Valuate 35 June

# EPIDEMIOLOGICAL BULLETIN

## **SRI LANKA**

Second Quarter 2014

## **EPIDEMIOLOGY UNIT**

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#### 1. POLIOMYELITIS

Twenty two (22) Acute Flaccid cases were notified to the Epidemiology Unit during the 2nd quarter 2014. This is lower compared to AFP cases of 28 during the 2nd quarter 2013. Reported number of AFP cases for the quarter is little lower than 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 second quarter of 2014 was 1.7:100,000.

#### **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 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 (36%) were notified from the main sentinel site hospitals for AFP, the Lady Ridgeway Children's Hospital (LRH). Particular of all hospitals which reported AFP cases are given below in Table 01.

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

The highest number of cases were reported from the district of Colombo, Gampaha and Kurunegala with 3 cases each. The complete list of distribution of AFP cases according to the province, district and MOH area is given below in Table 02.

#### Age and Sex Distribution of AFP Cases

The majority of AFP cases (15,68%) were girls during the 2nd quarter, 2014 and this was higher compared to the trend reported during the 2nd quarter 2013 which was 64% of girls in the reported AFP cases.

The majority of AFP cases (91%) were between 1-9 years during the second quarter this year and the trend was higher compared to the compatible quarter in the previous year. (Table 3)

Table 01: Reported AFP cases by hospitals 2nd quarter 2014

Hospital	No: of cases reported
LRH	8
T.H Anuradhpura	2
T.H Kandy	2
SBSCH	2
B.H Diyathalawa	2
T.H Karapitiya	1
G.H Gampaha	1
Colombo North TH	1
T.H Jaffna	1
G.H Nuwara Eliya	1
G.H Polonnaruwa	1
Total	22

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

Majority of AFP cases were reported during the month of May (46%). There is no observable variation of case presentation by month compared to the compatible quarter in the previous year.

Table 02: Distribution of AFP Cases according to Provinces, Districts & MOH Areas - 2nd quarter 2014

Province	District	District MOH Area	
Western	Colombo	Piliyandala	1
		Homagama	1
		Moratuwa	1
	Gampaha	Dompe	1
		Kelaniya	1
		Ragama	1
	Kalutara	Kalutara	1
Sourthern	Matara	Weligama	1
Central	Kandy	Hathuraliyadda	1
	Wattegama		1
	Nuwara Eliya Nuwara Eliya		1
North Western	Kurunagala	Pannala	1
		Panduwasnuwara	1
		Polgahawela	1
Eastern	Trincomalee	Gomarankadawala	1
North Central	Polonnaruwa	Welikanda	1
		Dimbulagala	1
	Anuradhapura	Rambewa	1
Uva	Monaragala	Siyabalanduwa	1
	Badulla	Bandarawela	1
		Haputale	1
Northern	Jaffna	Chavakachcheri	1
Total			22

Table 03: Distribution of AFP cases by Age & Sex - 2nd quarter 2014

Age	S	Total	
	Male Female		
< 1 year old	1	2	3
1-4 year old	4 9		13
5-9 year old	1	3	4
10–15 year old	1 1		2
Total	7 15		22

#### Final diagnoses of AFP cases

The majority (73%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 22 cases of AFP are given in Table 4.

Table 4: Final diagnoses of AFP patients reported during 2nd quarter 2014

Final Diagnoses	Frequency
GBS	16
Spinal cord compression	1
Post viral neuritis	1
Post viral radiculopathy	1
Osteomyelitis	1
Miller Fisher Syndrome	1
Transient UMN lesion	1
Total	22

## 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'. Out of 22 AFP cases, 17 cases (77.27%) had both stool sample collected timely and sent to MRI for polio virology.

#### 02. MEASLES

Seven hundred and thirty three (733) suspected measles patients were reported during the first quarter 2014 in continuing the outbreak situation started since January 2013. Five hundred and seventy eight (578) 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 811 suspected cases and 483 clinically confirmed cases respectively in the compatible quarter, in the previous year. These clinical cases were field investigated (74%) by the respective medical officers of health (MOH) of the patients' residential areas and special field investigation reports have been sent to the Epidemiology Unit.

Majority affected (25%) were below the age of 1 year and of them higher proportion belonged to 6 - 11 months. Western province reported highest proportion (18%) (Colombo 42, Kalutara 26, Gampaha 38) followed by Southern province (11%). Out of the all clinically confirmed cases 68% 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 (568) from April to June who were with fever and maculopapular rash were investigated in the WHO accredited virology laboratory at the Medical Research Institute (MRI) and identified 402 cases were serology positive for Measles IgM antibodies. Outbreaks of measles were considered as continuing during the second quarter with lower frequency

#### 3. LEPTOSPIROSIS

During the 2nd quarter 2014, 509 cases and 5 deaths (CFR 0.98%) due to Leptospirosis were notified to the Epidemiology Unit compared to 734 cases and 07 deaths in the previous quarter and 1171 cases and 08 deaths during corresponding quarter of 2013.

Table 05: Selected characteristics of Leptospirosis patients (%)- 2nd quarter 2014.

