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CONTENTS	PAGE NO
1. Surveillance of Poliomyelitis	02
2. Surveillance of Measles	04
3. Surveillance of Leptospirosis	04
4. Surveillance of Human Rabies & Control activities	05
5. Surveillance of Viral Hepatitis	05
6. Surveillance of Enteric Fever	05
7. Surveillance of Dysentery	05
8. Surveillance of Malaria	05
9. Surveillance of Japanese Encephalitis	06
10. Surveillance of Dengue Fever	08
11. Surveillance of Rubella and Congenital Rubella Syndrome	09
12. Surveillance of Cholera	09
13. Surveillance of Tetanus	09
14. Surveillance report on A E F I	10
15. Surveillance of Tuberculosis	12
16. Surveillance at Sea Port	12
17. Surveillance at Air Port	12
18. Surveillance of Leprosy	13
19. Sexually Transmitted Diseases	14
20. Pattern of Enteric Pathogens isolated	15
21. Surveillance of Meningitis	15
22. Influenza Surveillance	16
23. Special Report Surveillance Report on Leptospirosis	18
24. Summary of Notifiable Diseases	20



1. POLIOMYELITIS

Twenty four (24) Acute Flaccid cases have been notified to the Epidemiology Unit during the 1st quarter 2014. This is higher than the reported AFP cases during the 1st quarter 2013 which is 16. Reported number for the quarter has achieved the expected number of AFP cases per quarter to meet 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 2014 was 2:100,000 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 69 sentinel sites are currently functioning and was 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.

The majority of the cases (50%) were notified from the main sentinel site hospitals for AFP surveillance in the Western Province :Lady Ridgeway Hospital, National Hospital of Sri Lanka ,G H Kalutara, B H Homagama and Nawaloka Private Hospital. Most of these government hospitals are tertiary care centres receiving referrals from other hospitals and reported majority of AFP cases. All the hospitals which reported

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

The highest number (5) of AFP cases belonged to the district of Colombo in the Western Province. Three cases belonged to the Puttalam district. Districts of Galle, Kandy, Nuwara Eliya, Rathnapura and Badulla reported 2 AFP cases each. Kalutara, Matale, Kurunegala, Kalmunai, Ampara and Mullativu districts reported 1 AFP case each for the quarter. The complete list of distribution of AFP cases according to the province, district and MOH area are given below in Table 02.

Age and Sex Distribution of AFP Cases

Majority of AFP cases (54.17%) were males during the 1st quarter, 2014. During the 1st quarter 2013 the trend was similar with majority being males.

Majority of AFP cases (83.33%) were between 1-9 years and the age sex distribution of reported cases are given in Table 3.

Table 01: Notification of AFP cases by sentinel hospitals -1st quarter 2014

Hospital	No: of cases reported
LRH	7
G.H.Badulla	3
NHSL	2
T.H.Karapitiya	2
G.H.Nuwara Eliya	2
G.H.Kalutara	1
T.H.Kandy	1
T.H.Kurunegala	1
T.H.Peradeniya	1
SBSCH	1
B.h.Homagama	1
AMH Kalmunai	1
Nawaloka Private Hospital	1
Total	24

Seasonal Distribution of AFP Cases

Majority of cases were reported during the month of March (10 cases, 41.67%). No significant seasonal variation has been observed during the period.

**Table 02: Geographical distribution of AFP cases
1st quarter 2014**

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Colombo Municipal Council	3
		Homagama	1
		Dehiwala	1
	Kalutara	Beruwala	1
Southern	Galle	Thawalama	1
		Balapitiya	1
Central	Kandy	Hasalaka	1
		MC Kandy	1
	Matale	Wilgamuwa	1
	Nuwara Eliya	Lindula	1
		MC Nuwara Eliya	1
Sabaragamuwa	Ratnapura	Godakawela	1
		Embilipitiya	1
North Western	Kurunegala	Nikaweratiya	1
	Puttalam	Wennappuwa	1
		Kalpitiya	1
		Puttalam	1
	Kalmunai	Samanthurai	1
North Central	Ampara	Dehiattakandiya	1
Uva	Badulla	Passara	1
		Badulla	1
Northern	Mullativu	Malavii	1
Total			24

**Table 03. Distribution of AFP cases by Age
& Sex- 1st quarter 2014**

Age	Sex		Total
	Male	Female	
< 1 year old	0	1	1
1-4 year old	3	6	9
5-9 year old	7	4	11
10-15 year old	3	0	3
Total	13	11	24

Final diagnoses of AFP cases

Majority (70.83%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 24 cases of AFP are given in Table 4.

Table 4: Final diagnoses of AFP patients reported during 1st quarter 2014

Final Diagnoses	Frequency
GBS	17
Brachial Neuritis	1
Acute Cerebellitis	1
Traumatic Intracranial Hemorrhage	1
Meningoencephalitis	1
Bell's palsy	1
Transversemyelitis	1
Encephalomyelo Neuropathy	1
Total	24

Laboratory exclusion of poliomyelitis in AFP patients

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 complete to make the samples of 'good condition'.

Timely stool collection rate for the quarter was 80%. Hospitals contributed for late stool samples were GH Nuwara Eliya, TH Kurunegala, LRH and NHSL and reasons identified in majority were transferring from other hospitals to referral centres beyond the expected

2. MEASLES

One thousand three hundred and eight (1308) suspected measles patients were reported during the first quarter 2014 and 895 were compatible with clinical case definition of "fever and maculopapular rash with one of the signs of cough, coryza or conjunctivitis". This number was little higher than the number reported during the previous quarter which was 1008 suspected cases and 819 clinically confirmed cases.

Measles outbreak situation started during the 1st quarter 2013 had continued after reduction of the peak with supplementary immunization activity conducted for 6 to 11 month old infants as an outbreak control measure since major proportion of affected belonged to 6 to 11 month age group.

