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# EPIDEMIOLOGICAL BULLETIN

## SRI LANKA

*Third Quarter*  
*2013*

## EPIDEMIOLOGY UNIT

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No. 231, De Saram Place,  
Colombo.10  
[www.epid.gov.lk](http://www.epid.gov.lk)

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Epidemiology Unit  
Ministry of Health



## 1. POLIOMYELITIS

Twenty eight (28) Acute Flaccid cases were notified to the Epidemiology Unit during the 3rd quarter 2013. This is higher compared to reported AFP cases of 19 during the 3rd quarter 2012. Reported number of AFP cases for 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 first 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 (21, 75%) of the cases were boys during the 3rd quarter 2013 and this was higher compared to the trend reported during the 3rd quarter 2012 which was 53% boys among the reported AFP cases.

Majority (75%) of cases were between 1-9 years during the 3rd quarter this year and the trend was more or less similar compared to the compatible quarter in the previous year.

The Table 03 shows the age distribution in the 3rd quarter 2013.

Table 01

### Notification of AFP cases by sentinel hospitals 3rd Quarter 2013

Hospital	No: of cases reported
LRH	10
G.H.Kurunegala	3
G.H.Anuradhapura	2
TH Jaffna	2
SBSCCH	2
B.H.Hambantota	2
TH Karapitiya	1
G.H.Kalutara	1
Colombo South TH	1
G.H. Gampaha	1
G.H.Badulla	1
T.H.Peradeniya	1
G.H.Matara	1
Total	28

Table 02

### Geographical distribution of AFP cases 3rd quarter 2013

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Kaduwela	1
		Gampaha	1
		Biyagama	2
Southern	Galle	Elpitiya	1
		Hikkaduwa	1
		Induruwa	1
		Matara	1
		Weligama	1
		Hambantota	1
Central	Kandy	Hatharaliyadda	1
		Yatinuwara	1
		Udunuwara	1
		Panwila	1
Sabaragamuwa	Ratnapura	Embilipitiya	1
		Ayagama	1
		Kegalle	1
		Deraniyagala	1
North Western	Kurunegala	Ibbagamuwa	2
		Eastern	1
North Central	Polonnaruwa	Kaththankudi	1
		Anuradhapura	1
Uva	Moneragala	Kahatagasdigiya	1
		Galnewa	1
		Badalkumbura	1
Northern	Jaffna	Chavakachcheri	1
		Karavedi	1
		Mannar	1
Total			28

### Seasonal Distribution of AFP Cases

Majority of AFP cases were reported during July-August (71%) with a peak in August. This is in contrast to the compatible quarter in 2012 which reported the highest proportion in the month of September .

**Table 03. Distribution of AFP cases by Age  
3rd Quarter 2013**

Age Group	Total
<1 year old	2
1-4 year old	7
5-9 year old	14
10-15 year old	5
<b>Total</b>	<b>28</b>

#### 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 3rd quarter 2013**

Final Diagnoses	Frequency
GBS	23
Transverse Myelitis	1
Bell's Palsy	1
Myeloencephalopathy	1
Opsoclonus Myoclonus syndrome	1
Viral Encephalitis	1
<b>Total</b>	<b>28</b>

#### Laboratory Surveillance of AFP Cases

Two stool samples collected within 14 days of onset of paralysis are required at the Virology laboratory (Medical Research Institute, WHO regional reference laboratory) for exclusion of polio virus. According to WHO criteria these samples should be of 'good condition' as well as timely. Being of correct quantity (8-10g), being sent in a leak proof container with no evidence of spillage or leakage and presence of ice in the container on receipt are the criteria to be completed to make the samples of 'good condition'.

Out of all AFP cases reported 23(82%) had both stool samples 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 or only one timely stool sample collection.

## 2. MEASLES

Two thousand one hundred and three (2103) suspected measles patients were reported during the third quarter 2013 in continuing the outbreak situation started since January 2013. Thousand three hundred and thirty four (1334) 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 17 suspected cases and 9 clinically confirmed cases respectively in the compatible quarter, in the previous year. These clinical cases were field investigated (82%) 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.

Supplementary immunization activity (SIA) with an extra dose of Measles vaccination has been carried out during the 3rd quarter due to the experience of high proportion of affected among 6-11 months during first 2 quarters. For the third quarter proportion below 1 year of age was 26% and lower than compared to the previous quarter (46%).

Western province reported highest proportion (39%) (Colombo 237, Kalutara 51, Gampaha 121) followed by Sabaragamuwa province (31%) and Southern province (16%). Out of the all clinically confirmed cases 58% were among unvaccinated category but measles cases among children due for age appropriate vaccination for Measles were minimum.

Laboratory investigations of suspected measles or rubella patients (710) from July to September who were with fever and maculopapular rash with one of cough, coryza or conjunctivitis were investigated in the WHO accredited virology laboratory at the Medical Research Institute (MRI) and identified 504 cases were serology positive for Measles IgM antibodies. Outbreak of measles is considered as continuing during the third quarter with observed reduction of below 1 year during the month of September after supplementary immunization activity of Measles vaccination.

### 3. LEPTOSPIROSIS

During the 3rd Quarter 2013, 788 cases and 14 deaths (CFR 1.78%) due to Leptospirosis were notified to the Epidemiology Unit compared to 1171 cases and 16 deaths in the previous quarter and 588 cases and 10 deaths during corresponding quarter of 2012

Age and sex distribution of patients, revealed by the special surveillance data is given in Table 05.

**Table 05**

#### SELECTED CHARACTERISTICS OF LEPTOSPIROSIS PATIENTS(%)- 3rd QUARTER 2013

Age Group	Sex	
	Male	Female
0 - 9 years	0.23	0
10 - 19 years	7.93	3.33
20 - 29 years	17.25	3.33
30 - 39 years	24.24	18.33
40 - 49 years	21.91	26.67
50 - 59 years	18.41	23.33
>60 years	10.02	25.00
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### 4. HUMAN RABIES

Ten cases of Human Rabies were notified to the Epidemiology Unit in the 3rd quarter 2013 compared to 07 cases in the previous quarter and 7 cases in the corresponding quarter of year 2012.

Among the notified cases, 9 were investigated and confirmed as Human Rabies, 05 were females and 04 were males.

The highest number of cases (2) were reported from Batticaloa and Anuradhapura districts.

#### Animal Rabies

During this quarter, 159 dogs were reported positive for rabies, compared to 147 in the previous quarter and 156 positive in the same period in the last year. In addition the following animals were also reported positive;

Cats-17, Cows-02, Domestic Ruminants-00

#### Rabies Control Activities

**Dog vaccination** - A total of 411607 dogs were immunized during the Quarter under review when compared to 326281 in the previous quarter and 356451 in corresponding Quarter of the last year.

