebrile)			15	36	6	10	2			69
Reporting rate/1,000,000 doses administered			5.9	39.8	3.5	9.3	2.2			
Nodules	1		145	41	2	8	12	1		210
Reporting rate/1,000,000 doses administered	1.1		57.1	45.4	1.2	7.4	13.4	1.2		
Injection site abscess	5		16	4	1		2			28
Reporting rate/1,000,000 doses administered	5.7		6.3	4.4	0.6		2.2			
HHE			1							1
Reporting rate/1,000,000 doses administered			0.4							

15. TUBERCULOSIS

A total of 2456 Tuberculosis patients were registered for 2nd Quarter 2013. Of this total 2266 were New Pulmonary TB patients. Out of all TB cases 1144 (46.6%) were New Smear Positive Pulmonary TB, while the balance 514 (20.9%) were new Smear Negative Pulmonary TB Patients and 608 (24.8%) from New Extra Pulmonary cases. There were 100 (4.1%) retreatment cases and 90 (3.7%) were other cases. There was two HIV/TB positive patients found in the quarter. The distribution of tuberculosis patients by RDHS division is given in Table 13.

Table 13

TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 2nd Quarter 2013

RDHS DIVISION	New				Retreat-ment & other	Total
	PTB sp+ve	PTB -ve	sp	EPTB		
Colombo	284	99	144	527	39	566
Gampaha	127	45	63	235	24	259
Kalutara	92	31	45	168	15	183
Kandy	57	72	44	173	7	180
Matale	18	9	12	39	0	39
Nuwara Eliya	31	20	9	60	9	69
Galle	61	21	35	117	12	129
Matara	29	5	15	49	3	52
Hambantota	23	10	9	42	0	42
Jaffna	18	28	21	67	9	76
Vavuniya	6	1	4	11	0	11
Batticaloa	26	13	23	62	2	64
Ampara	8	2	1	11	0	11
Kalmunai	21	8	11	40	0	40
Trincomalee	22	10	10	42	3	45
Kurunegala	57	38	34	129	39	168
Puttalam	32	6	17	55	2	57
Anuradhapura	44	10	11	65	5	70
Polonnaruwa	14	8	4	26	2	28
Badulla	22	15	18	55	7	62
Monaragala	18	4	5	27	0	27
Rathnapura	67	32	40	139	5	144
Kegalle	54	13	26	93	5	98
Mannar	5	8	0	13	1	14
Mulathivu	3	2	1	6	1	7
Kilinochchi	5	4	6	15	0	15
Total	1144	514	608	2266	190	2456

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 2013, is as follows;

		Total
A.	Yellow fever	1100
B.	Meningococcal meningitis	87
C.	Oral polio	66

17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 2nd Quarter 2013 is given below.

1. Yellow Fever Surveillance

a.	No. with valid certificate	-	17
b.	No. without valid certificate & Deported	-	00
c.	No. without valid certificate & Isolated	-	00

2. Disinfection of Aircrafts

a	No. of flights arrived	-	6023
b	No. of flights has to be disinfected	-	5067
c	No. of flights disinfected	-	4702

3. Passenger Arrivals & Departures

		-	Nil
a	No. Of Passengers Arrived	-	847291
b	No. Of Passengers Departure	-	

4. Release of Human Remains

a	No. Of Human Remains released	-	114
b	No. Of released to J.M.O. for post-mortem	-	02
c	No. alleged suicide	-	03

5. Surveillance of other Infectious diseases

- **Nil**

6. Airport Sanitation

a.	No. of sanitary inspections carried out including food establishments	-	07
b.	No. of food sample taken under food act	-	02
c.	No. found defective	-	00
d.	No. of court cases/prosecuted/warned	-	00