These clinical cases were field investigated by the respective medical officers of the patients' residential areas. Case based field level investigation rate was 72% and special investigation forms were received at the Epidemiology Unit. Age categories according to vaccination status had been analysed, and relevant incomplete forms on vaccination status were returned to respective Regional Epidemiologists for clarifications.

Measles vaccination was introduced in 1984 in Sri Lanka at the age of 9 months and 2nd dose of measles vaccine introduced as MR vaccine at the age of 3 years in 2001. With marked reduction of measles cases, MMR vaccine was introduced advancing the 1st dose to the 1 year of age and 2nd dose at the age of 3 years in 2011.

Of the clinically confirmed cases, 184 (28%) were below the age of 1 year who had not received measles vaccination and expected to be protected from maternal antibodies. One hundred and seventy (26%) of the affected were 15-28 years old and the age group expected to be received at least one dose of measles containing vaccine (MCV) according to the National Immunization schedule compared with the MCV introduction year.

A proportion of 26% of the affected were above 28 years, who have not received measles vaccination according to The National Immunization Schedule. Affected numbers in vaccination age groups (1-3 years and 3-15 years) were minimal and identified majority were not tested at the laboratory for IgM antibodies for confirmation or negative for IgM antibodies.

Western province reported highest proportion (32%) (Colombo 117, Kalutara 11, Gampaha 63) of cases and Ratnapura which reported an increasing trend during the 4th quarter 2013, has come down during the 1st quarter. Out of all clinically confirmed cases 87% were among unvaccinated category or adult age groups whose vaccination status was uncertain.

Laboratory investigations of 762 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) and identified 551 cases were serology positive for Measles IgM antibodies. Non - measles, non - rubella rate calculated for the quarter was 4/100,000 population and laboratory investigation rate out of the suspected cases was 62%.

3. LEPTOSPIROSIS

During the 1st quarter 2014, 734 cases and 7 deaths (CFR 0.95%) due to Leptospirosis were notified to the Epidemiology Unit compared to 1111 cases and 15 deaths in the previous quarter and 1238 cases and 31 deaths during corresponding quarter of 2013.

Table 05: Selected characteristics of Leptospirosis patients (%) - 1st quarter 2014

Age Group	Sex	
	Male	Female
0 - 9 years	0.23	0.00
10 - 19 years	7.78	0.00
20 - 29 years	20.75	7.69
30 - 39 years	25.23	13.46
40 - 49 years	18.39	25.00
50 - 59 years	17.45	23.07
>60 years	10.14	30.76
Total	100.00	100.00

4. HUMAN RABIES

Three Human Rabies cases were reported in 1st quarter 2014 compared to 04 cases in the previous quarter and 7 cases in the corresponding quarter of year 2013.

Animal Rabies

During this quarter, 178 dogs were reported positive for rabies, compared to 178 positive in the previous quarter and 180 positive in the same period in the last year at MRI.

Cats-28, Cows- 02, Domestic Ruminants — 00.

Rabies Control Activities

Dog vaccination - 253976 dogs were immunized during the Quarter under review when compared to 416119 in previous quarter and 196554 in corresponding Quarter of last year.

Animal Birth control

5183 female dogs were injected with progesterone and 17923 female dogs were sterilized by surgical method.

5. VIRAL HEPATITIS

In the 1st quarter 2014, a total of 390 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 602 cases in the previous quarter and 573 cases in the corresponding quarter of 2013. Rathnapura (117 cases) reported the highest number of cases followed by Monaragala District(54 cases).

6. ENTERIC FEVER

In the 1st quarter 2014, a total of 295 cases of Enteric fever were reported to the Epidemiology Unit, compared to 255 cases in the previous quarter and 362 cases in the corresponding quarter of 2013. The district of Jaffna (84 cases) reported the highest number of cases, followed by Colombo (28 cases).

7. DYSENTERY

In the 1st quarter 2014, a total of 941 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 1279 cases in the previous quarter and 860 cases in the corresponding quarter of 2013. Jaffna (129 cases) and Batticaloa (90 cases) reported the highest number of cases.

8. MALARIA

There were no indigenous malaria cases reported during the 1st quarter of 2014. The number of imported malaria cases detected during this period, shows a decrease when compared with the same period of year 2013.

9. JAPANESE ENCEPHALITIS (JE)

During the 1st quarter 2014, 73 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 1st quarter of 2014, MRI has reported 12 lab confirmed JE cases. Out of these 12 confirmed JE cases, all 12 cases (100%) were investigated by the MOH. Among them, 04 (33%) were over 50 years of age, another 05 (42%) were between 21 - 50 years, another 02 (17%) were 05-10 years, while 01 was less than one year (5 months). The highest number of confirmed JE cases were (2 cases each) reported from Ratnapura, Gampaha and Matara districts. Matale, Kurunegala, Moneragala, Kegalle, Batticaloa and Polonnaruwa districts reported 01

Table 07: Selected characteristics of confirmed JE- 1st quarter 2014

Sex	Male	10 (83%)
	Female	02 (17%)
Age group	< 1 Y	01 (8%)
	1-10 Y	02 (17%)
	11-20 Y	00 (00%)
	21-50 Y	05 (42%)
	> 50 Y	04 (33%)
District	Colombo	02 (17%)
	Matara	02 (17%)
	Ratnapura	02 (17%)
	Kurunegala	01 (08%)
	Batticaloa	01 (08%)
	Moneragala	01 (08%)
	Kegalle	01 (08%)
	Polonnaruwa	01 (08%)
	Matale	01 (08%)

Table 06: Results of Blood smear examination for malaria parasites - 1st quarter 2014

	1st quarter 2013	1st quarter 2014
No. of blood smears examined	227,450	264,147
No. of positives	0	0
No. of P. vivax	0	0
No. of P. falciparum	0	0
No. of mixed infections	0	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0	0
P.v. : P.f. ratio	0	0
Percentage of infants positive	0	0