#### Animal Birth control

**Chemical**- A total of 10455 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

**Surgical**- 37115 female dogs were subjected to sterilization by surgical method during the quarter under review.

### 85. VIRAL HEPATITIS

In the 3rd Quarter 2013, a total of 603 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 372 cases in the previous quarter and 593 cases in the corresponding quarter of 2012. Rathnapura (228 cases) reported the highest number of cases followed by Monaragala District (100 cases)

### 6. ENTERIC FEVER

In the 3rd Quarter 2013, a total of 255 cases of Enteric fever were reported to the Epidemiology Unit, compared to 298 cases in the previous quarter and 314 cases in the corresponding quarter of 2012. The district of Colombo (49) reported the highest number of cases, followed by Jaffna (38 cases) and Gampaha (20 cases)

### 7. DYSENTERY

In the 3rd Quarter 2013, a total of 1279 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 961 cases in the previous quarter and 1028 cases in the corresponding quarter of 2012. Jaffna (152 cases) and Ratnapura (91 cases) reported the highest number of cases

## 8. MALARIA

There were no indigenous malaria cases reported during the 3rd quarter of 2013 compared to the number of malaria cases detected during the same period of 2012.( Table 06 )

## 9.JAPANESE ENCEPHALITIS (JE)

During the 3rd quarter 2013 , 65 cases of clinically suspected Encephalitis were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 44 cases were clinically confirmed by the Public Health Inspectors during their field investigations. During the 3rd quarter of 2013, MRI has reported 4 lab confirmed JE cases. Out of these 4 lab confirmed JE cases, 3 cases (75%) were investigated by the MOH . Among them, 02 (50%) were between 11 -20 years, another 01 (25%) was over 50 years of age, and 1 (25%) was between 20 - 50 years of age.

Districts of Gampaha, Ratnapura, Colombo and Puttalam have reported one lab confirmed JE case each for the 3rd Quarter 2013. The majority of confirmed JE cases have not been immunized .

**Table 07**  
**SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – 3rd Quarter 2013**

Sex	Male	04 (100%)
	Female	00 (00%)
Age group	< 1 y	00 (00%)
	1-10 y	00 (00%)
	11- 20	02 (50%)
	21-50Y	01 (25%)
	> 50 Y	01 (25%)
District	Gampaha	01(25%)
	Puttalam	01(25%)
	Ratnapura	01(25%)
	Colombo	01(25%)

**Table 06**

### Results of Blood smear examination for malaria parasites - 3rd Quarter 2013

	3rd quarter 2012	3rd quarter 2013
No. of blood smears examined	227,259	258,482
No. of positives	4	0
No. of <i>P. vivax</i>	3	0
No. of <i>P. falciparum</i>	1	0
No. of mixed infections	0	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.001%	0
P.v. : P.f. ratio	3:1	0
Percentage of infant positives	0%	0

Table 08

DISTRIBUTION OF NUMBER OF BLOOD SMEARS EXAMINED BY DISTRICT RMO- 3RD QUARTER 2013

RMO	July	August	September	Total
Colombo	6855	7341	6937	21133
Gampaha	3737	2074	2617	8428
Kalutara	1025	1522	813	3360
Kandy	3665	3361	3496	10522
Matale	2494	1597	1361	5452
Nuwara Eliya	273	180	203	656
Galle	1789	1897	1371	5057
Matara	1549	1836	2780	6165
Hambantota	2053	3538	2200	7791
Jaffna	5908	5691	5394	16993
Kilinochchi	3404	4544	3951	11899
Vavuniya	3293	3957	4610	11860
Mannar	2975	2705	3233	8913
Mullaitivu	1820	2186	1998	6004
Batticaloa	7818	6909	6845	21572
Ampara	1967	2058	1754	5779
Kalmunei	4052	4107	3863	12022
Trincomalee	3646	4320	3146	11112
Kurunegala	5575	5380	5690	16645
Maho	1624	1538	1198	4360
Puttalam	2333	2048	2308	6689
Anuradhapura	5470	6020	5928	17418
Polonnaruwa	3990	3875	4003	11868
Badulla	2206	1818	2033	6057
Monaragala	2669	3544	2299	8512
Rathnapura	2606	2653	2817	8076
Kegalle	1258	1270	1611	4139
<b>TOTAL</b>	<b>86054</b>	<b>87969</b>	<b>84459</b>	<b>258482</b>

Table 09

MORBIDITY AND MORTALITY DUE TO DF/DHF - 3RD QUARTER 2013

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	3151	38.81	7
Gampaha	1024	12.61	2
Kalutara	536	6.60	1
Kandy	541	6.66	2
Matale	150	1.85	0
N' Eliya	80	0.99	0
Galle	256	3.15	0
Hambantota	94	1.16	0
Matara	115	1.42	1
Jaffna	101	1.24	0
Kilinochchi	23	0.28	0
Mannar	7	0.09	0
Vavuniya	15	0.18	0
Mulativu	23	0.28	1
Batticaloa	77	0.95	0
Ampara	77	0.95	0
Trincomalee	33	0.41	0
Kurunagale	422	5.20	1
Puttalam	168	2.07	0
A'pura	94	1.16	0
Polonnaruwa	166	2.04	0
Badulla	173	2.13	0
Moneragala	73	0.90	0
Ratnapura	405	4.99	1
Kegalle	297	3.66	0
Kalmunai	22	0.27	0
<b>Total</b>	<b>8118</b>	<b>100.00</b>	<b>16</b>

Table 10

**DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 3RD QUARTER 2013**

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF
July	442	244
August	381	225
September	264	109
Total	1087	578

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

During the 3rd Quarter 2013, 8,118 cases of DF/DHF and 16 deaths were reported (0.20 % CFR) when compared to 7,150 cases of DF/DHF and 22 deaths were reported (0.30 % CFR) reported during the 2nd Quarter 2013. Proportion of cases notified in July, August and September was 36.0%, 40.43%, and 23.55% respectively. Table 9 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 3rd quarter.

Special surveillance data on 2025 confirmed cases were received and analyzed for the 3rd quarter 2013. Age distribution of reported cases were <4 years of age in 179 (8.84%), 5 - 9 years of age in 237 (11.7%), 10 - 14 years of age in 223(11.01%), 15 – 19 years of age in 146(7.21 %), 20 - 24 years of age in 331(16.35%), 25 - 29years of age in 259(12.79%), 30 - 34 years of age in 160 (7.90%), 35 - 39 years of age in 133 (6.57%), 40 - 44 years of age in 98(4.84%), 45 - 49 years of age in 63 (3.11%), 50 – 54 years of age in 65(3.21%), 55 - 59 years of age in 27(1.33 %), >60 years of age in 51 (2.52%).

According to the clinical findings majority of the reported cases (83.74%) were classified as dengue fever and 13.76% were classified as Dengue haemorrhagic fever without shock with 2.17% were Dengue haemorrhagic fever with shock while 0.08% falling into unusual dengue category.

During the 3<sup>rd</sup> quarter 2013, 1087 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. From the total 578(53.17%) samples were confirmed as positive (Table 10).

**11. RUBELLA AND CONGENITAL RUBELLA SYNDROME (CRS)**

During the whole quarter 10 suspected Rubella disease cases were reported and all of them were compatible with surveillance case definition [fever and maculopapular rash, with arthralgia/arthritis, lymphadenopathy (suboccipital, post auricular and cervical) or conjunctivitis] during field investigations. All clinically confirmed cases were adult males above 25 years. Comparing the compatible quarter in the previous year only 7 cases of suspected Rubella cases were reported and all of them were compatible with surveillance case definition. Outbreaks were not reported during the quarter for rubella infection and cases were not laboratory confirmed.

No CRS cases were reported during the quarter and not detected at the laboratory during investigations of babies for TORCH screen.

**12. CHOLERA**

No confirmed cases of cholera were reported to the Epidemiology Unit during the 3rd Quarter 2013. Last case of cholera was reported in the country in January 2003.

**13. TETANUS**

Eight tetanus cases were reported during 3rd quarter 2013. MC Colombo, Dompe, Panwila, Kekirawa, Dimbulagala, Welimada and Ruwanwella were the MOH areas which reported.