7. Other Health activities

a	Polio Vaccination: No of doses given	-	00
b	Health talk given to staff	-	07

08	A. No. of water samples taken for Bacteriological Analysis	-	06
	B. No. of reported contaminated	-	00

18. LEPROSY**QUARTERLY RETURN OF LEPROSY STATISTICS - 2ND QUARTER 2013****Table 14****1. National**

	At the end of the quarter			Cumulative for end of the quarter		
	2nd QTR,2013	2nd QTR,2012	Diff (%)	2013	2012	Diff (%)
New patients detected	558	498	12.05	1089	1022	6.56
Children	46	39	17.95	99	82	20.73
Grade 2 Deformities	32	32	0.00	75	62	20.97
Multi-Bacillary	276	247	11.74	529	492	7.52
Females	243	194	25.26	456	421	8.31

2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	26	2	0	11	10
Kandy	10	1	0	5	4
Matale	9	0	0	4	4
NuwaraEliya	7	1	0	2	2
Eastern	93	4	11	38	39
Ampara	11	0	0	7	4
Batticaloa	41	1	6	14	14
Kalmunai	37	3	5	15	18
Trincomalee	4		0	2	3
Northern	27	0	9	5	18
Jaffna	22	0	8	1	14
Vavuniya	0	0	0	0	0
Mannar	2	0	1	2	1
Killinochchi	3	0	0	2	3
Mulathivu	0	0	0	0	
North Central	30	1	0	16	11
Anuradhapura	22	1	0	14	8
Pollonnaruwa	8	0	0	2	3
North Western	66	7	3	28	31
Kurunegala	36	4	0	20	14
Puttalam	30	3	3	8	17
Sabaragamuwa	30	5	1	26	11
Kegalle	4	1	0	3	0
Rathnapura	26	4	1	23	11
Southern	62	1	8	32	23
Galle	32	1	3	19	12
Hambanthota	13	0	1	7	5
Matara	17	0	4	6	6
Uva	8	1	0	4	4
Baddulla	4	1	0	2	2
Monaragala	4	0	0	2	2
Western	216	11	14	116	96
Colombo	101	6	6	50	42
Gampaha	64	2	4	37	29
Kalutara	51	3	4	29	25
Sri Lanka	558	32	46	276	243

Source : Anti Leprosy Campaign

19. SEXUALLY TRANSMITTED DISEASES

Table 15

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

2ND QUARTER 2013

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	31	15	46	60	30	90
AIDS	7	4	11	19	6	25
Early Syphilis ²	50	28	78	101	51	152
Syphilis	124	73	197	256	144	400
Congenital Syphilis ⁴	1	0	1	3	2	5
Gonorrhoea ⁵	92	32	124	189	59	248
Ophthalmia Neonatorum ⁶	0	1	1	0	2	2
Non specific cervicitis/urethritis	158	318	476	336	652	988
Chlamydial infection	0	0	0	3	0	3
Genital Herpes	292	409	701	554	769	1323
Genital Warts	273	176	449	529	336	865
Chancroid	1	1	2	1	1	2
Trichomoniasis	0	26	26	4	56	60
Candidiasis	229	360	589	454	694	1148
Bacterial Vaginosis	0	304	304	0	610	610
Other sexually transmitted diseases ⁷	129	40	169	222	74	296
Non venereal	740	405	1145	1544	809	2353

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 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 INSTITUTE 2nd QUARTER 2013

Table 16

	APRIL	MAY	JUNE
(A) CHOLERA			
No. of stool specimens Examined	0	33	40
No. of positives	0	0	0
(B) SALMONELLA			
Blood- No. Examined	38	39	46
S.typhi	1	0	0
S.paratyphi A	0	1	0
Stools—No. examined	8	44	115
S.typhi	0	0	0
S.paratyphi A	0	0	0
Others	0	1	3
(C) SHIGELLA			
No. Examined	8	44	115
Sh.flexneri 1	0	0	0
Sh.flexneri 2	0	0	0
Sh.flexneri 3	0	0	0
Sh.flexneri 4	0	0	0
Sh.flexneri 5	0	0	0
Sh.flexneri 6	0	0	0
Sh. sonnei	0	0	0
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	1	1	2
No.+ve	0	0	0
(E) CAMPYLOBACTER			
No.Examined	7	12	15
No. Positive	0	1	0
(F) ISOLATES			
Clinical	8	15	16
S. Typhi	0	1	1
S. Paratyphi A	0	0	0
Other Salmonella	6	6	5
Shigella spp	0	0	0

**21. SURVEILLANCE OF MENINGITIS—
2nd quarter 2013**

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 2nd quarter 2013, 381 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 284 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Kegalle district (45), followed by Gampaha (24) and Anuradhapura (21) districts.