Table 08: Distribution of number of blood smears examined by district RMO — 1st quarter 2014

RMO	Jan	Feb	Mar	Total
Colombo	6566	7191	5113	18870
Gampaha	2052	4528	4582	11162
Kalutara	887	1384	1054	3325
Kandy	2749	3391	3620	9760
Matale	2420	2434	2636	7490
Nuwara Eliya	289	283	360	932
Galle	1200	1457	1312	3969
Matara	1762	2112	1303	5177
Hambantota	2219	2364	2362	6945
Jaffna	6410	5626	6600	18636
Kilinochchi	3367	3672	3946	10985
Vavuniya	4509	4561	5554	14624
Mannar	4337	4654	4868	13859
Mullaitivu	1859	2191	2343	6393
Batticaloa	6436	5054	5965	17455
Ampara	1732	2291	1626	5649
Kalmunei	4055	3979	3692	11726
Trincomalie	2878	3199	3644	9721
Kurunegala	5174	4700	5373	15247
Maho	1396	1183	1280	3859
Puttalam	2951	2647	3130	8728
Anuradhapura	6460	5805	6442	18707
Pollonnaruwa	3188	4816	5808	13812
Badulla	1995	1918	2317	6230
Monaragala	2232	2217	2687	7136
Rathnapura	2458	2034	2676	7168
Kegalle	1990	2173	2419	6582
Total	83571	87864	92712	264147

Table 09: Morbidity and mortality due to DF/DHF- 1st quarter 2014

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	2518	35.57	08
Gampaha	1102	15.16	01
Kalutara	553	7.60	00
Kandy	178	2.45	00
Matale	93	1.28	01
N' Eliya	47	0.65	00
Galle	246	3.38	00
Hambantota	99	1.36	00
Matara	92	1.22	00
Jaffna	298	4.00	00
Kilinochchi	24	0.30	00
Mannar	3	0.04	00
Vavuniya	32	0.40	00
Mulativu	49	0.67	00
Batticaloa	256	3.50	01
Ampara	45	0.60	00
Trincomalee	167	2.30	02
Kurunagale	363	5.00	01
Puttalam	177	2.40	00
A'pura	139	1.90	00
Polonnaruwa	158	2.17	00
Badulla	135	1.86	00
Moneragala	68	0.90	00
Ratnapura	192	2.60	00
Kegalle	196	2.19	00
Kalmunai	39	0.50	00
Total	7269	100.00	14

Table 10: DHF statistics from Department of Virology , MRI– 1st quarter 2014

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF
January	328	179
February	381	145
March	238	69
Total	947	393

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

During the 1stquarter of 2014, 7,269 cases of DF/DHF and 14deaths were reported (0.19% CFR) when compared to 7,079 cases of DF/DHF and 31 deaths (0.44% CFR) reported during the 4thquarter of 2013. Proportion of cases notified in January, February and March were 49.66%, 27.67%, and 22.67% respectively.

Table 09 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the1stquarter of 2014.

Special surveillance data on 1177 confirmed cases were received and analyzed for the 1stquarter of 2014. Age distribution of reported cases were <4 years of age in 98 (8.32%), 5- 9 years of age in 146 (12.40%),10 - 14 years of age in 145(12.32%), 15 – 19years of age in 124 (10.53%), 20 - 24 years of age in 132(11.21%), 25 - 29years of age in 110 (9.34%), 30 - 34 years of age in105 (8.92%), 35 - 39 years of age in 88(7.47%), 40 - 44 years of age in 63 (5.35%), 45 - 49 years of age in 41 (3.48%), 50 – 54 years of age in 46 (3.90%), 55 - 59 years of age in 29(2.46%), >60 years of age in 34(2.88%) .

According to the clinical findings majority of the reported cases1066 (90.56%) were classified as dengue fever, with 7.14% classified as Dengue fever without shock and 0.085% as Dengue fever with shock while 0.085 % falling into the unusual dengue category.

During the 1stquarter of 2014, 947 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. Out of the total,393(41.49%) samples were confirmed as positive (Table 10).

11. RUBELLA AND CONGENITAL RUBELLA SYNDROME (CRS)

During the whole quarter only 8 suspected Rubella disease cases were reported and 6 of them were compatible with surveillance case definition [fever and maculopapular rash, with arthralgia/arthritis, lymphadenopathy (suboccipital, post auricular and cervical) or conjunctivitis] and laboratory confirmed by investigation of rubella IgM. There were no outbreaks during the quarter. These reported cases for the quarter were more or less same as the reported cases during the compatible quarter in 2013. The field level investigations of 6 clinically confirmed cases showed 4 cases were below 1 year and 5 cases were males. None of the females in reproductive age was affected.

Congenital Rubella Syndrome

Three 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. All three cases were identified with congenital abnormalities and considered as Congenital Rubella Syndrome. Detailed case investigation at field level identified babies of these mothers were not vaccinated or the rubella vaccination status was uncertain by the

12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 1st Quarter 2014. Last case of cholera was reported in the country in January 2003.

13. TETANUS

Four cases of clinically confirmed tetanus were reported in the first quarter. One case each from Kopay, Chankanai MOOH of RDHS Jaffna and Pannala, Giribawa MOOH of RDHS Kurunegala.

14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 1st Quarter of 2014 has reached 92.8% of completeness of reports, while 37.2% reports were received in time at the Epidemiology Unit indicating concerns of timeliness of reporting by MOOH. Jaffna, Kegalle, Killinochchi, Mannar, Mullativu and Vavunia were able to send all reports. The best timeliness was reported from the Badulla district (60.9%) followed by Kegalle (60.6%) and Kurunegala (59.2%). (Table 11)

The highest percentage of nil reports were received from Nuwara Eliya (72.2%) followed by Matale district (65.7%), while the Sri Lanka average was 45.7% indicating the need for more attention for surveillance. Jaffna district has reported the lowest 'Nil return' of 2.8%, followed by Mullativu district (8.3%) indicating the good surveillance system in place.