#### 14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 3<sup>rd</sup> Quarter of 2013 has reached 95.8% of completeness of reports, while 58.2% reports were received in time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Anuradhapura, Colombo, Gampaha, Jaffna, Mannar, Monaragala and Vavunia were able to send all reports. The best timeliness was reported from the Hambantota district (96.9%) followed by Vavuniya (91.7%) and Kegalle (90.6%). (Table 11)

The highest percentage of nil reports were received from Nuwara-Eliya (65.8%) followed by Kalmunai district (63.2%), which is more than two fold of the Sri Lanka average (28.5%) indicating the need for more attention for surveillance. Trincomalee (54.8%), Batticaloa (53.8%) and Mannar (53.3%) districts too reported high number of nil reports. Jaffna district has no 'Nil return', followed by Kegalle (3.1%) and Colombo (7.1%) districts, indicating the good surveillance system in place. The highest rate (442.3 per 100,000 immunizations) of AEFI was reported from Jaffna district, while Colombo reported the highest number of 373 AEFI cases in third quarter 2013.

For the third quarter, the highest number of AEFI (n=882) was reported against Pentavalent vaccine, where as the highest rate of AEFI (627.2/100,000 doses administered) reported against DTP vaccine. The rate of AEFI for Pentavalent (01<sup>st</sup>, 02<sup>nd</sup> & 03<sup>rd</sup> dose) is 336.3 per 100,000 doses administered. High Fever (700), Allergic Reaction (430), Nodule (228) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (405 cases: 154.2 per 100,000 doses administered) and DPT (206 cases: 241.1 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to PVV (118 cases: 44.9 per 100,000 doses administered), MMR (113 cases: 61.6 per 100,000 doses administered) and LJE (64 cases: 63.2 per 100,000 doses administered)

Table 11

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 3RD QUARTER 2013

DPDHS	% completeness	% Timely returns	% Nil Returns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	100.0	66.7	7.1	373	277.8
Gampaha	100.0	57.8	17.8	156	120.1
Kalutara	94.9	43.2	13.5	111	141.5
Kandy	90.3	53.8	24.6	164	163.1
Matale	89.7	54.3	14.3	72	191.4
Nuwara Eliya	97.4	42.1	65.8	94	162.5
Galle	98.2	69.6	37.5	80	110.7
Hambantota	88.9	96.9	9.4	89	192.5
Matara	92.2	70.2	12.8	131	235.9
Jaffna	100.0	86.1	0.0	152	442.3
Kilinochchi	91.7	27.3	36.4	22	244.5
Mannar	100.0	13.3	53.3	25	319.2
Vavuniya	100.0	91.7	41.7	24	182.3
Mullativu	83.3	50.0	50.0	23	299.6
Batticaloa	92.9	41.0	53.8	66	160.3
Ampara	95.2	55.0	45.0	19	100.1
Trincomalee	93.9	38.7	54.8	26	84.0
Kurunegala	96.3	62.8	23.1	192	168.8
Puttalam	97.2	40.0	37.1	80	141.7
Anuradhapura	100.0	50.9	36.8	111	157.6
Polonnaruwa	95.2	70.0	15.0	64	204.7
Badulla	97.9	68.1	21.3	89	149.6
Moneragala	100.0	69.7	21.2	64	178.8
Ratnapura	96.3	34.6	30.8	164	209.8
Kegalle	97.0	90.6	3.1	99	184.3
Kalmunai	97.4	47.4	63.2	22	63.6
<b>Sri Lanka</b>	<b>95.8</b>	<b>58.2</b>	<b>28.5</b>	<b>2512</b>	<b>178.2</b>



Table 12: Number of Selected Adverse Events by Vaccines – 3rd Quarter 2013

	BC G	OP V	PVV	DPT	MMR	LJE	DT	TT	aTd	Total number of AEFI re- ported
<b>Total Number of AEFI Reported</b>	27	3	882	536	242	122	141	15	24	1992*
<b>AEFI reporting rate/1,000,000 doses administered</b>	28.7	0.7	336.3	627.2	132.0	120.5	151.2	18.9	35.1	
<b>High Fever (&gt;39°C)</b>	4	1	405	206	40	23	19	2		700
<b>Reporting rate/1,000,000 doses administered</b>	4.2	0.2	154.2	241.1	21.8	22.7	20.4	2.5		
<b>Allergic reactions</b>		2	118	87	113	64	37	5	4	430
<b>Reporting rate/1,000,000 doses administered</b>		0.5	44.9	101.8	61.6	63.2	39.7	6.3	5.8	
<b>Severe local reactions</b>	1		25	19	2	8	14	2		71
<b>Reporting rate/1,000,000 doses administered</b>	1.1		9.5	22.2	1.1	7.9	15.0	2.5		
<b>Seizure (Febrile/Afebrile)</b>			26	38	5	8	1			78
<b>Reporting rate/1,000,000 doses administered</b>			9.9	44.5	2.7	7.9	1.1			
<b>Nodules</b>	7		126	78		2	12	1	2	228
<b>Reporting rate/1,000,000 doses administered</b>	7.4		48.0	91.3		2.0	12.9	1.3	2.9	
<b>Injection site abscess</b>	7		20	14	1		4			46
<b>Reporting rate/1,000,000 doses administered</b>	7.4		7.6	16.4	0.5		4.3			
<b>HHE</b>			3				1			4
<b>Reporting rate/1,000,000 doses administered</b>			1.1				1.1			

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 2386 Tuberculosis patients were registered for 3rd Quarter 2013. Of this total 2180 were New pulmonary TB Patients. Out of all TB cases 1117 (46.8%) were New Smear Positive Pulmonary TB, while the balance 472 (19.8%) were New Smear Negative Pulmonary TB Patients and 591 (24.8%) from New Extra Pulmonary cases.

There were 117 (4.9%) Retreatment Cases and 89 (3.7%) were other cases. There were Two HIV/TB positive patients found in the quarter, There was no Multi Drug Resistant TB patients detected. The distribution of tuberculosis patients by RDHS division is given in Table 13.

**Table 13: TUBERCULOSIS PATIENTS BY RDHS DIVISIONS**  
- 3rd Quarter 2013

RDHS DIVISION	New				Retreat- ment & other	Total
	PTB sp+ve	PTB sp-ve	EPTB	Total		
Colombo	290	96	150	536	54	590
Gampaha	120	50	65	235	19	254
Kalutara	91	29	33	153	16	169
Kandy	56	62	61	179	12	191
Matale	21	5	12	38	3	41
Nuwara Eliya	26	9	14	49	3	52
Galle	52	17	27	96	5	101
Matara	22	16	13	51	7	58
Hambantota	15	4	9	28	1	29
Jaffna	25	15	15	55	7	62
Vavuniya	13	0	5	18	0	18
Batticaloa	23	5	14	42	4	46
Ampara	8	3	2	13	0	13
Kalmunai	15	14	4	33	5	38
Trincomalee	13	7	5	25	6	31
Kurunegala	59	40	29	128	37	165
Puttalam	19	10	23	52	3	55
Anuradhapura	36	8	9	53	3	56
Polonnaruwa	22	12	7	41	1	42
Badulla	32	13	18	63	8	71
Monaragala	12	2	4	18	1	19
Rathnapura	81	27	42	150	7	157
Kegalle	51	20	27	98	3	101
Mannar	5	6	0	11	1	12
Mulathivu	3	0	0	3	0	3
Kilinochchi	7	2	3	12	0	12
<b>Total</b>	<b>1117</b>	<b>472</b>	<b>591</b>	<b>2180</b>	<b>206</b>	<b>2386</b>

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 3rd quarter 2013, is as follows;

		Total
A.	Yellow fever	1089
B.	Meningococcal meningitis	160
C.	Oral polio	68

## 17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 3rd Quarter 2013 is given below.

### 1. Yellow Fever Surveillance

a. No. with valid certificate	-	14
b. No. without valid certificate & Deported	-	00
c. No. without valid certificate & Isolated	-	00

