# **EPIDEMIOLOGICAL BULLETIN**

# **SRI LANKA**

Volume 33

# Second Quarter 2012

# **EPIDEMIOLOGY UNIT**

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CO	NIENIS P	AGE	NU
1.	Surveillance of Poliomyelitis		02
2.	Surveillance of Cholera		03
3.	Surveillance of Tetanus		03
4.	Surveillance of Measles		03
5.	Surveillance of Leptospirosis		04
6.	Surveillance of Human Rabies		04
	& Control activities		
7.	Surveillance of Enteric Fever		04
8.	Surveillance of Viral Hepatitis		04
9.	Surveillance of Dysentery		04
10.	Surveillance of Malaria		04
11.	Surveillance of Japanese Encephalitis		05
12.	Surveillance of Dengue Fever		07
13.	Surveillance of Rubella		80
14.	Surveillance report on AEFI		80
15.	Surveillance of Tuberculosis		10
16.	Surveillance at Sea Port		10
17.	Surveillance at Air Port		10
18.	Surveillance of Leprosy		11
19.	Sexually Transmitted Diseases		12
20.	Pattern of Enteric Pathogens isolated		13
21.	Surveillance of Meningitis		13
22.	Influenza Surveillance		14
23.	Special Report		
	Surveillance Report on Influenza 201	1	17
24.	Summary of Notifiable Diseases	:	20







Epidemiology U

# **1. POLIOMYELITIS**

Twenty two (22) Acute Flaccid cases were notified to the Epidemiology Unit during the 2<sup>nd</sup> quarter 2012. This is almost similar to 23 AFP cases reported during the 2<sup>nd</sup> quarter 2011. This number is less than the expected number of AFP cases per quarter to meet the WHO surveillance criteria of 2:100,000 under 15 year population, which is 27 according to the updated current population census survey. The non-polio AFP rate for the second quarter of 2012 was 1.6:100,000.

# **Notification of AFP Cases from Hospitals**

Currently 67 hospitals are functioning as sentinel sites for AFP surveillance and sentinel sites for AFP are defined as hospitals with availability of Consultant Pediatricians' services. The majority of the cases (26%) were notified from the main sentinel site hospital for AFP, the Lady Ridgeway Children's Hospital (LRH).Teaching Hospital Karapitiya, National hospital of Sri Lanka (NHSL), T.H. Peradeniya. P.G.H. Badulla and T.H.Kandy have reported 2 patients each. All cases reported are given in the table 1 below.

#### Table 01

Notification of AFP cases by sentinel Hospital 2nd Quarter 2012

Hospital	AFP cases		
LRH	6		
NHSL	2		
TH Karapitiya	2		
TH Peradeniya	2		
TH Kandy	2		
GH Badulla	2		
BH Nuwaraeliya	1		
SBMCH	1		
GH Vavuniya	1		
TH Jaffna	1		
TH Kurunegala	1		
GH Polonnaruwa	1		
Total	22		

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

The highest number of cases was reported from districts of Colombo, Nuwara Eliya 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.

Table 02.

# Distribution of AFP cases by district & MOH area, 2nd quarter 2012

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Maharagama	1
		Homagama	1
		Pitakotte	1
	Gampaha	Negambo	1
	Kalutara	Madurawala	1
Southern	Hambantota	Tissamaharama	1
Uva	Badulla	Lunugala	1
Sabaraga- muwa	Kegalle	Mawanella	1
	Ratnapura	Embilipitiya	1
Northern	Jaffna	Sandilippai	1
	Mullaitivu	Mallavi	1
North West- ern	Kurunegala	Kurunegala	1
		Maho	1
		Galgamuwa	1
North Cen- tral	Polonnaruwa	Lankapura	1
	Anurad- hapura	Medawachchiya	1
Eastern	Trincomalee	Gomarakan- dawala	1
Central	Nuwara Eliya	Ragala	1
		Walapane	2
	Kandy	Akurana	1
		Wattegama	1
Total			22

### Age and Sex Distribution of AFP Cases

Volume 53

Majority (41%) of cases was between 1-4 years during the second quarter this year.

Majority (13, 59%) of the cases were girls during the  $2^{nd}$  quarter 2012.

The table 3 below shows the age distribution of AFP cases in 2nd quarter 2012.

# Table 03. Distribution of AFP cases by Age 2nd Quarter 2012

Age Group	Total
<1 year old	1
1-4 year old	9
5-9 year old	5
10-15 year old	7
Total	22

Two stool samples collected within 14 days of onset of paralysis are required at the Medical Research Institute for polio virology. 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 make the samples of 'good condition'. All 22 AFP cases (100%) reported in the 2nd quarter 2012 had two timely stool samples sent to MRI for polio virology.