The highest rate (519.2 per 100,000 immunizations) of AEFI was reported from Mullativu district, while Jaffna reported the highest number of 165 AEFI cases in first quarter 2014. For the first quarter, the highest number of AEFI (n=497) was reported against Pentavalent vaccine, where as the highest rate of AEFI (530.1/100,000 doses administered) reported against DTP vaccine. The rate of AEFI for Pentavalent (01st, 02nd & 03rd dose) is 184.7 per 100,000 doses administered. High Fever (508), Allergic Reaction (242) and, Nodule (163) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (251 cases: 93.3 per 100,000 doses administered) and DPT (175 cases: 200.8 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to DPT (68 cases: 78.0 per 100,000 doses administered), and PVV (59 cases: 21.9 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 2014.

DPDHS	% completeness	% Timely returns	% Nil Returns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	90.2	47.8	28.3	148	108.1
Gampaha	91.1	48.8	46.3	37	28.4
Kalutara	82.1	18.8	53.1	35	44.7
Kandy	66.7	25.0	47.9	71	72.2
Matale	89.7	34.3	65.7	22	59.7
Nuwara Eliya	92.3	44.4	72.2	26	58.6
Galle	98.3	52.5	64.4	39	62.8
Hambantota	94.4	11.8	44.1	46	98.9
Matara	92.2	53.2	38.3	84	153.4
Jaffna	100.0	13.9	2.8	165	415.5
Kilinochchi	100.0	0.0	25.0	26	251.2
Mannar	100.0	0.0	46.7	26	310.5
Vavuniya	100.0	41.7	16.7	14	108.5
Mullativu	100.0	0.0	8.3	49	519.2
Batticaloa	97.6	43.9	53.7	58	148.3
Ampara	85.7	33.3	61.1	9	47.7
Trincomalee	97.0	31.3	43.8	31	100.4
Kurunegala	93.8	59.2	35.5	113	106.5
Puttalam	77.8	21.4	60.7	29	50.5
Anuradhapura	87.7	24.0	36.0	70	104.0
Polonnaruwa	90.5	0.0	52.6	22	74.9
Badulla	95.8	60.9	32.6	52	106.1
Moneragala	97.0	43.8	62.5	19	50.4
Ratnapura	94.4	33.3	64.7	33	45.3
Kegalle	100.0	60.6	30.3	54	101.0
Kalmunai	92.3	30.6	58.3	23	67.6
Sri Lanka	92.8	37.2	45.7	1301	95.3

Table 12: Number of selected adverse events by vaccines – 1st quarter 2014

	BCG	OP V	PVV	DPT	MM R	LJE	DT	TT	aTd	Total number of AEFI reported
Total Number of AEFI Reported	12	2	497	462	113	71	85	12	37	1296
AEFI reporting rate/100,000 doses administered	15.3	0.5	184.7	530.1	71.4	77.3	101.3	15.3	48.0	
High Fever (>39°C)	2		251	175	25	26	23	2	4	508
Reporting rate/100,000 doses administered	2.5		93.3	200.8	15.8	28.3	27.4	2.5	5.2	
Allergic reactions			59	68	48	28	23	5	11	242
Reporting rate/100,000 doses administered			21.9	78.0	30.3	30.5	27.4	6.4	14.3	
Severe local reactions			9	26	1	1	2	1	1	41
Reporting rate/100,000 doses administered			3.3	29.8	0.6	1.1	2.4	1.1	1.3	
Seizure (Febrile/Afebrile)			10	37	3	7	1			58
Reporting rate/100,000 doses administered			3.7	42.5	1.9	7.6	1.2			
Nodules	1		82	57	3	2	15	2	1	163
Reporting rate/100,000 doses administered	1.3		30.5	65.4	1.9	2.2	17.9	2.5	1.3	
Injection site abscess	3		14	13			1		1	32
Reporting rate/100,000 doses administered	3.8		5.2	14.9			1.2		1.3	
HHE			1	1			3			5
Reporting rate/100,000 doses administered			0.4	1.1			3.6			

Note: The total number of AEFI reported in monthly returns include all vaccines in use, where as this table shows only selected vaccines. Therefore the total numbers of AEFI in these two tables are not the same.

15. TUBERCULOSIS

A total of 1946 TB patients were notified to the NPTCCD by H816A, while 2327 patients were registered at chest clinics for the 1st Quarter 2014. Out of this 2327 TB patients, 2145 (92.2%) were New TB Cases, 115 (4.9%) were Re-treatment Cases and 67 (2.9%) were Other Cases. Out of New TB cases 1015 (47.3%) were New Smear Positive TB, while the balance 436 (20.3%) were New Smear Negative TB and 694 (32.4%) were New Extra Pulmonary TB Cases. A total of 1697 TB patients were screened for HIV, out of them only One patient was found positive. Five Multi Drug Resistant TB patients were detected during above quarter. Distribution of TB Patients by RDHS division is given in the Table 13.