Twenty Six percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 29% belonged to the age group 1-5 years and 20% belonged to age group 6 – 15 years. 62% of the clinically confirmed cases were males and 38% were females.

Table 17

Summary findings for special investigations carried out for clinically confirmed cases of Meningitis for year 2013

CSF Culture Report		
CSF Culture	Number	(%)
CSF results available	109	35%
• No Growth	(103)	
• Group B streptococci	(03)	
• Haemophilus influenza	(01)	
• Meningococcal	(02)	
Culture results not known	195	63%
Not done	04	01%
Total	308	100%
Final outcome of the patient		
Outcome	Number	(%)
Cured	292	95%
Died	05	1.5%
Information not available	11	3%
Total	308	100%
Final Diagnosis (based on clinical and lab findings)		
Diagnosis	Number	(%)
Culture confirmed	06	2%
Probable bacterial meningitis	23	8%
Probable viral meningitis	27	9%
Suspected Meningitis	252	82%
Total	308	100%

22 INFLUENZA SURVEILLANCE

Human Influenza surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory tract Infections (SARI) surveillance.

Human Influenza surveillance

ILI Surveillance – Laboratory Component

Under ILI laboratory surveillance a total of 297 samples were received from sentinel hospitals for the said quarter. There were 265 samples in April and 32 May. Lady Ridgeway Children’s Hospital (LRH) (31) sent in the highest number of samples with North Colombo Teaching Hospital (NTCH) sending in 28. All sentinel hospitals except General Hospital (GH) Vavuniya and GH Ampara had sent in samples within the quarter. There were 14 samples from TH Jaffna.

Table 18 shows the performance of sentinel hospitals in the laboratory component of the ILI surveillance programme for this quarter.

Table 19 shows the subtypes of influenza viruses isolated from samples tested within the laboratory component by month in 2nd quarter 2013.

In contrast to the previous quarter Influenza B had emerged as the predominant influenza viral strain circulating during the quarter with strong presence of both Influenza A (H3N2) and A (H1N1pdm) 2009 as the other common circulating viral strains. This local circulating viral pattern with presence of all 3 viruses; Influenza B, Influenza A (H3N2) and Influenza A (H1N1pdm) 2009 were being observed as seasonal influenza viral strains globally during this time.

These results show that 13% of ILI samples tested within this quarter had an influenza viral strain. However this low yield is misleading since ILI samples were not entertained during 2 months of the quarter.

Figure 1 shows the seasonal changes in the circulating influenza viral strains and influenza percent positivity among tested samples within the laboratory component in ILI surveillance during the quarter.

ILI Surveillance – Epidemiological Component

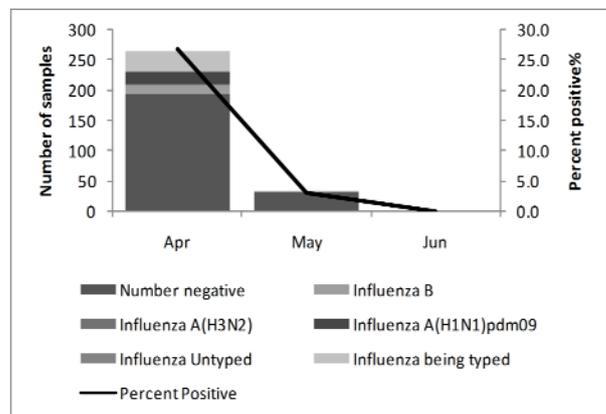
A total of 24,611 ILI visits had been recorded for the quarter. This is out of a total of 1,054,636 OPD visits in these hospitals. In April there were 6465 ILI cases visiting OPD of sentinel hospitals and 10081 in May and 8065 in June. Suspension of ILI laboratory surveillance had a negative impact on epidemiological component and a few better performing hospitals refrained from sending in data.