	Sex		
Age Group	Male	Female	
0 - 9 years	00.38	00.00	
10 - 19 years	10.38	02.50	
20 - 29years	15.00	12.50	
30 - 39years	22.30	20.00	
40 - 49years	20.76	20.00	
50 - 59 years	20.00	25.00	
>60 years	11.15	20.00	
Total	100.00	100.00	

#### 4. HUMAN RABIES

Twelve Human Rabies cases were reported in 2nd quarter 2014 compared to 02 cases in the previous quarter and 05 cases in the corresponding quarter of the last year.

#### **Animal Rabies**

During this quarter, 122 dogs were reported positive for rabies, compared to 178 positive in the previous quarter and 147 positive in the same period in the last year at MRI.

Cats-18, Squirrel- 01, Domestic Ruminants — 00.

#### **Rabies Control Activities**

**Dog vaccination** - 299111 dogs were immunized during the Quarter under review when compared to 253976 in previous quarter and 326281 in corresponding Quarter of last year.

#### **Animal Birth control**

5393 female dogs were injected with progesterone and 23938 female dogs were sterilized by surgical method.

#### 5. VIRAL HEPATITIS

In the 2nd Quarter 2014, a total of 468 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 390 cases in the previous quarter and 372 cases in the corresponding quarter of 2013. Rathnapura (106 cases) reported the highest number of cases followed by Gampaha District(78 cases)

#### **6. ENTERIC FEVER**

In the 2nd Quarter 2014, a total of 194 cases of Enteric fever were reported to the Epidemiology Unit, compared to 255 cases in the previous quarter and 298 cases in the corresponding quarter of 2013. The district of Jaffna (62 cases) reported the highest number of cases, followed by Colombo (23 cases).

#### 7. DYSENTERY

In the 2nd Quarter 2014, a total of 863 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 860 cases in the previous quarter and 860 cases in the corresponding quarter of 2013. Jaffna (120 cases ) and Nuwara-Eliya (97 cases) reported the highest number of cases.

#### 8. MALARIA

There were no indigenous malaria cases reported during the 2nd quarter of 2014. (Table 06) 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 2nd quarter 2014, 78 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 37 cases were clinically confirmed by the Public Health Inspectors during their field investigations. During the 2nd quarter of 2014, MRI has reported 1 lab confirmed JE case. This case was reported from Kurunagala district. This case was belongs to the age group over 50 years.

Table 07: Selected characteristics of confirmed cases of JE- 2nd quarter 2014.

Sex	Male	01 (100%)
Sex	Female	00 (00%)
Age group	< 1 Y	00 (00%)
	1-10 Y	00 (00%)
	11-20 Y	00 (00%)
	21-50 Y	00 (00%)
	> 50 Y	01 (100%)
District	Kurunegala	01 (100%)

Table 06: Results of Blood smear examination for malaria parasites - 2nd guarter 2014

	2nd quarter 2013	2nd quarter 2014
No. of blood smears examined	247,761	257,677
No. of positives (indigenous)	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- 2nd quarter 2014

RMO	April	Мау	June	Total
Colombo	4793	9846	7201	21840
Gampaha	2365	4643	3658	10666
Kalutara	824	1510	1094	3428
Kandy	2571	3655	3910	10136
Matale	2507	2943	2672	8122
Nuwara Eliya	284	93	283	660
Galle	1733	1487	1458	4678
Matara	1733	2008	1291	5032
Hambantota	1861	2318	2465	6644
Jaffna	6169	6712	6911	19792
Kilinochchi	3268	3857	3883	11008
Vavuniya	3770	4456	4753	12979
Mannar	4008	3881	4051	11940
Mullaitivu	1925	2365	2083	6373
Batticaloa	4385	5664	4087	14136
Ampara	1758	1880	1898	5536
Kalmunei	3124	3798	3600	10522
Trincomalie	2590	2848	2690	8128
Kurunegala	4428	5593	5736	15757
Maho	1154	1322	1333	3809
Puttalam	2431	3072	2528	8031
Anuradhapura	5211	6039	5996	17246
Pollonnaruwa	4270	4644	4821	13735
Badulla	1634	2195	2163	5992
Monaragala	2355	2601	2845	7801
Rathnapura	2127	2116	2246	6489
Kegalle	2186	2707	2304	7197
Total	75464	94253	87960	257677

Table 09: Morbidity and mortality due to DF/DHF - 2nd quarter 2014

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	4572	35.97	23
Gampaha	2312	18.19	05
Kalutara	787	6.19	00
Kandy	433	3.40	02
Matale	109	0.85	00
N' Eliya	96	0.75	00
Galle	249	1.96	00
Hambantota	189	1.48	00
Matara	98	0.77	01
Jaffna	221	1.73	00
Kilinochchi	07	0.05	00
Mannar	23	0.18	00
Vavuniya	48	0.37	00
Mulativu	20	0.15	00
Batticaloa	306	2.40	02
Ampara	43	0.34	00
Trincomalee	270	2.12	00
Kurunagale	425	3.34	01
Puttalam	144	1.13	00
A'pura	127	1.10	00
Polonnaruwa	119	0.93	00
Badulla	158	1.24	01
Moneragala	53	0.41	00
Ratnapura	1288	10.13	03
Kegalle	559	4.40	00
Kalmunai	54	0.42	00
Total	12,710	100.00	38

Table 10: DHF statics from Department of Virology, MRI -2nd quarter 2014

Month	Month Clinically suspected cases of DF/DHF Serologically Confirmed Cases of DF/DHF	
April	256	153
May	425	253
June	751	470
Total	1432	876

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

During the 2nd quarter of 2014, 12,710 cases of DF/DHF and 38 deaths were reported (0.29% CFR) when compared to 7,269 cases of DF/DHF and 14 deaths (0.19% CFR) reported during the 1st quarter of 2014. Proportion of cases notified in April, May and June were 13.24%, 33.76%, and 53% respectively.