The satisfactory stool specimen collection rate was 86% and this complies with the expected national target of 80% and very much similar with the compatible quarter in the previous year (89%).

All AFP cases reported during the quarter were excluded as non polio cases in the absence of polio virus in timely collected stool samples, on clinician diagnosis and the absence of residual paralysis on follow up of the patient.

# 2. CHOLERA

2<sup>nd</sup> Quarter

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2012. Last case of cholera was reported in the country in January 2003.

# 3. TETANUS

During the 2nd Quarter 2012, 02 suspected Tetanus cases were notified to the Epidemiology Unit. This is in comparison to 03 cases in the previous quarter.

# 4. MEASLES

Eleven (11) cases of suspected measles were reported during the second quarter 2012 but only 3 cases were compatible with clinical surveillance case definition of "fever and rash with one of the signs of cough, coryza or conjunctivitis". This number is in contrast to 49 suspected cases and 28 clinically confirmed cases respectively in the compatible quarter, in the previous year.

These clinical cases were field investigated by the respective medical officers of the patients' residential areas in the districts of Nuwara Eliya (Kotagala) and Trincomalee. They have sent their special field investigation reports to the Epidemiology unit with 100% field investigation rate. All 3 were below the age of 9 years and vaccinated with measles containing vaccines. Of them, 2 were serologically investigated at the Virology laboratory MRI and identified to be free of IgM antibodies for Measles.

Laboratory investigations of 19 fever and rash patients suspected of Measles or Rubella were carried out in the WHO accredited virology Laboratory at the Medical Research Institute (MRI) and no cases were serology positive for Measles IgM antibodies. Outbreaks of measles were not reported during the quarter.

# Volume 53

### 5. LEPTOSPIROSIS

During the 2nd Quarter 2012, 596 cases and 8 deaths (CFR 1.3%) due to Leptospirosis were notified to the Epidemiology Unit compared to 730 cases and 14 deaths in the previous quarter and 1930 cases and 13 deaths during corresponding quarter of 2011.

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

#### Table 05

SELECTED CHARACTERISTICS OF LEPTOSPIROSIS PATIENTS(%)- 2nd QUARTER 2012

Age Group	Sex		
	Male	Female	
0-10 years	0.36	0.00	
11-20 years	6.57	0.36	
21-30 years	16.79	1.82	
31-40 years	20.07	2.55	
41-50 years	21.17	1.82	
51-60 years	17.15	1.46	
>60years	8.39	1.46	
Total	90.51	9.49	

#### 6. HUMAN RABIES

Thirteen cases of Human Rabies were reported to the Epidemiology Unit in the 2<sup>nd</sup> quarter 2012 (based on special surveillance) compared to 11 cases in the previous quarter and 12cases in the corresponding quarter of year 2011.

Among the reported cases, all the cases (13) were investigated and confirmed as Human Rabies, 10 (76.92%) were males and 3 (23.08%) were females.

Batticaloa district reported the highest number of cases (3 cases) accounting for 23.08% of the total case load followed by Colombo (2 cases i.e.15.38%), Monaragala(2 cases i.e15.38%).

## **Animal Rabies**

During this quarter 143 dogs were reported positive for rabies, compared to 162 in the previous quarter and 106 positive in the same period in the last year. In addition, the following animals were also reported positive;

Cats-21, Domestic Ruminants-04

# **Rabies Control Activities**

**Dog vaccination** - A total of 305889 dogs were immunized during the Quarter under review when compared to 231486 in the previous quarter and 295958 in corresponding Quarter of the last year.

#### **Animal Birth control**

**Chemical**- A total of 12368 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

**Surgical**-25512 female dogs were subjected to sterilization by surgical method during the quarter under review.

# 8. VIRAL HEPATITIS

In the 2<sup>nd</sup> Quarter 2012, a total of 585 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 552 cases in the previous quarter and 220 cases in the corresponding quarter of 2011. Kegalle (153 cases) & Gampaha districts (93 cases) reported the highest number of cases followed by Monaragala(59) and Kurunegala (59) districts.

# 7. ENTERIC FEVER

In the 2<sup>nd</sup> Quarter 2012, a total of 272 cases of Enteric fever were reported to the Epidemiology Unit, compared to 455 cases in the previous quarter and 280 cases in the corresponding quarter of 2011. The district of Jaffna (74 cases) reported the highest number of cases, followed by Colombo (45cases).