Table 20 shows the performance of sentinel hospitals in the epidemiological component of the surveillance programme for this quarter.

According to these numbers, contribution of ILI to OPD visits during the quarter is 2.3% which seems underestimated as in the previous quarter (2%).

Figure 2 shows the monthly distribution of the proportion of ILI in sentinel hospitals for the years 2009 to 2013.

Figure 1: Seasonal Patterns in Influenza Positivity within the ILI laboratory component 2nd Quarter 2013



Severe Acute Respiratory Infections (SARI) Surveillance

Laboratory Component

There were a total of 380 samples from SARI patients in the designated sentinel hospitals received by the NIC/MRI for the 2nd quarter 2013. LRH and GH Matara had performed well in sending SARI samples. Table 21 shows the performance of 3 SARI sentinel hospitals in the laboratory component of the SARI surveillance for this quarter. Table 22 shows the results yielded for SARI samples in the 2nd quarter 2013 at NIC.

In contrast to the previous quarter, both Influenza B and Influenza A(H1N1pdm) 2009 featured as predominantly seen viral strains among inward SARI patients with very low presence of Influenza A(H3N2).

The results show that 42% of SARI patients tested within this quarter as having an influenza viral strain. This is much higher than that recorded for the previous quarter (21%) and to the pattern seen in second quarter in 2012, where Influenza activity was a low 9%. This reflects the unusually high influenza activity that was observed during the quarter especially in May.

Figure 3 shows the seasonal changes in the influenza positivity along with the performance within the laboratory component in SARI surveillance within the quarter.

SARI Surveillance –

Epidemiological surveillance

There were a total of 1502 SARI patients treated inward for severe respiratory tract infections within the 2nd quarter 2013 in sentinel hospitals of LRH, GH Matara and NCTH. The new sentinel site, NCTH showed a strong performance reporting the highest number of SARI patients during the quarter.

Table 23 shows the distribution of SARI patients in the 3 hospitals by month in the 2nd quarter 2013. SARI had contributed to 3.9% of total admissions in these hospitals within this quarter. This proportion closely follows that of the previous quarter (4.2%).

Figure 4 shows the monthly distribution of the proportion of SARI in sentinel hospitals for the years 2011 to 2013.

Animal Influenza Surveillance

In the 2nd quarter 2013 there were 1132 pooled samples and 1210 serum samples collected and tested at the VRI for HPAI. None of the samples had yielded HPAI. The table 24 shows the number of samples collected by month and the districts they were collected from.

Figure 2: Distribution of Proportion of SARI cases by month – 2011 – 2013 2nd Quarter

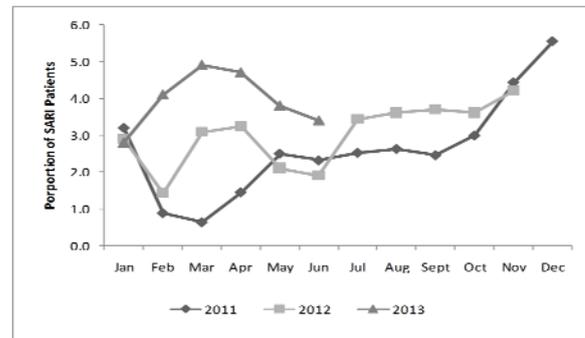


Figure 3: Seasonal Patterns in Influenza Positivity within the SARI laboratory component – 2nd Quarter 2013