Table 09 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 2nd quarter of 2014

Special surveillance data on 1924 confirmed cases were received and analyzed for the 2nd quarter of 2014. Age distribution of reported cases were <4 years of age in 174 (9.04%), 5- 9 years of age in 297 (15.43%),10 - 14 years of age in 225 (11.69%),15 - 19years of age in 186 (9.66%),20 - 24 years of age in 265 (13.77%),25 - 29years of age in 185 (9.61%), 30 - 34 years of age in148 (7.69%), 35 - 39 years of age in 98 (5.09%), 40 - 44 years of age in 106 (5.05%), 45 - 49 years of age in 77 (4.0%),50 - 54 years of age in 62 (3.22%), 55 - 59 years of age in 35 (1.81%), >60 years of age in 58 (3.01%).

According to the clinical findings majority of the reported cases 1762 (92.39%) were classified as dengue fever, 0.26% were classified as Dengue fever without shock, 6.66% were Dengue fever with shock while 0.05 % falling into the unusual dengue category.

During the 2nd quarter of 2014, 1432 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. From the total, 876 (61.17%) samples were confirmed as positive (Table 10).

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

During the whole quarter only 6 suspected Rubella disease cases were reported and 4 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. These clinical cases were not tested at the laboratory and 3 of them were males and 2 were above 30 years. Comparing the compatible quarter in the previous year only 7 cases of suspected Rubella cases were reported and 4 of them was compatible with surveillance case definition. Outbreaks were not reported during the quarter for rubella infection.

#### 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. These babies who were identified with congenital abnormalities and considered as Congenital Rubella Syndrome were reported from B.H Kalmunai (1), Lady Ridgeway Hospital (2) and belonged to district of Baticaloa, Colombo and Puttalam.

#### 12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2014. Last case of cholera was reported in the country in January 2003.

#### 13. TETANUS

One case of clinically confirmed tetanus was reported from Opanayaka MOH of RDHS Rathnapura.

#### 14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 2nd Quarter of 2014 has reached 92% of completeness of reports, while 31.2% reports were received in time at the Epidemiology Unit indicating lack of compliance for by the MOOH. Batticaloa, Hambantota, Jaffna, Mannar, Mullativu, Polonnaruwa, Trincomalee and Vavunia were able to send all reports. The best timeliness was reported from the Kegalle district (78.1%) (Table 11)

The highest percentage of "Nil reports" were received from Matale (77.8%) followed by Ampara (76.5%), Monaragala (71.9%) and Kandy (70.6%) districts. High level of "nil reports" indicates the need for more attention for surveillance, as possible under reporting cannot be ruled out. Jaffna district has reported the "Nil return" of 11.1%, indicating the good surveillance system in place. A total of 1021 cases of AEFI reported in second quarter 2014. The highest rate (360.2 per 100,000 immunizations) of AEFI was reported from Jaffna district, while Colombo reported the highest number of 140 AEFI cases in second quarter 2014.

For the second quarter, the highest number of AEFI (n=419) was reported against Pentavalent vaccine, where as the highest rate of AEFI (406.2/100,000 doses administered) reported against DTP vaccine. The rate of AEFI for Pentavalent (01st, 02nd & 03rd dose) is 171.1 per 100,000 doses administered. High Fever (381), Allergic Reaction (164), Nodule (110) are the leading AEFI reported. Highest number of fever cases reported were following Pentavalent (190 cases: 77.6 per 100,000 doses administered) and DPT (129 cases: 150.6 per 100,000 doses administered) vaccines. For Allergic Reactions, it was largely due to DPT (43 cases: 50.2 per 100,000 doses administered) and MMR (43 cases: 25.4 per 100,000

Table 11: Completeness and timeliness of monthly reporting and receipt of "NIL" reports of AEFI by RDHS divisions –2nd quarter 2014

					AEFI
	%	% Time	%	No.	Rate
DPDHS	com plete	ly retur	Nil Retu	of AEFI	(100,00 0
	ness	ns	rns		vaccine doses)
Colombo	92.2	42.6	38.3	140	113.9
Gampaha	97.8	38.6	54.5	43	35.1
Kalutara	87.2	20.6	55.9	38	52.7
Kandy	70.8	15.7	70.6	38	43.8
Matale	92.3	47.2	77.8	12	36.2
Nuwara Eliya	89.7	37.1	65.7	23	50.4
Galle	86.7	46.2	67.3	39	61.0
Hambantota	100.0	13.9	55.6	42	94.7
Matara	94.1	52.1	58.3	33	62.4
Jaffna	100.0	0.0	11.1	122	360.2
Kilinochchi	91.7	0.0	18.2	21	240.1
Mannar	100.0	13.3	66.7	14	185.9
Vavuniya	100.0	0.0	58.3	19	155.4
Mullativu	100.0	0.0	25.0	14	174.7
Batticaloa	100.0	50.0	40.5	58	139.4
Ampara	81.0	17.6	76.5	09	48.7
Trincomalee	100.0	30.3	54.5	22	70.5
Kurunegala	95.1	51.9	51.9	65	64.5
Puttalam	86.1	19.4	67.7	24	28.2
Anuradhapura	84.2	2.1	47.9	36	53.8
Polonnaruwa	100.0	14.3	42.9	22	74.1
Badulla	95.8	41.3	47.8	40	68.0
Moneragala	97.0	31.3	71.9	18	49.4
Ratnapura	92.6	0.0	62.0	41	56.8
Kegalle	97.0	78.1	34.4	39	72.7
Kalmunai	97.4	42.1	36.8	49	148.4
Sri Lanka	92.0	31.2	53.3	1021	77.8