### 2. Disinfection of Aircrafts

a No. of flights arrived	-	6278
b No. of flights has to be disinfected	-	5161
c No. of flights disinfected	-	4871

### 3. Passenger Arrivals & departures

a No. Of passengers Arrived	-	902557
b No. of Passengers Departures	-	—

### 4. Release of Human Remains

a. No. of human Remains released	-	110
b. No. of released to J.M.O. For post-mortern	-	06
c. No. Alleged suicide	-	04

### 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	-	18
8 a. No. of water samples taken for Bacteriological Analysis	-	10
b. No. Reported Contaminated	-	00

**18. LEPROSY****QUARTERLY RETURN OF LEPROSY STATISTICS - 3RD QUARTER 2013****Table 14****1. National**

	At the end of the quarter			Cumulative for end of the quarter		
	3rd QTR,2013	3rd QTR,2012	Diff (%)	2013	2012	Diff (%)
New patients detected	502	595	-15.63	1552	1743	-10.95
Children	44	44	0	141	136	3.67
Grade 2 Deformities	31	56	-44.64	102	130	-21.53
Multi-Bacillary	261	291	-10.30	786	853	-9.96
Females	203	272	-25.36	647	737	-12.21

**2. Districts**

District	New patients	G2-Deformity	Children	MB	Females
<b>Central</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>4</b>
Kandy	9	2	0	4	4
Matale	4	0	1	2	0
NuwaraEliya	3	0	0	1	0
<b>Eastern</b>	<b>70</b>	<b>5</b>	<b>6</b>	<b>31</b>	<b>33</b>
Ampara	12	1	1	6	4
Batticaloa	30	2	4	10	16
Kalmunai	25	1	1	14	12
Trincomalee	3	1	0	1	1
<b>Northern</b>	<b>12</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>4</b>
Jaffna	9	3	1	2	4
Vavuniya	3	1	0	3	0
Mannar	0	0	0	0	0
Killinochchi	0	0	0	0	0
Mulathivu	0	0	0	0	0
<b>North Central</b>	<b>50</b>	<b>5</b>	<b>5</b>	<b>34</b>	<b>22</b>
Anuradhapura	30	3	4	19	13
Pollonnaruwa	20	2	1	15	9
<b>North Western</b>	<b>60</b>	<b>6</b>	<b>7</b>	<b>30</b>	<b>29</b>
Kurunegala	30	2	1	18	13
Puttalam	30	4	6	12	16
<b>Sabaragamuwa</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>3</b>
Kegalle	8	1	0	4	3
Rathnapura	1	0	0	1	0
<b>Southern</b>	<b>60</b>	<b>3</b>	<b>3</b>	<b>37</b>	<b>16</b>
Galle	20	1	1	13	7
Hambanthota	20	2	2	12	7
Matara	20	0	0	12	2
<b>Uva</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>
Baddulla	4	0	0	3	0
Monaragala	2	0	0	0	0
<b>Western</b>	<b>219</b>	<b>5</b>	<b>21</b>	<b>109</b>	<b>92</b>
Colombo	116	1	12	58	47
Gampaha	58	3	6	31	29
Kalutara	45	1	3	20	16
<b>Sri Lanka</b>	<b>502</b>	<b>31</b>	<b>44</b>	<b>261</b>	<b>203</b>

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

#### 3RD 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 <sup>1</sup>	42	27	69	102	57	159	
AIDS	15	10	25	34	16	50	
	Early Syphilis <sup>2</sup>	45	21	66	146	72	218
Syphilis	Late Syphilis <sup>3</sup>	171	99	270	427	243	670
	Congenital Syphilis <sup>4</sup>	2	2	4	5	4	9
Gonorrhoea <sup>5</sup>		115	30	145	304	89	393
Ophthalmia Neonatorum <sup>6</sup>		0	0	0	0	2	2
Non specific cervicitis/urethritis		175	420	595	511	1072	1583
Chlamydial infection		0	0	0	3	0	3
Genital Herpes		275	385	660	829	1154	1983
Genital Warts		301	230	531	830	566	1396
Chancroid		2	1	3	3	2	5
Trichomoniasis		0	27	27	4	83	87
Candidiasis		218	385	603	672	1079	1751
Bacterial Vaginosis		0	341	341	0	951	951
Other sexually transmitted diseases <sup>7</sup>		120	52	172	342	126	468
Non venereal		982	447	1429	2526	1256	3782

Source: NSACP

(Includes cases diagnosed and reported to the Central STD clinic Colombo and Peripheral STD clinics of National STD/AIDS Control Programme of Sri Lanka)

\*\* - Includes adjustments for revised diagnosis, reporting delays or any other amendments

<sup>1</sup> - Includes AIDS cases

<sup>2</sup> - Diagnosed within 2 years of infection and considered to be infectious

<sup>3</sup> - Diagnosed after 2 years of infection and considered to be non-infectious

<sup>4</sup> - Includes both early and late cases

<sup>5</sup> - Includes presumptive Gonorrhoea

<sup>6</sup> - Includes both gonococcal and chlamydial conjunctivitis in neonatal period

<sup>7</sup> - Includes Lymphogranuloma venerium, Granuloma inguinale, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.

<sup>8</sup> - Number of STD clinic attendees who were not having sexually transmitted diseases.

**20. BACTERIOLOGY REPORT, MEDICAL RE-SEARCH INSTITUTE 3rd QUARTER 2013**

Table 16

	JUL	AUG	SEPT
<b>(A) CHOLERA</b>			
No. of stool specimens Examined	12	187	171
No. of positives	0	0	0
<b>(B) SALMONELLA</b>			
Blood- No. Examined	62	55	32
S.typhi	0	0	0
S.paratyphi A	0	0	0
Stools—No. examined	44	202	181
S.typhi	0	0	0
S.paratyphi A	0	0	0
Others	0	2	4
<b>(C) SHIGELLA</b>			
No. Examined	28	201	181
Sh.flexneri 1	1	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
<b>(D) ENTEROPATHOGENIC E.COLI</b>			
No.Examined	2	3	3
No.+ve	0	0	0
<b>(E) CAMPYLOBACTER</b>			
No.Examined	16	15	10
No. Positive	0	0	0
<b>(F) ISOLATES</b>			
Clinical	15	5	6
S. Typhi	0	1	2
S. Paratyphi A	1	0	0
Other Salmonella	1	2	3
Shigella spp	0	0	0

**21. SURVEILLANCE OF MENINGITIS—  
3rd quarter 2013**

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 3rd quarter 2013, 367 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 276 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Kegalle district (29) followed by Rathnapura (23) and Anuradhapura (20) districts.

Twenty eight percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 28% belonged to the age group 1-5 years and 28% belonged to age group 6 – 15 years. Sixty three percent of the clinically confirmed cases were males and 37% were female.