Table 13: Tuberculosis patients by RDHS divisions - 1st quarter 2014

RDHS DIVISION	New				Retreat ment & other	Total
	PTB sp+ve	PTB sp-ve	EPTB	Total		
Colombo	270	75	149	494	57	551
Gampaha	127	34	73	234	20	254
Kalutara	63	34	37	134	7	141
Kandy	56	57	50	163	15	178
Matale	11	06	20	37	1	38
Nuwara Eliya	26	16	19	61	6	67
Galle	57	18	35	110	10	120
Matara	24	11	24	59	3	62
Hambantota	17	03	14	34	1	35
Jaffna	21	16	27	64	4	68
Vavuniya	06	03	06	15	0	15
Batticaloa	18	11	23	52	3	55
Ampara	09	04	09	22	0	22
Kalmunai	20	19	14	53	4	57
Trincomalee	17	06	10	33	3	36
Kurunegala	49	32	26	107	14	121
Puttalam	26	04	23	53	6	59
Anuradhapura	35	08	20	63	4	67
Polonnaruwa	17	15	09	41	3	44
Badulla	23	12	18	53	5	58
Monaragala	08	02	06	16	1	17
Rathnapura	63	30	45	138	6	144
Kegalle	39	15	31	85	5	90
Mannar	02	02	03	07	2	09
Mulathivu	04	02	01	07	0	07
Kilinochchi	07	01	02	10	2	12
Total	1015	436	694	2145	182	2327

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 1st quarter 2014, is as follows;

		Total
A.	Yellow fever	861
B.	Meningococcal meningitis	71
C.	Oral polio	57

17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 1st Quarter 2014 is given below.

1. Yellow Fever Surveillance

a. No. with valid certificate	-	12
b. No. without valid certificate & Departed	-	00
c. No. without valid certificate & Isolated	-	00

2. Disinsection of Aircrafts

a No. of flights arrived	-	6129
b No. of flights has to be disinsected	-	5257
c No. of flights disinsected	-	4913

3. Passenger Arrivals & departures

a No. Of passengers Arrived	-	929055
b No. of Passengers Departures	-	—

4. Release of Human Remains

a. No. of human Remains released	-	135
b. No. of released to J.M.O. For postmortern	-	10
c. No. Alleged suicide	-	06

5 Surveillance of other infectious diseases**6 Airport Sanitation**

a No of sanitary inspections carried out including Food establishment	-	26
b No. Of food samples taken under Food Act	-	00
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	-	19
8 a. No. of water samples taken for Bacteriological Analysis	-	06
b. No. Reported Contaminated	-	00

18. LEPROSY

Table 14: Quarterly returns of Leprosy statistics– 1st quarter 2014

1. National

	At the end of the quarter			Cumulative for end of the quarter		
	1st QTR, 2014	1st QTR, 2013	Diff (%)	2014	2013	Diff (%)
New patients detected	568	494	14.97	568	494	14.97
Children	50	49	2.040	50	49	2.040
Grade 2 Deformities	53	39	35.89	53	39	35.89
Multi-Bacillary	280	233	20.17	280	233	20.17
Females	211	199	6.030	211	199	6.030

2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	25	03	02	11	04
Kandy	12	01	01	05	02
Matale	06	01	00	03	02
NuwaraEliya	07	01	01	03	00
Eastern	63	06	10	39	25
Ampara	17	02	03	09	05
Batticaloa	20	00	05	14	07
Kalmunai	17	03	02	11	09
Trincomalee	09	01	00	05	04
Northern	21	03	03	07	09
Jaffna	17	03	02	03	07
Mannar	03	00	01	03	01
Mulathivu	01	00	00	01	01
North Central	51	08	03	26	18
Anuradhapura	26	05	01	13	10
Pollonnaruwa	25	03	02	13	08
North Western	47	03	04	27	16
Kurunegala	23	00	03	09	07
Puttalam	24	03	01	18	09
Sabaragamuwa	31	03	01	24	11
Kegalle	12	02	01	09	07
Rathnapura	19	01	00	15	04
Southern	82	05	08	38	37
Galle	27	00	03	08	10
Hambanthota	23	02	01	12	12
Matara	32	03	04	18	15
Uva	12	00	01	09	03
Baddulla	04	00	01	03	00
Monaragala	08	00	00	06	03
Western	236	22	18	99	88
Colombo	113	11	13	37	43
Gampaha	68	07	03	38	21
Kalutara	55	04	02	24	24
Sri Lanka	568	53	50	280	211

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– 1st quarter 2014

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	35	16	51	35	16	51	
AIDS	11	04	15	11	04	15	
Early Syphilis ²	34	18	52	34	18	52	
Syphilis	Late Syphilis ³	182	86	268	182	86	268
	Congenital Syphilis ⁴	00	03	03	00	03	03
Gonorrhoea ⁵	112	27	139	112	27	139	
Ophthalmia Neonatorum ⁶	01	01	02	01	01	02	
Non specific cervicitis/urethritis	166	354	520	166	354	520	
Chlamydial infection	00	00	00	00	00	00	
Genital Herpes	309	380	689	309	380	689	
Genital Warts	257	201	458	257	201	458	
Chancroid	01	00	01	01	00	01	
Trichomoniasis	03	27	30	03	27	30	
Candidiasis	222	376	598	222	376	598	
Bacterial Vaginosis		287	287		287	287	
Other sexually transmitted diseases ⁷	121	36	157	121	36	157	
Non venereal ⁸	929	532	1461	929	532	1461	

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 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

Table 16

	JAN	FEB	MAR
(A) CHOLERA			
No. of stool specimens Examined	268	68	104
No. of positives	0	0	0
(B) SALMONELLA			
No of blood specimens examined	398	328	388
S.typhi	0	0	0
S.paratyphi A	0	0	0
No of stools specimens examined	281	88	121
S.typhi	0	1	0
S.paratyphi A	0	0	0
Others	0	1	2
(C) SHIGELLA			
No of stool specimens examined	281	82	121
Sh.sonnei	0	0	1
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
(D) ENTERO PATHOGENIC E.COLI			
No of stool specimens examined	3	3	3
No of positive	0	0	0
(E) CAMPYLOBACTER			
No of stool specimens examined	18	12	17
No of Positives	1	0	0
(F) ISOLATES			
Clinical	8	9	9
S. Typhi	1	4	1
S. Paratyphi A	0	0	0
Other Salmonella	3	3	5
Shigella spp	1	0	0

21. SURVEILLANCE OF MENINGITIS

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 1st quarter 2014, 270 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 203 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Kurunagala district (24) followed both Kalutara and Matara (18) and Hambantota (17) districts.