Table 12: Number of selected adverse events by Vaccines – 2nd quarter 2014

	BC G	OP V	PVV	DPT	MMR	LJE	DT	тт	aTd	Total number of AEFI reported
Total Number of AEFI Reported	03		419	352	89	53	56	7	42	1021
AEFI reporting rate/100,000 doses administered	3.6		171.1	406.2	52.6	60.8	68.7	9.4	24.8	
High Fever (>39°C)			190	129	25	19	17		10	381
Reporting rate/100,000 doses administered			77.6	150.6	14.8	21.8	20.8		0.6	
Allergic reactions Reporting rate/100,000 doses			36	43	43	19	09	02	12	164
administered			14.7	50.2	25.4	21.8	11.0	2.7	7.1	
Severe local reactions Reporting rate/100,000 doses	01		21	18	03	1	12			56
administered	1.2		8.6	21.0	1.8	1.1	14.7			
Seizure (Febrile/Afebrile)			07	25	02	07	1		01	43
Reporting rate/100,000 doses administered			2.9	29.2	1.2	8.0	1.2		0.6	
Nodules			57	45	01	01	06			110
Reporting rate/100,000 doses administered			23.3	52.5	0.6	1.1	7.4			
Injection site abscess	01		46	16	01		01	01		110
Reporting rate/100,000 doses administered	1.2		18.8	18.7	06		1.2	1.3		
HHE					02				01	03
Reporting rate/100,000 doses administered					1.2				0.6	

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 2295 TB patients were notified to the NPTCCD by H816A, and 2356 patients were registered at chest clinics for the 2nd Quarter 2014.Out of this 2356 TB patients, 2157 (91.6%) were New TB Cases,116 (4.9%) were Retreatment Cases and 83 (3.5%) were Other Cases. Out of New TB cases 1077 (49.9%) were New Smear Positive TB, 459 (21.1%) were New Smear Negative TB and 621 (28.8%) were New Extra Pulmonary TB Cases. A total of 1776 TB patients were screened for HIV, out of them **No** patients were found positive. **Three** 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 - 2nd quarter 2014

RDHS		Ne	Retreat			
DIVISION	PTB sp+ve	PTB sp-ve	ЕРТВ	Total	ment & other	Total
Colombo	278	81	133	492	64	556
Gampaha	127	34	73	234	20	254
Kalutara	72	23	59	154	12	166
Kandy	54	40	52	146	18	164
Matale	21	12	14	47	06	53
Nuwara Eliya	23	20	14	57	05	62
Galle	59	31	25	115	12	127
Matara	26	24	16	66	01	67
Hambantota	20	07	14	41	05	46
Jaffna	29	15	21	65	05	70
Vavuniya	09	00	03	12	02	14
Batticaloa	32	03	07	42	06	48
Ampara	12	06	05	23	00	23
Kalmunai	15	23	04	42	05	47
Trincomalee	20	06	10	36	01	37
Kurunegala	38	32	28	98	22	120
Puttalam	20	05	16	41	02	43
Anuradhapura	37	04	15	56	02	58
Polonnaruwa	10	08	09	27	00	27
Badulla	33	13	19	65	02	67
Monaragala	16	05	10	31	01	32
Rathnapura	68	27	43	138	02	140
Kegalle	42	27	23	92	03	95
Mannar	02	06	05	13	02	15
Mulathivu	05	05	00	10	01	11
Kilinochchi	09	02	03	14	00	14
Total	1077	459	621	2157	199	2356

PTB-Pulmonary Tuberculosis

EPTB- Extra Pulmonary Tuberculosis

SP + ve - Sputum Positive

SP - ve - Sputum Negative

Data from Central TB Register

Source - National TB Register

#### 16. SURVEILLANCE AT SEA PORT

Details of the vaccinations carried out by the Assistant Port Health Office during the 2nd quarter 2014, is as follows;

		Total
A.	Yellow fever	814
B.	Meningococcal meningitis	128
C.	Oral polio	69

#### 17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the Inter national Airport, Katunayake during the 2nd Quarter 2014 is given below.