**Table 17  
Summary findings for special investigations  
carried out for clinically confirmed cases of Meningitis from January 1st to 30th September 2013**

<b>CSF Culture Report</b>		
CSF Culture	Number	(%)
CSF results available	166	33%
• No Growth	155	
• Group B streptococci	(06)	
• Haemophilus influenza	(01)	
• Colliform	(02)	
• Strept Pneumoniae	(01)	
• Staph Aureus	(01)	
Culture results not known	<b>323</b>	65%
Not done	<b>10</b>	<b>02%</b>
<b>Total</b>	<b>499</b>	<b>100%</b>
<b>Final outcome of the patient</b>		
Outcome	Number	(%)
Cured	468	94%
Died	09	02%
Information not available	<b>18</b>	<b>04%</b>
<b>Total</b>	<b>499</b>	<b>100%</b>
<b>Final Diagnosis (based on clinical and lab findings)</b>		
Diagnosis	Number	(%)
Culture confirmed	11	02%
Probable bacterial meningitis	48	10%
Probable viral meningitis	44	09%
Suspected Meningitis	<b>396</b>	<b>79%</b>
<b>Total</b>	<b>499</b>	<b>100%</b>

## 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. A decision has been taken in early July to re-start ILI laboratory surveillance that was suspended in late April. But by July the turnover was still low and NIC received only 10 samples from sentinel hospitals. There were 109 samples in August and 178 in September. Lady Ridgeway Children's Hospital (LRH) and GH ratnapura sent in the highest number of samples (42) with North Colombo Teaching Hospital (NCTH) sending in 36 samples. All sentinel hospitals except General Hospital (GH) Vavuniya, GH Badulla and GH Polonnaruva 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.

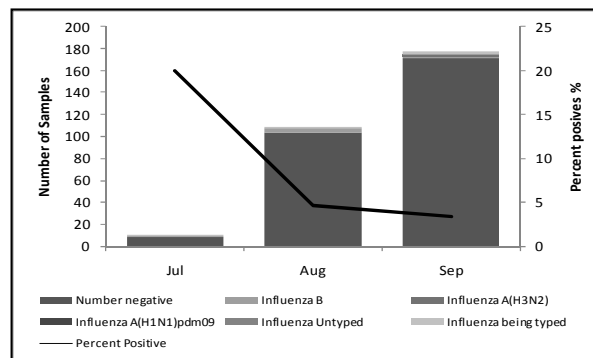
These samples were processed at the Medical Research Institute (MRI) which is the National Influenza Centre (NIC) for the country. Table 19 shows the subtypes of influenza viruses isolated from samples tested within the laboratory component by month in 3<sup>rd</sup> quarter 2013.

These results show that only 4% 13% of ILI samples tested within this quarter had an influenza viral strain which was much lower than the previous quarter (13%). However this low yield could be misleading since ILI samples were not entertained during the first month of the quarter.

During the quarter Influenza B had emerged as the predominantly circulating influenza viral strain. 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.

**Figure 1: Seasonal Patterns in Influenza Positivity within the ILI laboratory component**

3<sup>rd</sup> Quarter 2013



#### ILI Surveillance – Epidemiological Component

A total of 21,089 ILI visits had been recorded for the quarter. This is out of a total of 1,177,355 OPD visits in these hospitals. In July there were 8160 ILI cases visiting OPD of sentinel hospitals and 7156 in August and 5773 in September. TH Jaffna and GH Vavuniya did not report on ILI visits during the quarter.

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 1.8% which is even lower than in the previous quarter (2.3%). Contribution of ILI to total OPD disease burden could be higher and this underestimated figure could be due to underreporting.

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

Although ILI data may be underestimated, the trends of disease activity can be observed over the years.

In 2009 the country suffered from the Influenza A H1N1 pandemic and in 2010 its second wave was reported which ended by the beginning of 2011. Pandemic disrupted routine ILI surveillance activities and resulted in marked changes in healthcare seeking behaviours. Therefore seasonal trends cannot be detected with these years' data

Years 2011, 2012 and 2013 had been non-pandemic years. Evidence of an early mid-year peak and another at the end of the year can be seen in 2011 and a slight increasing trend from a small mid-year peak to another peak at the end of the year is seen in 2012. The trend observed first 3 quarters of 2013 shows higher activity than that of same period in 2012.

### Severe Acute Respiratory Infections (SARI) Surveillance

#### Laboratory Component

There were a total of 164 samples from SARI patients in designated sentinel hospitals received by the NIC/MRI for the 3rd quarter 2013. LRH had performed well in sending SARI samples.

Table 21 below shows the performance of SARI sentinel hospitals in the laboratory component of the SARI surveillance for this quarter. Along with ILI samples, these SARI samples are processed at the NIC, MRI. Table 22 below shows the results yielded for SARI samples in the 3rd quarter 2013 at NIC. As in ILI component, Influenza B featured as the predominantly seen viral strain among inward SARI patients with low presence of Influenza A(H3N2).

The results show that around 8% 42% of SARI patients tested within this quarter as having an influenza viral strain. This is much lower than that recorded for the previous quarter (42%) and to the pattern seen in third quarter in 2012, where Influenza activity was 23%. This reflects the low influenza activity that was observed after the high peak during the previous quarter.

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 867 SARI patients treated inward for severe respiratory tract infections within the 3rd quarter 2013 in sentinel hospitals of LRH, TH Peradeniya, GH Matara and NCTH

LRH reported the highest number of SARI patients during the quarter. Table 23 shows the distribution of SARI patients in the sentinel hospitals by month in the 3rd quarter 2013.

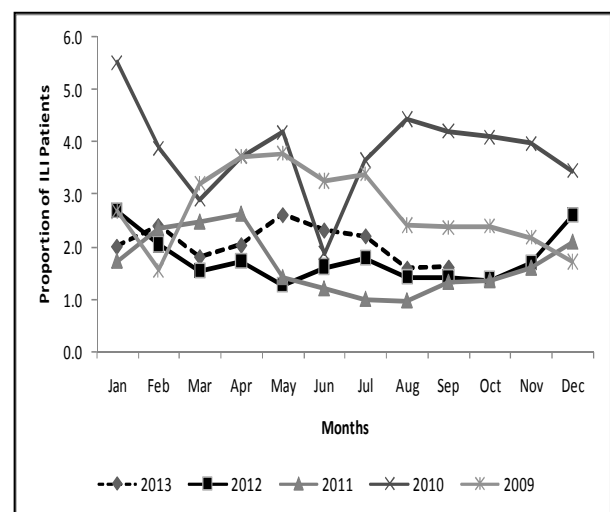
In this quarter, there had been 32118 total admissions to these units from which SARI cases are selected. SARI had contributed to 2.7% of total admissions in these hospitals within this quarter. This proportion is lower than that of the previous quarter (3.9%). Figure 4 shows the monthly distribution of the proportion of SARI in sentinel hospitals for the years 2011 to 2013.

In 2011 a mid-year peak and the larger year-end peak is seen merged together. An increasing trend of disease activity with an early mid-year peak and a larger year end peak can be separately observed in 2012. An early peak decreasing towards a lower activity level can be observed by the end of this quarter.

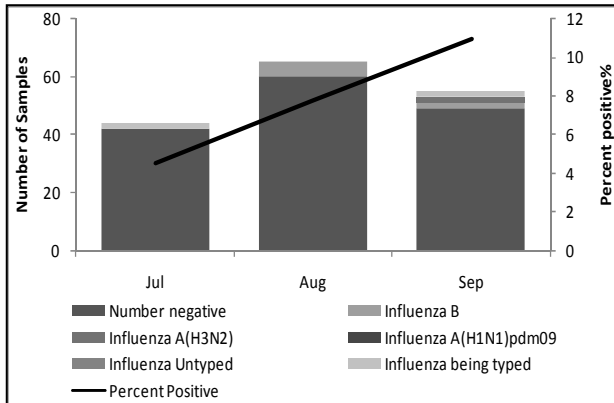
### Animal Influenza Surveillance

In the 3<sup>rd</sup> quarter 2013 there were pooled samples and serum samples collected and tested at the VRI for HPAI. None of the samples had yielded HPAI. The following Table 24 shows the number of samples collected by month and the districts they were collected from