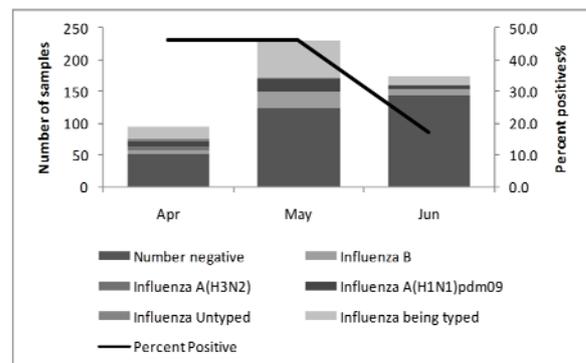


Figure 4: Distribution of OPD ILI visits by month – 2009 – 2013 2nd Quarter

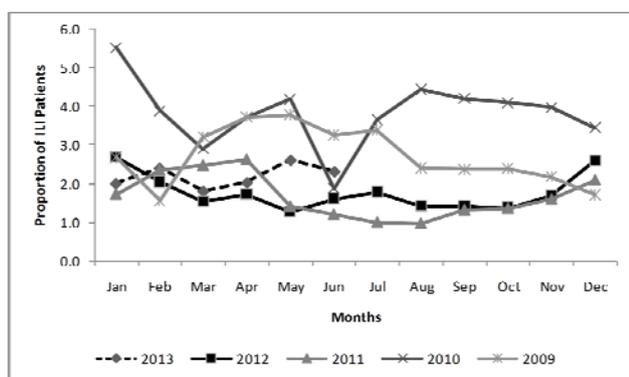


Table 18: Performance of sentinel hospitals in the laboratory component of the ILI surveillance programme - 2nd Quarter 2013

	April	May	June	Total
LRH	30	1	0	31
NHSL	4	0	0	4
CSTH	8	0	0	8
IDH	11	4	0	15
NCTH	27	1	0	28
TH Peradeniya	6	6	0	12
GH Nuwara Eliya	17	2	0	19
TH Karapitiya	18	2	0	20
GH Matara	12	1	0	13
TH Jaffna	14	0	0	14
GH Vavuniya	0	0	0	0
GH Ampara	0	0	0	0
TH Batticaloa	18	0	0	18
TH Kurunegala	21	0	0	21
GH Chilaw	22	0	0	22
TH Anuradhapura	17	0	0	17
GH Polonnaruwa	14	4	0	18
GH Badulla	11	6	0	17
GH Ratnapura	15	5	0	20
Total	265	32	0	297

Table 19: Types of Respiratory Viruses Isolated in ILI samples – 2nd Quarter 2013

Month	Total	Influenza B	(H1N1pdm) 2009	A (H3N2)	A untyped	Influenza Yield
April	265	14	18	3	3	26.8
May	32	1	0	0	0	3.1
June	0	-	-	-	-	-
Total	297	15	18	3	3	13.1

Table 20: Performance of sentinel hospital in Epidemiology component of ILI Surveillance—2nd Quarter 2013

	April	May	June	Total
LRH	390	503	414	1307
NHSL	0	0	0	0
CSTH	65	83	14	162
IDH	148	323	248	719
NCTH	20	0	0	20
TH Peradeniya	47	6	133	186
GH Nuwara Eliya	846	740	851	2437
TH Karapitiya	292	567	743	1602
GH Matara	85	83	67	235
TH Jaffna	180	1058	509	1747
GH Vavuniya	449	610	306	1365
GH Ampara	1514	2578	2267	6359
TH Batticaloa	1098	1193	1054	3345
TH Kurunegala	8	0	0	8
GH Chilaw	0	0	0	0
TH Anuradhapura	0	0	0	0
GH Polonnaruwa	125	519	166	810
GH Badulla	222	340	147	709
GH Ratnapura	976	1478	1146	3600
Total	6465	10081	8065	24611

Table 21: performance of sentinel hospitals in the laboratory component of the SARI surveillance - 2nd Quarter 2013

Institution	April	May	June	Total
LRH	48	84	25	157
GH Matara	19	96	14	129
TH Peradeniya	2	7	5	14
NCTH	26	44	10	80
Total	95	231	54	380

Table 22: Types of Respiratory Viruses Isolated in SARI Samples - 2nd Quarter 2013

Month	Total	Infl B	Infl A (H3N2)	Infl A (H1N1) pdm09	Infl untyped	Infl being typed	Infl yield
April	95	7	5	8	4	20	46.3%
May	231	25	0	23	0	58	46.3%
June	54	3	0	2	0	3	14.8%
Total	380	35	5	33	4	81	41.8%

Table 23: Distribution of SARI patients by month – 2nd Quarter 2013

Institution	April	May	June	Total
LRH	138	95	127	360
GH Matara	156	164	143	463
NCTH	214	296	169	679
Total	508	555	439	1502