#### 1. Yellow Fever Surveillance

a. No. with valid certificate	-	05
b. No. without valid certificate & Deported	-	00
c. No. without valid certificate & Isolated	-	00
2. Disinsection of Aircrafts		
a No. of flights arrived	-	5915
b No. of flights has to be disinsected	-	5113
c No. of flights disinsected	-	4747
3. Passenger Arrivals & departures		
a No. Of passengers Arrived	-	899336
b No.of Passengers Departures	-	_
4. Release of Human Remains		
a. No. of human Remains released	-	99
b. No. of released to J.M.O. For postmortern	-	05
c. No. Alleged suicide	-	03
5 Surveillance of other infectious diseases	-	Nil
6 Airport Sanitation		
a No of sanitary inspections carried out including Food establishment	-	32
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	_	00
given		
b Health talk given to staff	-	20
<b>8</b> a. No. of water samples taken for Bacteriological Analysis	-	06
b. No. Reported Contaminated	-	00

### 18. LEPROSY

Table 14: Quarterly return of Leprosy statistics –2nd quarter 2014

### 1. National

	At the	end of the quarte	er	Cumulative for end of the quarter			
	2nd QTR,2014	2nd QTR,2013	Diff (%)	2014	2013	Diff (%)	
New patients detected	606	558	8.60	1174	1052	11.59	
Children	61	46	32.6	111	95	16.84	
Grade 2 Deformities	47	32	46.87	100	71	40.84	
Multi-Bacillary	291	276	5.43	571	509	12.18	
Females	231	243	-4.93	442	442	0	

### 2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	33	04	04	17	09
Kandy	18	02	02	09	06
Matale	09	01	01	05	03
NuwaraEliya	06	01	01	03	00
Eastern	63	02	08	33	25
Ampara	12	00	01	05	04
Batticaloa	27	01	06	11	12
Kalmunai	21	01	01	16	09
Trincomalee	03	00	00	01	00
Northern	31	04	02	14	14
Jaffna	17	02	02	06	06
Kilinochchi	02	01	00	02	01
Manner	11	01	00	06	07
Vauniya	01		00	00	00
North Central	39	01	03	18	14
Anuradhapura	21	00	01	11	09
Pollonnaruwa	18	01	02	07	05
North Western	54	04	04	28	24
Kurunegala	31	01	01	14	15
Puttalam	23	03	03	14	09
Sabaragamuwa	45	07	03	28	15
Kegalle	18	02	02	07	05
Rathnapura	27	05	01	21	10
Southern	77	05	06	32	25
Galle	33	02	03	12	10
Hambanthota	16	02	01	07	04
Matara	28	01	02	13	11
Uva	13	02	00	11	03
Baddulla	06	02	00	05	02
Monaragala	07	00	00	06	01
Western	251	18	31	110	102
Colombo	125	08	23	55	54
Gampaha	71	07	05	36	25
Kalutara	55	03	03	19	23
Sri Lanka	606	47	61	291	231

Source : Anti Leprosy Campaign

#### 19. SEXUALLY TRANSMITTED DISEASES

Table 15: New episodes of STD/HIV/AIDS reported or treated at STD clinics in Sri Lanka –2nd quarter 2014

Disease			ses or new s during the		Total new cases or new episodes for the calendar year up to end of the quarter **			
		Male	Female	Total	Male	Female	Total	
HIV positiv	ves <sup>1</sup>	44	15	59	70	32	102	
AIDS		09	02	11	22	08	30	
	Early Syphilis <sup>2</sup>	45	16	61	79	34	113	
Syphilis	Late Syphilis <sup>3</sup>	206	119	325	388	205	593	
	Congenital Syphilis <sup>4</sup>	01	03	04	01	06	07	
Gonorrho	ea <sup>5</sup>	121	30	151	233	57	290	
Ophthalm	ia Neonatorum <sup>6</sup>	00	00	00	01	01	02	
Non speci	fic cervicitis/urethritis	125	334	459	291	688	979	
Chlamydia	al infection	00	00	00	00	00	00	
Genital He	erpes	302	415	717	611	795	1406	
Genital W	arts	269	189	458	526	390	916	
Chancroid		01	00	01	02	00	02	
Trichomor	niasis	01	28	29	04	55	59	
Candidias	Candidiasis		338	531	415	714	1129	
Bacterial Vaginosis		00	271	271	02	558	560	
Other sex	ually transmitted diseases <sup>7</sup>	92	29	121	213	65	278	
Non vene	real	963	454	1417	1892	986	2878	

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
- Includes AIDS cases
- <sup>2</sup> Diagnosed within 2 years of infection and considered to be infectious
  - Diagnosed after 2 years of infection and considered to be non-infectious
- Includes both early and late cases
- Includes presumptive Gonorrhoea
- Includes both gonococcal and chlamydial conjunctivitis in neonatal period
- Includes Lymphogranuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.
- Number of STD clinic attendees who were not having sexually transmitted diseases.