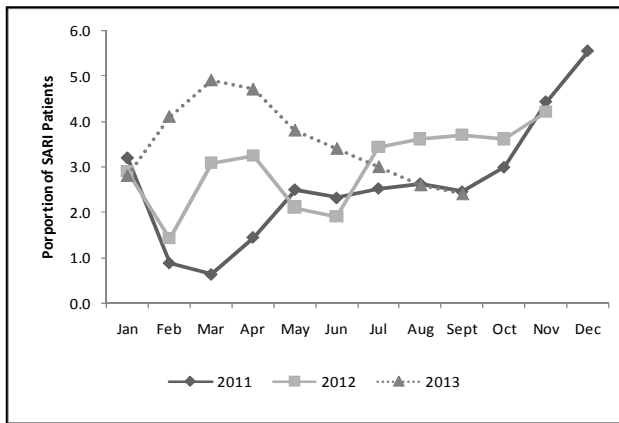
**Figure 2: Distribution of POD ILI visits by month – 2009-2013 3<sup>rd</sup> Quarter**



**Figure 3: Seasonal Patterns in Influenza Positivity within the SARI laboratory component – 3<sup>rd</sup> Quarter – 2013**



**Figure 4: Distribution of Proportion of SARI cases by month – 2011 – 2013 3<sup>rd</sup> Quarter**



**Table 18: Performance of Sentinel Hospitals in Laboratory Component of ILI Surveillance 3rd Quarter 2013**

	July	Aug	Sep	Total
LRH	5	20	17	42
NHSL	0	5	14	19
CSTH	0	0	16	16
IDH	0	0	15	15
NCTH	5	10	21	36
TH Peradeniya	0	6	6	12
GH Nuwara Eliya	-	3	5	8
TH Karapitiya	0	0	5	5
GH Matara	0	0	14	14
TH Jaffna	0	0	14	14
GH Vavuniya	0	0	0	0
GH Ampara	0	11	0	11
TH Batticaloa	-	11	10	21
TH Kurunegala	-	10	10	20
GH Chilaw	0	0	10	10
TH Anuradhapura	0	12	0	12
GH Polonnaruwa	0	0	0	0
GH Badulla	0	0	0	0
GH Ratnapura	0	21	21	42
<b>Total</b>	<b>10</b>	<b>109</b>	<b>178</b>	<b>297</b>

**Table 19: Types of Respiratory Viruses Isolated in ILI samples – 3<sup>rd</sup> Quarter 2013**

MONTH	TOTAL	INFLU B	A(H1N1pdm) 2009	A(H3N2)	A UNTYPED	Influenza yield
Jan	10	1	0	0	1	20%
Feb	109	4	0	0	1	4.6%
March	178	1	0	2	3	3.4%
<b>Total</b>	<b>297</b>	<b>6</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>4.4%</b>

**Table 20: Performance of Sentinel Hospitals in Epidemiological Component of ILI Surveillance 3rd Quarter 2013**

	July	Aug	Sep	Total
LRH	459	478	375	1312
NHSL	0	89	450	539
CSTH	5	29	41	75
IDH	724	186	176	1086
NCTH	0	17	28	45
TH Peradeniya	174	84	46	304
GH Nuwara Eliya	861	951	724	2536
TH Karapitiya	342	942	643	1927
GH Matara	34	49	36	119
TH Jaffna	281	321	387	989
GH Vavuniya	352	230	205	787
GH Ampara	2820	1714	734	5268
TH Batticaloa	860	558	972	2390
TH Kurunegala	0	37	19	56
GH Chilaw	0	0	0	0
TH Anuradhapura	0	0	0	0
GH Polonnaruwa	171	183	139	493
GH Badulla	173	80	88	341
GH Ratnapura	904	1208	710	2822
<b>Total</b>	<b>8160</b>	<b>7156</b>	<b>5773</b>	<b>21089</b>

**Table 21: performance of sentinel hospitals in the laboratory component of the SARI surveillance - 3rd Quarter 2013**

Institution	July	Aug	Sep	Total
LRH	30	30	22	82
GH Matara	5	20	13	38
TH Peradeniya	5	2	1	8
NCTH	4	13	19	36
<b>Total</b>	<b>44</b>	<b>65</b>	<b>55</b>	<b>164</b>



**Table 22: Types of Respiratory Viruses Isolated in SARI Samples - 3rd Quarter 2013**

Month	Total	Influenza B	A (H3N2)	Influenza being typed	Influenza yield
July	44	0	0	2	4.5%
Aug	65	5	0	0	7.7%
Sep	55	2	2	2	10.9%
<b>Total</b>	<b>164</b>	<b>7</b>	<b>2</b>	<b>4</b>	<b>7.9%</b>

**Table 23: Distribution of SARI patients by month – 3rd Quarter 2013**

Institution	July	Aug	Sep	Total
LRH	165	91	85	341
GH Matara	75	88	30	193
TH Peradeniya	0	11	50	61
NCTH	112	99	61	272
<b>Total</b>	<b>352</b>	<b>289</b>	<b>226</b>	<b>867</b>

**Table 24: Animal samples collected by month and district – 3rd Quarter 2013**

Month	No. of samples		Districts samples were collected from
	Pooled	Serum	
July	296	695	Anuradhapura, Gampaha, Ampara, Trincomalee, N'eliya, Badulla, Hambantota, Matara, Ratnapura, Kurunegala, Colombo, Puttalam
Aug	222	415	Gampaha, Trincomalee, Puttalam, Colombo, Jaffna,
Sep	190	460	Kandy, Vavuniya, Badulla, Kegalle, Anuradhapura, Matara, Colombo, Jaffna
<b>Total</b>	<b>3651</b>	<b>5006</b>	

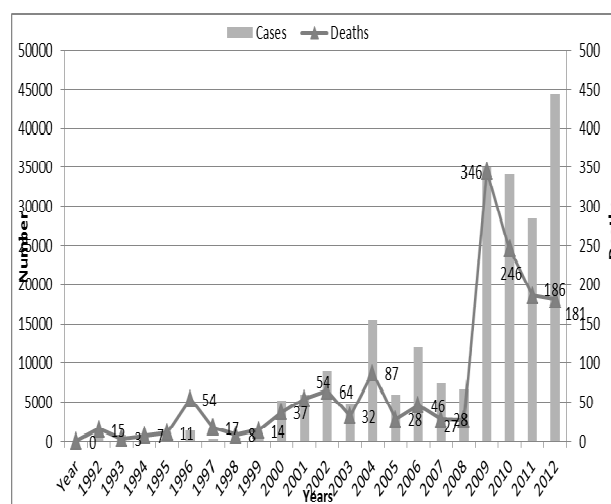
## Special Report

### Surveillance Report On Dengue Fever/ Dengue Haemorrhagic Fever – 2012

#### Introduction

Dengue Fever was serologically confirmed in Sri Lanka in 1962 and the first outbreak was reported in 1965. The disease which was earlier confined to urban areas has spread to peri urban and rural districts as well. At present it is endemic in the country and epidemics have been experienced almost every other year since 2002 (Figure 5- Dengue cases and deaths notified during 1992 – 2012).

During the year 2012, 44,461 suspected Dengue Fever / Dengue Haemorrhagic Fever cases and 181 deaths (CFR 0.41 %) were reported to the Epidemiology Unit. It is the highest ever reported number of cases for a given year. When compared to 2011, the case fatality rate has reduced (in 2011, 28473 cases and 186 deaths with a CFR of 0.65 %). The incidence rate for DF/DHF in 2012 was 154.67 per 100,000 population. The usual seasonal increase in case reporting which occurs in June-July in relation to the South Western monsoon rains was well marked in 2011. This was not marked until 2009 after 2004, but, a level of high endemicity prevailed throughout the period since 2005.