# 9. DYSENTERY

In the 2<sup>nd</sup> Quarter 2012, a total of 731 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 746 cases in the previous quarter and 2224 cases in the corresponding quarter of 2011. Nuwaraeliya (60 cases), Batticaloa (51 Cases) and Ratnapura (51 cases) reported the highest number of cases.

#### **10. MALARIA**

The number of positive cases detected during the  $2^{nd}$  quarter of 2012, shows a considerable reduction compared to the number of malaria cases detected during the same period of 2011. (Table 07)

# **11.JAPANESE ENCEPHALITIS (JE)**

During the 2<sup>nd</sup> quarter of 2012, 42 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the Weekly Return of Communicable Diseases (WRCD). The number of cases that were subjected to case based investigation during the 2<sup>nd</sup> quarter of 2012 was 18. Among these 18 cases, 8 were found to be lab confirmed as JE. All these 8 (100%) cases were investigated by the MOH. Among them one (12.5%) was under 10 years of age. The highest number of confirmed JE cases were (5) reported from Vavuniya and Ratnapura districts. In the majority of confirmed JE cases, immunization status was unknown. One death was reported due to JE during the quarter.

In the corresponding quarter of 2011, there were 44 reported cases of Encephalitis, with 03 lab confirmed JE and two deaths . Table 06

# SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – 2nd QUARTER 2012

Sex	Male	03
	Female	05
Age group	10 <y< td=""><td>1</td></y<>	1
	11-20Y	2
	21-30Y	1
	31-40Y	1
	41-50Y	1
	51-60Y	2
District	Hambantota	02
	Puttalam	01
	Badulla	01
	Matara	01
	Trincomalee	01
	Anuradhapura	01
	No Data	01
MOH Areas	Ambalantota	01
	Katuwana	01
	Dankotuwa	01
	Haldummulla	01
	Weligama	01
	Gomarankadawala	01
	Madawachchiya	01
	No Data	01
Immunization	Immunized	02
	Non immunized	03
	Unknown	03

Table 07

# Results of Blood smear examination for malaria parasites - 2<sup>nd</sup> Quarter 2012

	2 <sup>nd</sup> quarter 2011	2 <sup>nd</sup> quarter 2012
No. of blood smears examined	236,735	230,262
No. of positives	27	3
No. of <i>P. vivax</i>	25	2
No. of P. falciparum	1	1
No. of mixed infections	1	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.01%	0.0%
P.v. : P.f. ratio	12:1	2:1
Percentage of infant positives	0%	0%

## 2<sup>nd</sup> Quarter

# Volume 53 Table 08

# DISTRIBUTION OF MALARIA CASES BY RMO DIVISION

RMO	Blood smears	Positives	P.v.	P.f.	Mixed
Colombo	19254	0	0	0	0
Gampaha	7157	0	0	0	0
Kalutara	2354	0	0	0	0
Kandy	11185	0	0	0	0
Matale	6205	0	0	0	0
Nuwara Eliya	460	0	0	0	0
Galle	3714	0	0	0	0
Matara	5067	0	0	0	0
Hambantota	6138	0	0	0	0
Jaffna	15330	1	1	0	0
Kilinochchi	10613	0	0	0	0
Vavuniya	8842	0	0	0	0
Mannar	7322	0	0	0	0
Mullaitivu	6519	0	0	0	0
Batticaloa	19268	0	0	0	0
Ampara	6373	0	0	0	0
Kalmune	11203	0	0	0	0
Tricomalie	11554	1	0	1	0
Kurunegala	15366	0	0	0	0
Maho	2847	0	0	0	0
Puttalam	4768	0	0	0	0
Anuradhapura	18417	0	0	0	0
Pollonnaruwa	9344	0	0	0	0
Badulla	5681	0	0	0	0
Monaragala	6497	1	1	0	0
Rathnapura	6676	0	0	0	0
Kegalle	2108	0	0	0	0
TOTAL	230262	3	2	1	0

# MORBIDITY AND MORTALITY DUE TO DF/DHF - 2ND QUARTER 2012

RDHS Division	Cases	Percent- age (%)	Deaths
Colombo	2246	21.31%	18
Gampaha	1944	18.45%	10
Kalutara	751	7.13%	6
Kandy	614	5.83%	5
Matale	148	1.40%	0
N' Eliya	101	0.96%	0
Galle	412	3.91%	1
Hambantota	130	1.23%	0
Matara	325	3.08%	1
Jaffna	85	0.81%	0
Kilinochchi	38	0.36%	0
Mannar	30	0.28%	0
Vavuniya	9	0.09%	0
Mullaitivu	8	0.08%	0
Batticaloa	99	0.94%	0
Ampara	45	0.43%	0
Trincomalee	30	0.28%	0
Kurunegala	582	5.52%	2
Puttalam	331	3.14%	4
A'pura	111	1.05%	0
Polonnaruwa	65	0.62%	0
Badulla	88	0.84%	0
Moneragala	75	0.71%	0
Ratnapura	1314	12.47%	3
Kegalle	916	8.69%	5
Kalmunai	41	0.39%	1
Total	10538	100.00%	56