## 20. BACTERIOLOGY REPORT, MEDICAL RESEARCH INSTITUTE

#### Table 16

	APR	MAY	JUN
(A) CHOLERA			
No. of stool specimens Examined	16	42	08
No. of positives	00	00	00
(B) SALMONELLA			
No of blood specimens examined	317	359	325
S.typhi	00	00	00
S.paratyphi A	00	00	00
No of stools specimens examined	66	109	24
S.typhi	00	00	00
S.paratyphi A	00	00	00
Others	01	05	01
(C) SHIGELLA			
No of stool specimens examined	66	109	24
Sh.sonnei	00	01	00
Sh.flexneri 1	00	00	00
Sh.flexneri 2	00	00	00
Sh.flexneri 3	00	00	00
Sh.flexneri 4	00	00	00
Sh.flexneri 5	00	00	00
Sh.flexneri 6	00	00	00
(D) ENTERO PATHOGENIC E.COLI			
No of stool specimens examined	03	02	00
No of positive	00	00	00
(E) CAMPYLOBACTER			
No of stool specimens examined	09	21	10
No of Positives	00	00	00
(F) ISOLATES			
Clinical	18	21	26
S. Typhi	00	00	01
S. Paratyphi A	00	00	01
Other Salmonella	05	07	09
Shigella species	03	03	01

#### 21. SURVEILLANCE OF MENINGITIS

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 2nd quarter 2014, 248 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this,168 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Badulla district (25) followed by Kalutara (17) and Kegalla (14) districts.

Thirty nine percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 21% belonged to the age group 1-5 years and 15% belonged to age group 6-15 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 June 2014.

CSF Culture Report		
CSF Culture	Number	(%)
CSF results available	99	45%
No Growth	(94)	
Grouup B streptococci	(03)	
Haemophillus influenza	(01) (01)	
Streptococcus Pneumoniae	(01)	
Culopiossocias i nodinisimas		
Culture results not known	117	53%
Not done	04	02%
Total	220	100%
Final outcome of the patient		
Outcome	Number	(%)
Cured	201	91%
Died	07	03%
Information not available	12	06%
Total	220	100%
Final Diagnosis (based on clinical an	d lab findings)	
Diagnosis	Number	(%)
Culture confirmed	10	05%
Probable bacterial meningitis	19	07%
Probable viral meningitis	23	10%
Suspected Meningitis	168	76%

#### 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**

Sixteen surveillance hospitals have reported out of nineteen surveillance hospitals. Reporting rate was 84.21%. Total 17640 ILI cases were reported out of 10,44605 OPD visits (1.69 %) in the 2nd quarter of year 2014. Out of a total of reported ILI cases, maximum number was reported from G.H Ampara 2491 (14.12%) and majority age group reported was age 15 – 49 years, 5938 (33.66%).

## Severe Acute Respiratory Infections (SARI) Surveillance

A total of 1311 SARI cases were reported from 34316 admissions (3.82%) of all 4 surveillance hospitals (T.H Ragama, G.H Matara, T.H Peradeniya and LRH). Maximum number of SARI cases were reported from G.H Matara 593 (45.23%) and majority age group reported was 1-4 years, 474 (36.15%).

#### **Laboratory Component**

#### **ILI Surveillance**

Under ILI laboratory surveillance a total of 187 samples were received from all sentinel hospitals for the 2nd quarter 2014. There were 48 samples in April, 63 in May, and in June 66. G.H Badulla (31) had sent in the highest number of samples followed by NHSL (30), T.H Kurunegala (25) GH Ratnapura (25), T.H Karapitiya (23) and T.H Anuradhapura (21).

Seven sentinel hospitals had sent samples in each month within the quarter (53.85%). Four hospitals had done poor performance. G.H Chilaw had not sent samples. IDH, T.H Jaffna, G.H Polonnaruwa had sent samples for one month only.

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

	APR	MAY	JUN	Total
NHSL	10	10	10	30
CSTH	01	01	01	03
IDH	02	00	00	02
GH Nuwara Eliya	06	04	00	10
TH Karapitiya	02	10	11	23
TH Jaffna	00	03	00	03
TH Batticaloa	04	03	00	07
TH Kurunegala	10	05	10	25
GH Chilaw	00	00	00	00
TH Anuradhapura	07	10	04	21
GH Polonnaruwa	00	00	07	07
GH Badulla	06	12	13	31
GH Ratnapura	10	05	10	25
Total	48	63	66	187

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

Table 19: Types of Respiratory Viruses Isolated in ILI samples – 2nd quarter 2014

Month	Total	Influenza A	(H1N1pdm) 9	A (H3N2)	A untyped	Influenza B	Influenza yield
APR	48	08	00	07	00	00	03.12%
MA Y	63	15	00	12	02	00	46.03%
JUN	66	80	00	04	00	01	19.69%
TOT AL	187	31	00	23	02	01	30.48%

# Severe Acute Respiratory Infections (SARI) Surveillance

Out of the total of (87) samples collected to the MRI, T.H Ragama had sent the highest number of samples (29) followed by LHR (28), G.H Matara (17) and T.H Peradeniya (13).

Table 20: Monthly performance of sentinel hospitals in the laboratory component of the SARI surveillance - 2nd quarter 2014

Institution	APR	MAY	JUN	Total
LRH	05	16	07	28
T.H Ragama	09	05	15	29
GH Matara	04	08	05	17
TH Peradeniya	01	04	80	13
Total	19	33	35	87

Predominant circulating Influenza virus strain in the quarter was Influenza A and Influenza (H3N2).