**Figure 5- DENGUE CASES AND DEATHS NOTIFIED DURING 1992 - 2012**

In 2012 the cases of DF/DHF were distributed in almost all the districts but the majority of the cases were reported from the Western Province which accounted for 46.81% of the total case load. Ratnapura, Kurunegala, Kegalle, Kandy districts reported a high case load accounting for 8.86%, 7.96%, 6.08%, 5.66% of the total case load respectively. Distribution of cases by RDHS divisions is given in Table 25.

Eleven districts and 40 'high-risk' MOH areas reported a significant number of cases during the year 2012. Colombo Municipal Council area reported 2,811 cases (11.32% of the total case load) followed by the MOH areas Kolonnawa (1374 cases i.e. 6.22%), Dehiwala (1271 cases i.e. 4.86%). The MOH areas which had a major contribution to the case load are given in Table 26.

**Table 25- DISTRIBUTION OF NOTIFIED CASES AND DEATHS DUE TO DF/DHF BY RDHS DIVISION-2012**

District	Reported cases	Deaths	CFR %	Incidence (100'000 pop)	%
Colombo-MC	2,611	19	0.73	365.08	5.87
Colombo-RHDS	7,406	39	0.53	417.67	16.66
Colombo	10,017	58	0.58	431.06	22.53
Gampaha	8006	33	0.41	348.30	18.01
Kalutara	2,791	12	0.43	229.73	6.28
Kandy	2,517	14	0.56	183.96	5.66
Matale	596	1	0.17	123.56	1.34
NuwaraEliya	342	1	0.29	48.43	0.77
Galle	1,513	3	0.20	142.86	3.40
Hambantota	604	3	0.50	101.36	1.36
Matara	1,835	4	0.22	226.35	4.13
Jaffna	894	2	0.22	153.33	2.01
Killinochchi	93	0	0.00	82.39	0.21
Mannar	186	0	0.00	187.76	0.42
Vavuniya	104	0	0.00	60.19	0.23
Mulativu	42	0	0.00	45.54	0.09
Batticaloa	717	0	0.00	136.52	1.61
Ampara	155	0	0.00	56.86	0.35
Trincomalee	168	0	0.00	44.64	0.38
Kurunegala	3,537	12	0.34	219.50	7.96
Puttalam	1,800	12	0.67	236.60	4.05
Anuradhapura	493	0	0.00	57.62	1.11
Polonnaruwa	289	0	0.00	71.56	0.65
Badulla	430	2	0.47	53.01	0.97
Monaragala	287	1	0.35	64.03	0.65
Ratnapura	3,938	12	0.30	363.86	8.86
Kegalle	2,705	7	0.26	323.11	6.08
Kalmunai	402	4	1.00	89.83	0.90
<b>National</b>	<b>44,461</b>	<b>181</b>	<b>0.41</b>	<b>218.46</b>	<b>100.00</b>

**Table 26- DISTRIBUTION OF NOTIFIED CASES OF DF/DHF CASES BY HIGH RISK MOH AREAS – 2012**

RDHS Division	MOH Area	No. Of cases	% of the country total	Incidence per 100,000 population
<b>Colombo</b>	Dehiwala	1271	4.86%	576.62
	Piliyandal	554	1.30%	212.62
	Homagama	464	1.26%	171.21
	Kaduwela	747	1.63%	193.36
	Kolonnawa	1374	6.22%	964.94
	Kotte	410	1.33%	532.41
	maharagama	658	2.21%	389.81
	MC-Colombo	2811	11.32%	438.82
	Moratuwa	656	1.69%	236.78
	Nugegoda	273	1.83%	492.28
	Hanwella	55	0.83%	220.45
<b>Gampaha</b>	Biyagama	543	1.14%	165.92
	Gampaha	658	1.01%	138.73
	Ja-Ela	570	0.89%	163.89
	Katana	390	0.27%	68.17
	Kelaniya	655	1.58%	275.22
	Dompe	671	1.03%	184.61
	Mahara	887	1.45%	192.27
	MC-Negombo	738	0.74%	119.59
	Meerigama	329	0.73%	118.54
	Wattala	654	2.47%	388.35
	<b>Kalutara</b>	Beruwala	312	0.52%
Panadura		792	1.23%	148.27
<b>Ratnapura</b>	Pelmadulla	290	0.32%	94.94
<b>Kurunegala</b>	Polgahawel	359	0.28%	81.46
	kurunegala	803		
<b>Kandy</b>	Akurana	347	0.17%	77.17
	MC-Kandy	267	0.89%	225.00
<b>Batticaloa</b>	Batticaloa	190	0.66%	
	oddanwadu	51	0.33%	
<b>Galle</b>	MC-Galle	158	0.39%	111.87
<b>Matara</b>	MC-Matara	422	0.79%	306.31
<b>Kalmunai</b>	Samanthura	203	0.05%	
<b>Kegalle</b>	kegalle	305	0.23%	137.44
	aranayaka	325	0.66%	202.64
	Mawanella	697	0.77%	205.83

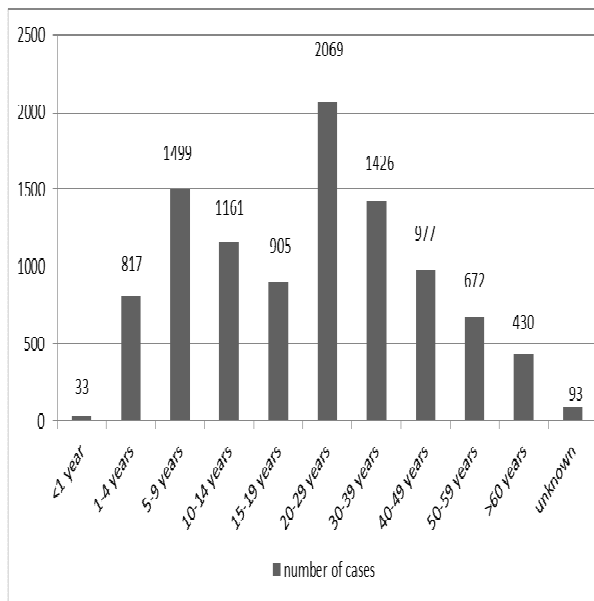
### Special Surveillance of DF/DHF

Special surveillance data were received from health institutions where dengue patients were treated. Lady Ridgway Hospital for Children, Teaching Hospital Peradeniya, National Hospital of Sri Lanka and Teaching Hospital Batticaloa provided a major proportion of special surveillance data. Several leading private hospitals in the Colombo district also significantly contributed to the surveillance data.

Special surveillance data in respect of 10,082 cases were received for the year 2012. All age groups were affected by the disease with 34.81% of the cases(3510) being less than 15 years old while 20.52% of the cases (2069) were in the 20-29 year age group (Figure 6).Deaths due to DF/DHF had occurred among all age. The highest case fatality rate was for those below 1 year of age followed by over 60 years group. The highest number of deaths was among the 30-39 year age group (Figure 7).

Distribution of cases by sex showed that there was a male preponderance with 5,785 cases, 57.38% (female - 4262 cases,42.27%) and distribution of deaths by sex showed that there was a female preponderance with 103 deaths, 56.91% (male 78 deaths,43.09%).