Table 24: Animal samples collected by month and district – 2nd Quarter 2013

Month	No. of samples		Districts samples were collected from
	Pooled	Serum	
April	306	240	Colombo, Jaffna, Vavuniya, Badulla
May	471	450	Anuradhapura, Matale, Ratnapura, Badulla, Colombo, Hambantota, Jaffna, Matara, Kandy, Puttalam
June	355	520	Anuradhapura, Kurunegala, Ratnapura, Vavuniya, Polonnaruwa, Colombo, Jaffna
Total	1132	1210	

23. Special Report

Surveillance Report Leptospirosis - 2012

Introduction

Leptospirosis is a major public health problem in Sri Lanka. It is a zoonotic illness which is transmitted to humans through muscus membranes or abraded skin to water that has been contaminated by urine from infected animals, especially rodents. Leptospirosis is found throughout the world, particularly in tropical and subtropical regions where environmental conditions favour the survival and transmission of Leptospirosis, the causative bacteria which is found in animal hosts.

Surveillance of Leptospirosis

Leptospirosis cases are reported to the Epidemiology Unit through the routine notification system. In addition, field based and hospital based (Sentinel Site) special surveillance carried out by the Epidemiology Unit.

Geographical distribution of Leptospirosis cases

A total of 2663 of cases were reported from the entire country in 2012, As compared to 6689 cases notified in 2011. The highest number of cases were reported from Gampaha district (329) followed by Rathnapura (315) and Kalutara (307) districts. Table 25.

Seasonal distribution of Leptospirosis cases

There were no major peaks observed in 2012 during number of the months. Though peaks are observed during paddy harvesting and/or paddy cultivation season in most years, such a picture was not observed in 2012. The notification of Leptospirosis in Sri Lanka witnessed a low endemic pattern throughout the year, when comparing with previous years. Maximum number (325) of cases were reported in November from the entire country, with 288 cases reported in March and 260 cases reported January (figure 05).

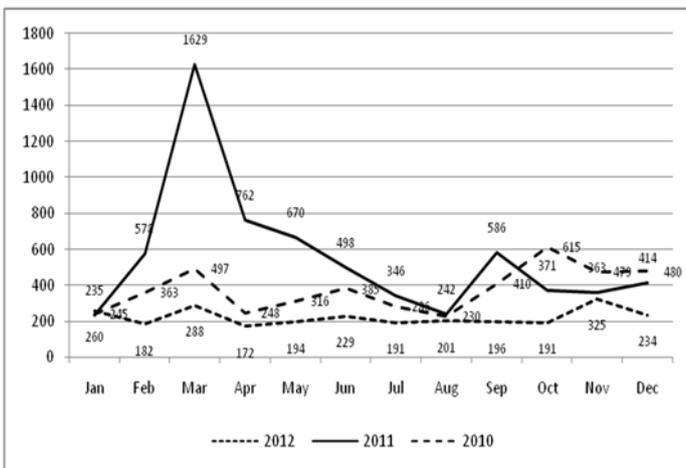
Prevention and Control

Epidemiology Unit carried out broad district/local level strategies to prevent and control the transmission of Leptospirosis. Surveillance activities were intensified mainly during paddy cultivation season with MOH, RE and central level involvement aimed at early detection of outbreaks. Chemoprophylaxis with Doxycyclin was given for selected high risk population under close monitoring by PHC staff. Progress of implementing, preventing & controlling activities were discussed at quarterly regional epidemiologist conference.

Age and sex distribution of Leptospirosis cases

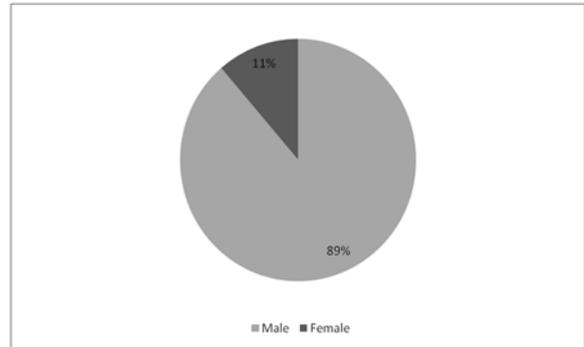
The majority of Leptospirosis cases reported during the year were males. Out of the total cases, 89% were males and 11% were females. The age distribution of reported cases of Leptospirosis for the year 2012 is given in figure 6. Figure 07 shows the highest percentage of cases (22.02%) occurred in the age group of 30-39 years. 40- 49 age group too witnessed a 21.86% representation of cases.