Twenty eight percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 19% belonged to the age group 1-5 years and 16% belonged to age group 6 – 10 years. Sixty percent of the clinically confirmed cases were males and 40% were females.

Table 17: Summary findings for special investigations carried out for clinically confirmed cases of Meningitis up to 30th March 2014

CSF Culture Report		
CSF Culture	Number	(%)
CSF results available	34	31%
• No Growth	(31)	
• Group B streptococci	(02)	
• Haemophilus influenza	(01)	
Culture results not known	73	67%
Not done	02	02%
Total	109	100%
Final outcome of the patient		
Outcome	Number	(%)
Cured	105	96%
Died	02	02%
Information not available	02	02%
Total	109	100%
Final Diagnosis (based on clinical and lab findings)		
Diagnosis	Number	(%)
Culture confirmed	03	03%
Probable bacterial meningitis	04	04%
Probable viral meningitis	03	03%
Suspected Meningitis	99	91%
Total	109	100%

22. INFLUENZA SURVEILLANCE

Human Influenza surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory tract Infections (SARI) surveillance. Epidemiological data are collected through 19 sentinel hospitals throughout the country. Samples are collected from 13 sentinel hospitals for ILI and from 4 sentinel hospitals for SARI.

Human Influenza surveillance

Epidemiological Component

ILI Surveillance

Seventeen surveillance hospitals have reported out of nineteen surveillance hospitals. Reporting rate was 89.47%. Total 20,802 ILI cases were reported out of 12,33058 OPD visits (1.69 %) in the 1st quarter of year 2014. Out of reported ILI cases, maximum number reported was from G.H Ampara 3284 (15.79%) and majority age group reported was age 15 – 49 years, 6798 (32.67%).

Severe Acute Respiratory Infections (SARI) Surveillance

A total of 985 SARI cases were reported from 25,205 admissions (3.91%) of all 4 surveillance hospitals (T.H Ragama, G.H Matara, T.H Peradeniya and LRH). Maximum number of SARI cases was reported from T.H Peradeniya 407 (41.31%) and majority age group reported was 1-4 years, 339 (34.42%).

Laboratory Component

ILI Surveillance

Under ILI laboratory surveillance a total of 534 samples were received from all sentinel hospitals for the 1st quarter 2014. There were 159 samples in January, 192 in February and 166 in March. T.H Jaffna (90) had sent the highest number of samples followed by NHSL (67), GH Ratnapura (57), T.H Kurunegala (50) and G.H Badulla (50).

Table 18: Shows the monthly performance of sentinel hospitals in the laboratory component of the ILI surveillance.

	Jan	Feb	March	Total
NHSL	27	27	13	67
CSTH	00	02	09	11
IDH	13	20	03	36
GH Nuwara Eliya	12	01	17	30
TH Karapitiya	11	14	07	32
TH Jaffna	20	35	35	90
TH Batticaloa	14	16	10	40
TH Kurunegala	08	21	21	50
GH Chilaw	05	01	00	06
TH Anuradhapura	07	07	07	21
GH Polonnaruwa	14	13	17	44
GH Badulla	13	16	21	50
GH Ratnapura	15	19	23	57
Total	159	192	166	534

Influenza A was the predominant circulating Influenza viral strain identified in the quarter followed by Influenza (H3 N2) and Influenza A (untyped).

Table 19: Types of Respiratory Viruses Isolated in ILI samples – 1st quarter 2014

Month	Total	Influenza A	(H1 N1p dm) 9	A (H3 N2)	A untyped	Influenza B	Influenza yield
JAN	159	06	00	05	00	00	6.92%
FEB	192	06	00	03	01	00	5.21%
MAR	166	27	01	17	00	00	27.11%
TOTAL	534	39	01	25	01	00	12.36%

Severe Acute Respiratory Infections (SARI) Surveillance

Out of the total of (141) samples collected to the MRI, Lady Ridgeway Children's Hospital (LRH) had sent the highest number of samples (51) followed by T.H Ragama (32), G.H Matara (26) and T.H Peradeniya (32).

Table 20: Monthly performance of sentinel hospitals in the laboratory component of the SARI surveillance - 1st quarter 2014

Institution	JAN	FEB	MAR	Total
LRH	28	18	05	51
T.H Ragama	07	19	06	32
GH Matara	18	02	06	26
TH Peradeniya	00	26	06	32
Total	53	65	23	141

Predominant circulating Influenza virus strain in the quarter was Influenza A followed by Influenza (H3N2), Influenza B and Influenza A (Untyped).

Table 21: Types of Respiratory Viruses Isolated in SARI Samples - 1st quarter 2014

Month	Total	Influenza A	(H1 N1p dm) 09	A (H3N2)	A (untyped)	Influenza B	Influenza yield
JAN	53	06	00	05	01	02	26.41%
FEB	65	02	00	01	00	00	04.61%
MAR	23	02	00	02	00	00	17.39%
Total	141	10	00	08	01	02	14.89%

Animal Influenza Surveillance

Sri Lanka has been considered a high risk country for Avian Influenza because of its location in the South Asian Region and due to country's large poultry industry with a considerable proportion of people engaged in backyard poultry. Also it being a tropical island which attracts over a two hundred species of migratory birds fleeing cold winters of temperate countries every year is another risk factor for continuation of animal influenza surveillance.

Table 22: Animal samples collected by month and district – 1st quarter 2014

Month	No. of samples		Districts samples were collected from
	Pool ed	Serum	
JAN	131	170	Colombo, Gampaha, Badulla, Kegalle and Matara
FEB	219	145	Colombo, Gampaha and Kalutara
MAR	413	215	Colombo, Gampaha, Matara, Badulla, Puttalam, Jaffna and Trincomalee.
Total	763	530	

23. SPECIAL REPORT

Surveillance Report Leptospirosis - 2013

Introduction

Leptospirosis is a major public health problem in Sri Lanka. It is a zoonotic illness which is transmitted to humans through mucus membranes or abraded skin to water that have been contaminated by urine from infected animals, especially rodents. Leptospirosis is found throughout the world, particularly in tropical and subtropical regions where environmental conditions favor 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 4308 of cases were reported from the entire country in 2013, As compared to 2663 cases notified in 2012. The highest number of cases were reported from Gampaha district (489) followed by Rathnapura (456) and Kalutara (435) districts.(Table 23).