**Figure 6- Distribution of Deaths due to DF/DHF cases and case fatality rates by age groups – 2012 (n=10,082)**



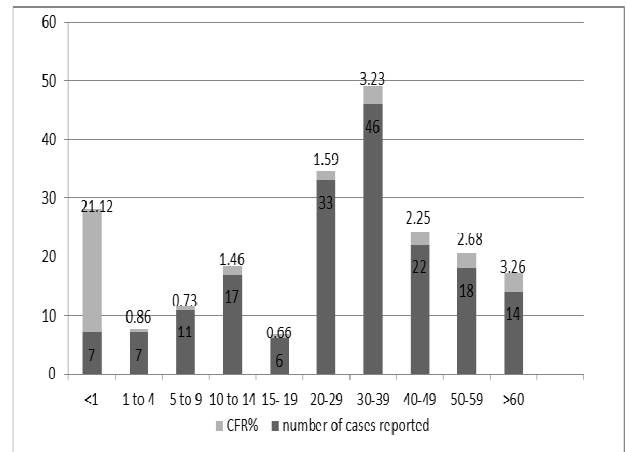
**Severity of the disease**

According to the WHO disease classification 8,988 (89.14%) cases received through the special surveillance mechanism were classified as dengue fever while the remaining 1088 cases (10.79%) were classified as DHF. Majority of the DHF cases were classified as DHF I (713 cases i.e. 7.07 %), followed by DHF II (274 cases i.e.2.71%). Out of all the Dengue cases 1.001% (100) had developed Dengue shock (DHF III &IV) (Figure 8).

**Confirmation of the diagnosis**

Department of Virology, Medical Research Institute, Colombo had tested 6,106 samples during the year using IgM capture ELISA test and Haem Agglutination Inhibition test and 3,176(52.01%) were serologically confirmed

**Figure 7– Number of deaths due to DF/DHF cases and case fatality rates by age groups – 2012 (n= 10,082)**



**Figure 8-Classification of the caseload by WHO cas-sification-2012**

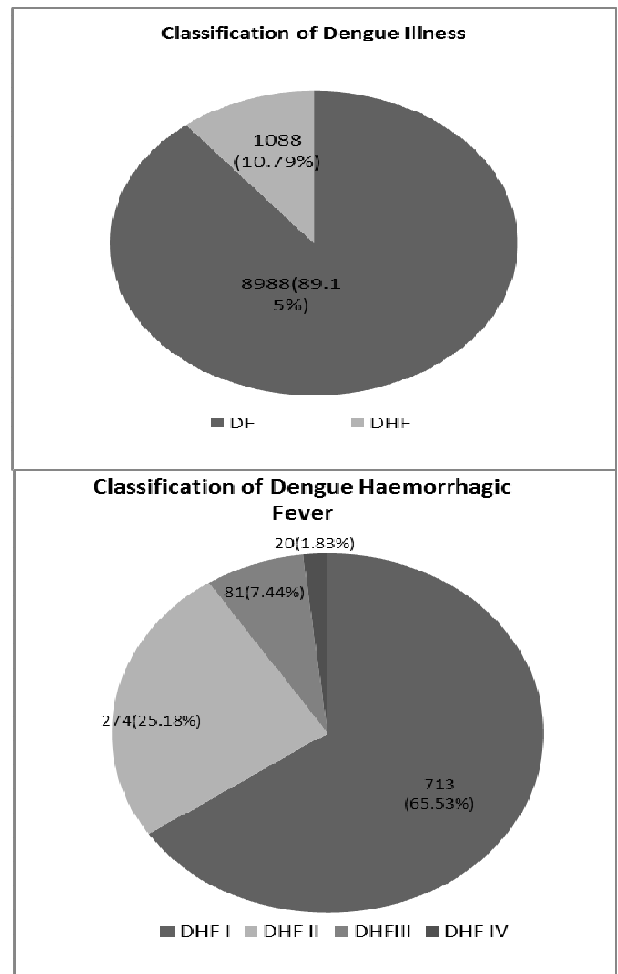


Table 27

## 24. SUMMARY OF NOTIFIABLE DISEASES - 3RD 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	55	4	49	28	1	43	386	0	2	2	27	6	3151	135	99	15	24	0
Gampaha	83	3	20	7	0	119	237	0	1	5	46	2	1024	285	34	20	20	0
Kalutara	70	5	21	10	0	103	132	0	0	4	7	1	536	28	46	22	21	0
Kandy	53	5	10	1	0	22	64	2	1	18	26	2	541	104	26	9	6	1
Matale	27	2	14	6	0	15	6	0	0	2	14	0	150	34	11	9	13	5
Nuwara-Eliya	43	0	3	214	0	4	14	0	0	14	7	0	80	79	63	51	7	0
Galle	47	6	2	6	1	57	150	5	0	26	7	0	256	93	102	17	15	0
Hambantota	20	1	8	21	0	21	150	4	0	21	13	1	94	26	21	7	29	111
Matara	26	2	11	0	0	25	63	7	0	38	18	2	115	47	55	19	30	25
Jaffna	152	5	38	19	1	1	0	2	0	6	5	1	101	80	18	36	14	0
Kilinochchi	16	0	6	1	1	0	1	0	0	0	0	0	23	14	0	2	0	6
Mannar	37	1	6	22	0	4	1	0	0	2	0	0	7	11	0	2	1	3
Vavuniya	21	2	3	11	0	3	3	0	0	0	2	0	15	15	3	4	9	4
Mullaitivu	14	1	2	1	0	9	1	0	0	0	1	0	23	3	2	1	2	5
Batticaloa	83	2	8	56	2	5	41	2	0	0	3	0	77	50	17	0	5	0
Ampara	83	1	0	8	0	14	6	4	0	1	6	0	77	16	22	42	9	2
Trincomalee	20	0	1	2	0	10	2	0	0	5	0	1	33	39	9	6	2	13
Kurunegala	41	8	11	15	0	80	30	6	0	19	16	1	422	216	80	24	17	13
Puttalam	27	3	3	1	1	24	43	1	0	2	4	0	168	36	21	8	16	3
Anuradhapura	36	3	0	35	2	22	46	0	1	7	10	0	94	48	50	36	21	121
Polonnaruwa	21	0	2	9	1	20	6	4	1	1	10	0	166	51	30	10	7	61
Badulla	70	1	7	3	0	26	21	1	1	24	11	0	173	73	23	1	20	3
Moneragala	39	1	10	8	0	17	19	0	0	27	100	0	73	22	11	24	14	2
Ratnapura	91	3	7	1	0	73	581	4	0	37	228	2	405	153	47	17	28	4
Kegalle	61	5	13	7	0	67	78	0	1	15	41	0	297	92	83	14	35	1
Kalmunai	43	1	0	50	0	4	2	3	0	0	1	0	17	30	26	11	2	0
<b>Total</b>	<b>1279</b>	<b>65</b>	<b>255</b>	<b>542</b>	<b>10</b>	<b>788</b>	<b>2103</b>	<b>45</b>	<b>8</b>	<b>276</b>	<b>603</b>	<b>19</b>	<b>8118</b>	<b>1780</b>	<b>899</b>	<b>407</b>	<b>367</b>	<b>383</b>

No polio cases. (from AFP surveillance system).

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**Epidemiology Unit, Ministry of Health, 231, De Saram Place, Colombo 10.**

**Telephone : 2695112, FAX No : 2696583, E-mail: [chepid@sltnet.lk](mailto:chepid@sltnet.lk)**

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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:

The Editor, Quarterly Epidemiological Bulletin

Epidemiology Unit, P.O. BOX 1567, Colombo, SRI LANKA.

## ON STATE SERVICE

**DR. P. PALIHAWADANA**  
**CHIEF EPIDEMIOLOGIST**  
**EPIDEMIOLOGY UNIT**  
**231, DE SARAM PLACE**  
**COLOMBO 10.**

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