P.v.– Plasmodium vivax

P.f.- Plasmodium falciparum

# Volume 53

### Table 10

#### RESULTS OF LARVAL SURVEY CARRIED OUT BY DEPARTMENT OF ENTOMOLOGY, MRI 2ND QUARTER 2012

	April 2012		May 2012		luno 2012	
A =	April 2012		Nay 2012			
Area	Breteau Inde	ex	Breteau Index		Breteau Index	
	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus
СМС	4.6	1.1			2.5	0.0
Moratuwa	2.7	2.7	3.2	4.0	1.75	2.28
Kaduwela	0.0	13.7	0.0	13.6	0.0	22.0
Nugegoda	2.3	4.6	0.8	4.0	0.0	12.3
Piliyandala	0.0	14.0	1.0	5.5	0.0	12.3
Ragama	0.6	10.1	0.0	4.9	1.16	10.5
Ja Ela	5.7	10.3	3.0	5.5	2.0	6.6
Kelaniya	2.7	6.0	0.5	1.5	2.0	8.7
Mahara					0.0	10.5
Wattala					0.0	1.54
Seeduwa	-				0.5	8.04
Mirigama		-	-	-	0.0	12.6
Kalutara		-		-	0.0	14.3

2nd Quarter

#### Table 11

## DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI 2ND QUARTER 2012

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF
April	481	175
May	524	284
June	733	381
Total	1738	840

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

During the 2<sup>nd</sup> Quarter 2012, 10538 cases of DF/DHF and 56 deaths were reported (0.53% CFR) when compared to 9759 cases of DF/DHF and 42 deaths (0.43% CFR) reported during the 1<sup>st</sup> Quarter 2012. Proportion of cases notified in April, May, June was 19.24 %, 24.21%, and 56.55% respectively.

Table 09 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 2nd quarter 2012.

Special surveillance data on 2763 confirmed cases were received and analyzed for the  $2^{nd}$  quarter 2012. Age distribution of reported cases were <4 years of age in 234 (8.47%), 5- 9 years of age in 349(12.63%), 10 - 14 years of age in 316 (11.44%) 15 – 19 years of age in 233 (8.43%), 20 - 24 years of age in 302 (10.93%),25 - 29 years of age in 276 (9.99%), 30 - 34 years of age in 224 (8.11%), 35 - 39 years of age in 176 (6.37%),

40 - 44 years of age in 166 (6.01%), 45 - 49 years of age in 114 (4.13%), 50 - 54 years of age in 133 (4.81%), 55 - 59 years of age in 92 (3.33%), >60 years of age in 133 (4.81%)

According to the clinical findings majority of the reported cases (86.72%) were classified as dengue fever and 13.14% were classified as DHF with 9.12%, 3.08%, 0.83%, 0.11% falling into DHF I, DHF II, DHF III, DHF IV categories respectively.

Results of entomological surveillance carried out in the Western Province by the Department of Entomology, MRI during the current quarter is given in Table 10.

During the 2<sup>nd</sup> Quarter 2012, 1738 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. From the total, 840 (48.33%) samples were confirmed as positive (Table 11).

#### 13. RUBELLA

During the whole guarter, 5 suspected Rubella disease cases were reported and 3 of them were compatible with surveillance case definition [fever and maculopapuler rash, with arthralgia/arthritis, lymphadenopathy (suboccipital, post auricular and cervical) or conjunctivitis] during field investigations carried out by the Medical Officers of Health (MOOH) at the field level in the respective residences of each reported patient. The field level investigation identified 2 of them were adult males above 30 years. Comparing the compatible quarter in the previous year, only 2 cases of suspected Rubella cases were reported and 1 of them was compatible with surveillance case definition. Outbreaks were not reported during the quarter for rubella infection.

Laboratory investigations of fever and rash patients suspected of Measles or Rubella (27) were carried out in the WHO accredited Virology Laboratory in the Medical Research Institute (MRI) and identified 3 cases were serology positive for Rubella IgM antibodies. All three are 18-19 year old males.