Figure 5: Distribution of Leptospirosis cases by month 2010 – 2012



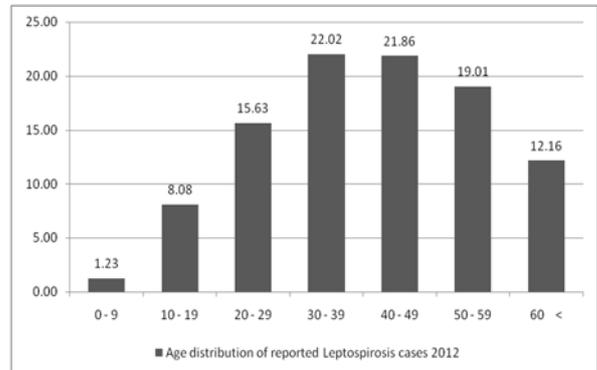
Source: Epidemiology Unit, Notification Data

Figure: 06 Sex distribution of reported Leptospirosis cases - 2012



Source: Epidemiology Unit, Special Surveillance

Figure: 07 Age distribution of reported Leptospirosis cases 2012

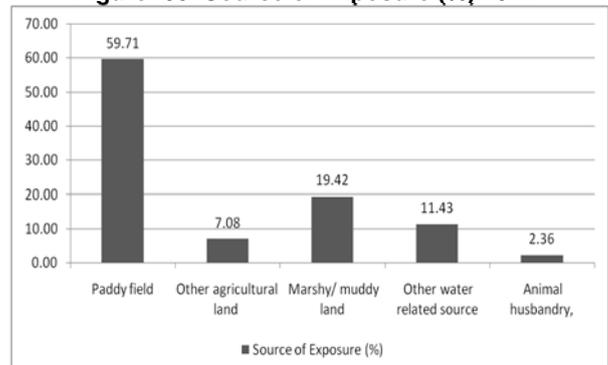


Source: Epidemiology Unit, Special Surveillance

Source of Exposure

According to data analyzed through confirmed leptospirosis cases, the majority (59.71%) were exposed via paddy field followed by marshy land (19.42%). Other water related sources and too were considered as source of exposure in 11.43% of cases (figure 08).

Figure: 08. Source of Exposure (%) 2012



Source: Epidemiology Unit, Special Surveillance

Table 25
Geographical distribution of Leptospirosis cases by district-2012

District	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec	Total
Colombo	12	6	29	17	7	17	27	15	28	20	35	13	226
Gampaha	16	15	30	23	15	25	21	30	24	46	66	18	329
Kalutara	16	18	45	20	19	28	13	22	26	29	45	26	307
Kandy	14	4	6	2	6	4	8	8	7	7	13	6	85
Matale	7	3	3	6	4	5	5	3	0	5	3	8	52
N'Eliya	3	1	6	3	4	2	3	8	1	1	6	5	43
Galle	9	8	26	16	5	14	4	13	10	8	18	17	148
Hambantota	9	6	5	6	12	14	6	3	2	3	19	15	100
Matara	12	10	26	17	18	8	9	8	34	21	31	19	213
Jaffna	2	0	0	0	0	0	0	0	0	0	1	0	3
Kilinochchi	1	1	1	0	0	1	0	0	0	0	0	0	4
Mannar	3	2	7	0	1	0	2	2	2	1	3	4	27
Vavuniya	7	7	0	0	0	2	1	1	0	0	0	1	19
Mulativu	2	0	0	0	0	0	1	0	0	0	0	0	3
Batticaloa	2	2	0	0	1	1	2	0	0	0	2	2	12
Ampara	7	2	6	0	4	2	2	2	2	0	1	1	29
Trincomalee	6	8	7	2	9	6	1	1	0	1	3	2	46
Kurunegala	19	19	12	12	23	19	5	8	8	10	16	9	160
Puttalam	5	5	8	2	3	3	0	5	5	3	2	1	42
Anuradhapura	23	8	6	8	7	12	5	8	1	0	7	17	102
Polonnaruwa	7	3	7	2	8	7	3	4	2	4	6	22	75
Badulla	4	6	4	4	3	4	5	2	4	0	0	2	38
Monaragala	16	4	13	4	8	7	5	3	1	3	4	11	79
Ratnapura	47	32	24	13	18	29	37	38	20	17	20	20	315
Kegalle	11	11	17	14	19	18	26	17	13	12	24	14	196
Kalmunai	0	1	0	1	0	1	2	0	6	0	0	1	10
Total	260	182	288	172	194	229	191	201	196	191	325	234	2663