Table 21: Types of Respiratory Viruses Isolated in SARI Samples - 2nd quarter 2014

Month	Total	Influenza A	(H1N1pdm)209	A (H3N2)	A (untyped)	Influenza B	Influenza yield	
APR	19	08	00	03	00	00	57.89%	
MAY	33	04	00	00 00		00	12.12%	
JUN	35	02	00	01	00	00	08.57%	
Total	87	14	00	04	00	00	09.19%	

#### **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 – 2nd quarter 2014

Mont	No. of sa	imples	Districts samples					
h	Pooled	Serum	were collected from					
APR	451	255	Colombo, Gampaha, Vavuniya, Badulla, Puttalam					
MAY	214	385	Colombo, Gampaha, Rathnapura, Vavuniya, Trincomalee, Puttalam, Hambantota, Jaffna.					
JUN	191	505	Colombo, Gampaha, V a v u n i y a , Anuradhapura, Badulla, Kegalle, Rathnapura.					
Total	856	1145						

#### 23. SPECIAL REPORT

# Measles Elimination programme : Annual report 2013 Introduction and Measles vaccination history

Measles is a highly contagious disease responsible for a high degree of morbidity and mortality among children in the past. Fatal cases of measles is now rarely reported after successful implementation of the National Immunization Programme. The measles vaccine was introduced into the Expanded Programme Immunization (EPI) in Sri Lanka in 1984 at the age of 9 months. Morbidity and mortality of measles were reduced remarkably since then. But an outbreak of measles with over 15,000 infected cases experienced in Sri Lanka from September 1999 to June 2000. This was identified and described as possible accumulation of susceptible individuals over the years since the efficacy of measles vaccine is only 85% when given at the age of 9 months. The decision to introduce the 2<sup>nd</sup> dose of measles containing vaccine was taken based on this incident and MR vaccine (Rubella containing Measles vaccine) was introduced to all Measles cases were remarkably reduced since 2001 to 2010. National Immunization Summit in 2010 discussed the requirement of adding Mumps vaccination to EPI programme considering the Mumps burden in the country. As with the global recommendations on advancing the age with low measles transmission (incidence of clinical cases: 4/million population in 2009), expert discussions led to the recommendation of advancing the age at first measles vaccination to 1 year of age expecting a better seroconversion, and change over to MMR (Measles, Mumps and Rubella) vaccine to add Mumps component to EPI schedule. This schedule change was effected since November 2011.

An outbreak of measles was reported during 2013 after 11 years with 3629 suspected cases including around 1,800 laboratory confirmed measles cases. This was experienced from January to December 2013.

#### Measles elimination plan:

Sri Lanka is planning to achieve elimination of Measles by 2018 with the achievement goal of <1 measles case per million population.

#### Immunization coverage

National vaccination coverage of Measles Containing Vaccine(MCV) 1 (MMR 1) is 97% and MMR 2 vaccination coverage was 96% in 2013. Out of 26 districts 16 districts maintained >95% coverage while all 26 districts maintained >90% MMR 1 coverage.

Table 23: Measles vaccination coverage by district: 2013

District	MCV1 %
Colombo	98
Gampaha	98
Kalutara	97
Kandy	91
Matale	97
Nuwaraeliya	94
Galle	97
Matara	98
Hambantota	95
Jaffna	92
Kilinochchi	98
Mannar	98
Vavuniya	90
Mullativu	98
Batticaloa	94
Ampara	92
Trincomalee	96
Kalmunai	93
Kurunegala	98
Puttalam	94
Anuradhapura	97
Polonnaruwa	98
Badulla	96
Monaragala	92
Ratnapura	95
Kegalle	94

#### Measles surveillance:

Case based investigation: monitoring measles disease situation with strengthened disease surveillance activities including field investigation of each case and laboratory confirmation of all suspected measles cases are expected in case based investigations.

Clinically suspected measles cases are considered as clinically compatible/ clinically confirmed, if patient is presented with fever and maculopapular rash with one of cough, coryza (runny nose) or conjunctivitis. Three thousand six hundred and twenty nine (3629) suspected measles cases were notified to the Epidemiology Unit during 2014 and 2725 of them were clinically confirmed as measles by clinicians or at the field level investigation by public health staff, based on the clinical case definition of measles. Out of 2725 clinically confirmed cases at field level investigations, 1686 cases (62%) were specially investigated at field level on collection of more information by Medical Officers of Health (MOOH) at field level, and not identified any significant immunity gaps or specific reasons for measles transmission but identified inadequate laboratory conformation rate among all age groups especially among vaccinated age groups.

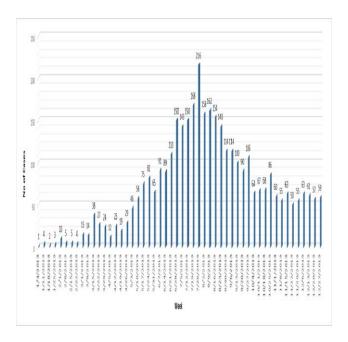
Epidemiology Unit is the main coordinating centre for measles elimination programme for the Ministry of Health. Measles surveillance data is received at the Epidemiology Unit from clinicians in curative institutions (sentinel site hospitals) where the patients seek treatment/medical care and also weekly reporting received from Medical Officers of Health at field level. Sentinel site hospital surveillance has been set up in major hospitals in every Regional Director of Health Services [RDHS] Division where Consultant Paediatricians are in place by incorporating into Acute Flaccid Paralysis (AFP) surveillance in Polio Eradication . Regional Epidemiologists are expected to visit their respective sentinel site hospitals in districts at least once a week. However, the premier children hospital in Colombo (Lady Ridgeway Children's Hospital) and the National Hospital of Sri Lanka in Colombo are under the direct purview of the Epidemiology Unit.