Seasonal distribution of Leptospirosis cases

A major peak was observed in March (716), April (504) period which coincide with the (Maha) paddy harvesting season. An endemic pattern was observed in rest of the year.

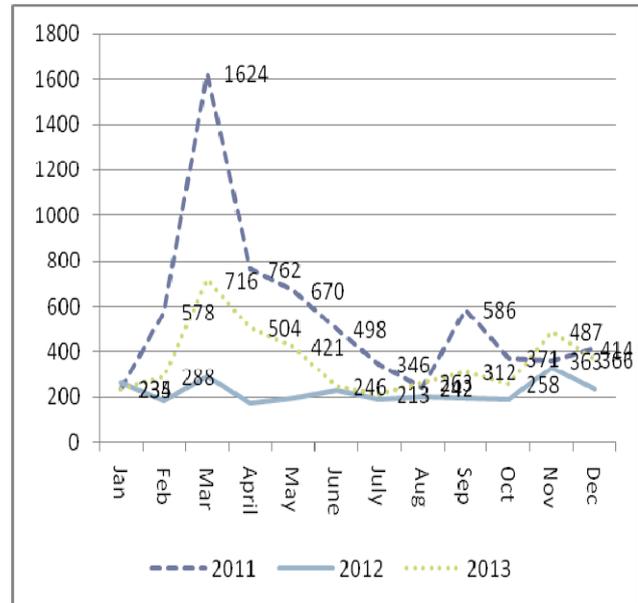
Prevention and Control

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 implementation, prevention & control activities were discussed at quarterly regional epidemiologist conference.

Age and sex distribution of Leptospirosis cases

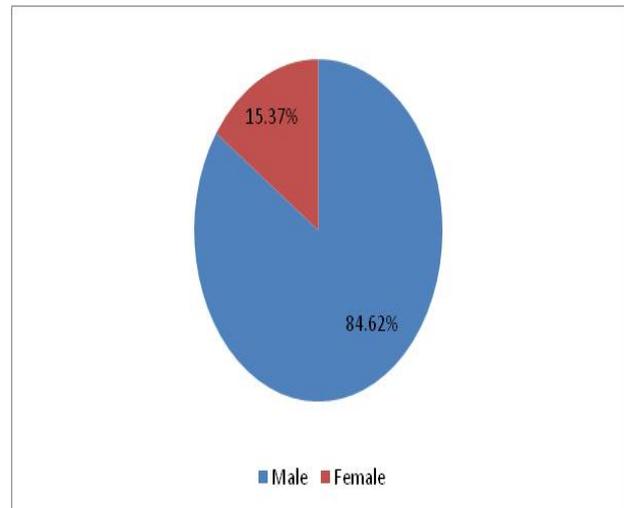
The majority of Leptospirosis cases reported during the year was males. Out of the total cases, 84.62% were males and 15.37% were females. The sex distribution of reported cases of Leptospirosis for the year 2013 is given in figure 02. Figure 03 shows the highest percentage of cases (23.31%) occurred in the age group of 40-49 years. 30– 39 age group too witnessed a 22.89% representation of cases.

Figure 01: Distribution of Leptospirosis cases by month 2011 – 2013

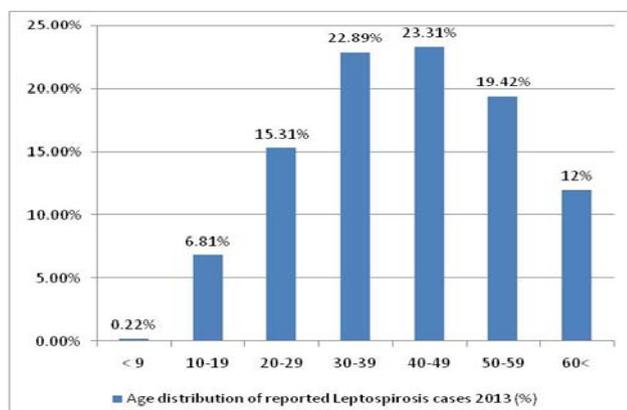


Source: Epidemiology Unit, Notification Data

Figure 02: Sex distribution of reported Leptospirosis cases – 2013



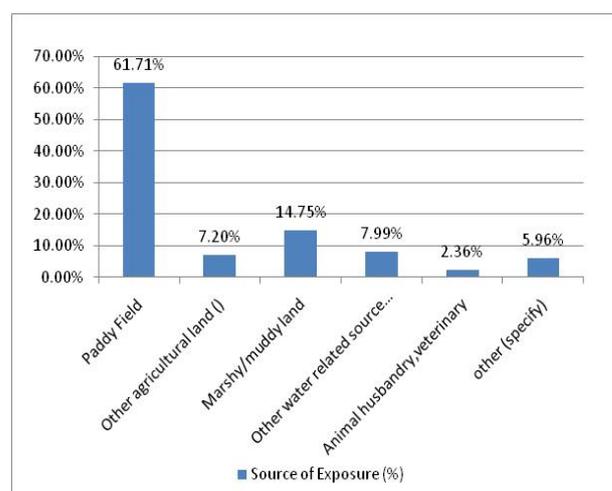
Source: Epidemiology Unit, Special Surveillance

Figure 03: Age distribution of reported Leptospirosis cases – 2013

Source: Epidemiology Unit, Special Surveillance

Source of Exposure

According to data reported through special surveillance, the majority of patients (61.71%) were exposed through paddy field followed by marshy land (14.75%). Other water related sources (7.99%) too was considered as an important source of exposure in 2013.