Table 26

24. SUMMARY OF NOTIFIABLE DISEASES - 2nd QUARTER 2013

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	62	4	35	14	0	53	174	2	1	2	13	4	2188	106	98	22	12	0
Gampaha	57	4	11	16	0	114	108	0	0	4	40	5	804	218	41	15	35	3
Kalutara	39	4	23	6	0	86	95	0	0	0	8	2	419	10	79	22	14	0
Kandy	48	1	7	6	0	20	113	1	0	37	16	0	425	182	44	12	6	2
Matale	22	1	8	3	0	25	6	0	0	1	12	0	99	46	17	8	13	5
Nuwara-Eliya	59	0	3	1	0	11	11	1	1	22	11	0	52	73	14	8	4	0
Galle	19	5	1	70	1	75	56	7	0	11	3	0	265	141	84	10	15	0
Hambantota	10	0	2	2	0	43	89	3	0	14	15	0	73	45	21	3	8	65
Matara	24	2	13	23	1	42	35	5	0	9	43	4	95	52	74	13	21	26
Jaffna	62	2	107	72	0	7	1	30	1	98	6	1	215	69	57	43	28	0
Kilinochchi	3	0	3	3	0	4	0	0	0	8	0	1	16	17	0	2	4	4
Mannar	13	0	13	3	0	5	2	0	0	10	2	0	16	18	6	12	2	0
Vavuniya	7	1	3	4	2	26	1	0	0	1	1	0	17	10	10	3	12	1
Mullaitivu	3	0	3	32	0	19	0	1	0	3	0	0	50	5	6	1	1	5
Batticaloa	123	1	0	12	1	18	0	3	0	0	3	0	194	69	17	5	1	0
Ampara	15	0	1	3	0	15	9	0	0	0	1	0	33	10	21	25	1	0
Trincomalee	20	2	4	1	0	6	0	1	0	4	1	0	48	24	18	11	1	11
Kurunegala	43	11	7	5	0	86	21	8	0	8	14	0	523	97	107	32	44	10
Puttalam	15	1	7	34	0	7	7	0	0	3	1	0	176	26	18	9	9	2
Anuradhapura	28	2	2	4	0	141	15	6	0	3	4	2	111	73	57	36	34	111
Polonnaruwa	8	1	7	53	1	60	4	0	1	0	5	0	88	28	47	16	6	45
Badulla	55	3	5	6	0	15	1	0	1	26	20	1	124	69	56	2	30	4
Moneragala	34	0	6	1	1	113	12	3	0	7	23	0	58	39	19	14	2	4
Ratnapura	97	11	17	4	0	100	27	3	0	6	71	7	655	106	50	16	18	0
Kegalle	32	0	7	1	0	80	22	0	0	28	59	0	308	83	73	43	55	0
Kalmunai	63	0	3	54	0	0	2	1	0	0	0	0	98	48	21	8	5	0
Total	961	56	298	433	7	1171	811	75	5	305	372	27	7150	1664	1055	391	381	298

No polio cases. (from AFP surveillance system).

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Figures given may be subject to revision.

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

Such reports should be addressed to:

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ON STATE SERVICE

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