A weekly report of measles suspected cases from sentinel site hospitals and a compiled monthly report of measles cases (integrated with AFP surveillance) from the Regional Epidemiologists in each district are received at the Epidemiology Unit and are closely monitored.

Measles cases start rising since December 2012 and the Epidemiology Unit has closely monitored the situation and observed the gradual increase of numbers. Information by May 2013 showed a higher proportion (>50%) of confirmed measles cases among infants with a majority being in 6 months to 1 year of age who have not received MMR 1<sup>st</sup>dose. Advisory Committee on Communicable Diseases decided to vaccinate 6 months to 1 year old infants as an outbreak control measure with the intention of reduction of transmission in the country. Measles cases among vaccination due age groups were minimum and next majority of cases were above 30 years of age, who have not received Measles vaccination.

Supplementary Immunization Activity (SIA) was carried out throughout the island among 6 months to 1 year old infants in the month of July 2013, with media publicity and public awareness and vaccine acceptance was very high. Measles vaccination coverage of SIA was 96% and conducted as one time activity to control the outbreak situation. Measles rising trend was gradually reduced with significant reduction of measles cases among infants after SIA but remained static around 50-60 cases per week by the end of the year 2013.

Figure 1: Number of Measles cases by week:2013



Patients (2377) from January to December who were with fever and maculopapular rash were investigated in the WHO accredited virology laboratory at the Medical Research Institute (MRI) for measles IgM antibodies. Out of the suspected total reported, the laboratory testing rate and identified 1759 cases were serology was 65% positive for Measles IgM antibodies. The calculated non measles non rubella rate was 3 / 100,000 population but identified the gaps in requirement of improving laboratory testing rate of all suspected measles cases from 65% to at least 80% in the consecutive one year period. A new circular with guidelines on Measles elimination, combined with Rubella/Congenital Rubella Elimination has been circulated among all clinicians and public health staff with a view to controlling outbreak, improving laboratory confirmation, improving the quality of field level investigations and achieving measles elimination goals by 2018.

#### 24. SUMMARY OF NOTIFIABLE DISEASES

Table 24

I	D	Ш	Ш	ŢĪ	I	_	3	ŢΙO	=	J	<	5	00	=	C	3	3	
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	40	02	23	14	00	33	63	01	00	01	09	00	4572	80	126	06	11	00
Gampaha	35	01	08	01	03	44	93	02	00	01	78	00	2312	203	63	06	13	00
Kalutara	51	01	09	08	01	49	57	00	00	00	03	00	787	15	71	05	23	00
Kandy	17	02	07	04	00	07	26	01	00	29	35	02	433	139	53	05	04	01
Matale	13	00	02	06	01	08	07	00	00	00	56	00	109	53	18	07	16	19
Nuwara-Eliya	97	01	04	59	00	08	00	01	00	18	10	00	96	59	29	02	11	00
Galle	32	00	03	28	00	45	37	20	00	22	05	00	249	123	151	12	03	01
Hambantota	14	01	01	07	00	12	24	00	00	06	04	00	189	35	36	02	07	80
Matara	20	01	02	07	00	20	43	00	00	01	07	00	98	70	48	07	04	28
Jaffna	120	01	62	19	00	01	25	10	00	36	01	02	221	65	29	14	06	00
Kilinochchi	11	00	05	00	00	00	00	00	00	04	00	00	07	17	11	03	00	01
Mannar	16	02	09	09	00	00	00	00	00	01	00	00	23	07	07	00	05	00
Vavuniya	07	00	08	13	00	03	04	01	00	01	02	00	48	23	02	03	06	02
Mullaitivu	21	00	02	04	01	01	00	00	00	03	00	00	20	11	00	00	01	03
Batticaloa	61	00	04	06	01	08	18	02	01	00	02	00	306	49	20	01	01	00
Ampara	13	01	01	04	00	06	19	00	00	04	03	00	43	23	28	14	04	02
Trincomalee	17	00	01	03	00	05	03	01	00	04	02	03	270	37	26	05	02	03
Kurunegala	45	07	05	13	01	29	85	03	00	04	16	00	425	92	98	09	15	31
Puttalam	19	01	06	00	03	08	33	01	00	02	02	01	144	25	19	04	08	04
Anuradhapura	22	02	00	14	00	25	43	06	00	04	04	00	127	53	56	13	11	107
Polonnaruwa	11	02	03	00	00	19	39	00	00	03	03	00	119	21	50	11	15	41
Badulla	28	05	06	03	00	15	47	00	00	27	71	00	158	72	15	02	38	00
Moneragala	08	00	01	06	01	20	13	01	00	53	21	01	53	37	22	02	08	07
Ratnapura	81	04	07	14	00	99	32	01	01	25	106	01	1288	119	80	08	12	11
Kegalle	35	05	13	31	00	44	22	00	00	16	28	01	559	109	64	13	21	00
Kalmunai	29	00	02	50	00	00	00	09	00	00	00	00	54	50	18	06	03	00
Total	863	39	194	323	12	509	733	60	02	265	468	11	12710	1587	1140	160	248	341

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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