Figure 04: Source of Exposure (%) 2013

Source: Epidemiology Unit, Special Surveillance

Table 23: Geographical distribution of Leptospirosis cases by district - 2013

District	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Colombo	13	27	37	25	17	10	11	8	24	14	22	13	222
Gampaha	11	20	62	26	56	32	24	42	53	43	96	24	489
Kalutara	34	27	81	34	25	27	27	31	45	26	47	52	456
Kandy	2	8	13	6	10	4	9	5	8	4	9	21	99
Matale	1	5	10	5	10	10	6	2	7	3	8	11	78
N'Eliya	0	2	7	1	4	6	1	1	2	5	2	3	34
Galle	11	6	42	48	11	16	11	16	30	6	36	45	278
Hambantota	17	37	41	16	19	8	9	6	6	2	9	11	181
Matara	9	14	42	21	19	2	7	8	10	11	20	14	177
Jaffna	0	0	0	1	5	1	0	0	1	1	0	1	10
Kilionochchi	1	0	4	4	0	0	0	0	0	0	0	1	10
Mannar	4	0	2	3	1	1	0	2	2	0	0	0	15
Vavuniya	5	3	13	10	14	2	1	1	1	0	1	0	51
Mulativu	2	2	5	1	12	6	3	5	1	1	0	0	38
Batticaloa	2	3	3	10	8	0	2	2	1	2	1	10	44
Ampara	3	1	1	2	10	3	5	5	4	2	4	4	44
Trincomalee	12	4	27	3	1	2	6	3	1	0	2	2	63
Kurunagala	10	9	83	33	35	18	14	41	25	26	82	26	402
Puttalam	2	2	5	3	2	2	7	9	8	2	2	5	49
Anuradhapura	16	35	85	84	40	17	6	11	5	7	8	30	345
Polonnaruwa	39	12	24	16	31	13	6	2	12	6	11	15	187
Badulla	3	4	4	4	2	9	11	8	7	4	4	3	63
Monaragala	12	19	34	79	26	8	4	5	7	1	5	11	212
Ratnapura	16	40	70	50	32	18	18	32	23	40	55	41	435
Kegalle	8	5	20	18	31	31	24	14	29	50	62	23	315
Kalmunai	1	3	0	0	0	0	1	3	0	2	1	0	11
Total	234	288	716	504	421	246	213	263	312	258	487	366	4308

24. SUMMARY OF NOTIFIABLE DISEASES

Table 24

Health Region	Dysentery	Encephalitis	Enteric Fever	F o o d P o i s o n i n g	H u m a n R a b i e s	Leptospirosis	Measles	S i m p l e F e v e r C o n .	Tetanus	Typhus Fever	Viral Hepatitis	W h o o p i n g C o u g h	D e n g u e F e v e r / D H F	Tuberculosis	Chickenpox	Mumps	Meningitis	Leishmaniasis
Colombo	34	6	28	147	0	36	191	0	1	0	11	2	2518	148	154	5	17	3
Gampaha	55	4	15	9	2	72	160	0	0	6	26	3	1102	178	136	7	20	2
Kalutara	43	3	16	42	0	97	90	1	0	0	5	0	553	25	91	14	23	0
Kandy	35	1	5	1	0	10	30	2	0	20	35	1	178	150	77	8	11	1
Matale	22	1	9	1	0	16	11	1	0	2	45	0	93	36	14	8	5	6
Nuwara-Eliya	61	1	10	8	0	2	6	0	0	23	11	0	47	77	35	6	6	0
Galle	28	4	0	3	0	61	121	10	0	28	0	1	246	128	151	9	19	2
Hambantota	13	3	8	2	0	45	104	1	0	39	5	0	99	34	65	2	16	108
Matara	21	2	19	5	0	21	84	2	0	21	13	0	92	55	80	10	17	21
Jaffna	129	3	84	27	0	5	6	42	2	218	7	0	298	75	45	22	12	0
Kilinochchi	49	1	11	0	0	0	0	1	0	12	0	0	24	15	3	5	3	7
Mannar	10	8	19	0	0	4	0	0	0	19	1	0	3	9	1	1	1	1
Vavuniya	14	0	5	3	0	6	5	0	0	3	0	0	32	16	4	2	4	0
Mullaitivu	18	0	7	9	0	7	2	0	0	5	0	0	49	15	4	4	3	4
Batticaloa	90	2	15	11	0	5	9	2	0	1	5	0	256	51	14	3	3	0
Ampara	20	0	0	4	0	9	7	0	0	7	1	0	45	25	34	46	2	6
Trincomalee	09	1	0	0	0	5	4	1	0	8	0	1	167	30	30	8	1	0
Kurunegala	26	9	9	5	0	34	86	3	2	30	8	2	363	113	157	14	28	49
Puttalam	15	0	5	9	0	43	61	3	0	18	1	0	177	30	41	4	1	1
Anuradhapura	41	1	0	5	0	41	102	15	0	22	2	3	139	55	82	15	18	96
Polonnaruwa	14	2	3	0	0	21	8	1	0	2	2	0	158	43	62	2	3	45
Badulla	33	3	2	2	0	20	8	0	0	22	17	0	135	68	27	2	21	0
Moneragala	22	2	3	27	1	37	26	0	1	41	54	1	68	21	29	3	6	8
Ratnapura	62	12	7	7	0	86	149	3	0	37	117	1	192	160	64	9	10	10
Kegalle	40	3	12	3	0	50	36	0	0	22	24	0	196	85	92	11	18	1
Kalmunai	37	1	3	10	0	1	2	20	0	0	0	0	39	57	59	3	2	0
Total	941	73	295	340	3	734	1308	108	6	606	390	15	7269	1699	1551	223	270	371

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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