# 14. SURVEILLANCE REPORT ON AEFI 2ND QUARTER 2012

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 2<sup>nd</sup> Quarter of 2012 and has reached 95.8% completeness of reports, while 36.1% reports were received in time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Galle, Hambantota, Jaffna, Batticaloa, Polonnaruwa, Moneragala, Kegalle and, Kalmunai were able to send all reports. The completeness for Anuradhapura (98.2%), Badulla (97.9%), Nuwara Eliya (97.4%), Puttalam (97%), Matara (96.1) too were high. The best timeliness was reported from Gampaha district (65.9%) followed by Kegalle (57.6%) and Monaragala (57.6%). (Table 12)

The highest percentage of nil reports were received from Kilinochchi (90.9%) followed by Batticaloa district (78.6%) which is much higher than the Sri Lanka average (43.6%) indicating the need for more attention for surveillance. The lowest percentage of 9.8% nil returns received was from the Gampaha district and followed by Colombo (12.5) and Jaffna (16.7%) districts indicate enhanced AEFI surveillance in district.

The highest rate (311.1 per 100,000 doses antigen administered) of AEFI was reported from Mullativu district with the number of 21 AEFI. The highest number (222) and rate of AEFI (269.5 per 100,000 doses antigen administered) were reported against PVV 1<sup>st</sup> dose vaccine. A total 549 AEFIs with a rate of 213.4 per 100,000 doses administered was reported for all three doses of PVV. High Fever (387), Allergic Reaction (355), Nodule (158) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (214 cases: 83.2 per 100,000 doses administered) and DPT (86 cases: 97.7 per 100,000 doses administered) vaccines. For Allergic Reactions, it was largely due to MMR (103 cases: 59.9 per 100,000 doses administered) and PVV (91 cases: 103.3 per 100,000 doses administered).

There were 5 cases of anaphylaxis reported, but all had recovered without any adverse outcome. Investigation revealed that administering adrenaline in clinic settings has significantly contributed to avoid any serious outcomes.

#### Table 12

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVI-SIONS - 2ND QUARTER 2012

DDDUG	%	%	%	No. of	AEFI Rate
DPDHS	completeness	I imely returns	NII Keturns	AEFI	(100,000 vaccine
Colombo	95.2	37.5	12.5	93	75.5
Gampaha	91.1	65.9	9.8	86	67.4
Kalutara	94.9	18.9	51.4	32	41.5
Kandy	93.1	23.9	59.7	51	54.5
Matale	94.4	55.9	47.1	50	134.1
Nuwara Eliya	97.4	21.1	68.4	24	43.5
Galle	100.0	31.6	68.4	25	36.5
Hambantota	100.0	52.8	22.2	70	159.3
Matara	96.1	46.9	59.2	47	87.5
Jaffna	100.0	44.4	16.7	104	279.3
Kilinochchi	91.7	0.0	90.9	2	19.2
Mannar	86.7	15.4	46.2	12	156.4
Vavuniya	91.7	36.4	45.5	32	251.4
Mullativu	58.3	0.0	42.9	21	311.1
Batticaloa	100.0	26.2	78.6	18	40.4
Ampara	95.2	10.0	60.0	16	86.2
Trincomalee	93.9	25.8	48.4	22	65.7
Kurunegala	91.9	39.7	26.5	141	127.4
Puttalam	97.0	28.1	34.4	39	67.0
Anuradhapura	98.2	28.6	32.1	95	133.2
Polonnaruwa	100.0	47.6	28.6	49	154.9
Badulla	97.9	55.3	21.3	92	154.1
Moneragala	100.0	57.6	27.3	71	202.3
Ratnapura	94.4	27.5	56.9	40	55.3
Kegalle	100.0	57.6	30.3	42	77.2
Kalmunai	100.0	20.5	69.2	14	38.8
Sri Lanka	95.8	36.1	43.6	1288	93.3

Table 13

NUMBER AND RATE OF SELECTED AEFI REPORTED BY VACCINE AND BY TYPE OF AEFI , 2nd Quarter 2012

Vaccine	Seizure	Allergic Reaction	Injection Site Ab- scess	Severe Local Re-	High Fever	H	Meningitis	Nodule	Arthralgia	Encephalopathy	Encephalitis	Lymphadentitis	Anaphylactic Shock	Persistent Scream	Injection Reaction	Parotitis	Others	Total
BCG	0	1	4	2	0	0	0	1	0	0	0	3	0	0	0	0	0	11
DPT	16	34	5	8	86	0	0	36	2	0	0	0	0	2	0	0	24	213
Penta 1st	4	50	14	3	79	2	0	29	1	0	0	0	1	12	0	0	27	222
Penta 2nd	4	19	10	2	62	0	0	47	0	0	0	0	0	4	0	0	25	173
Penta 3rd	5	22	4	2	73	0	0	27	0	0	0	0	0	2	0	0	19	154
OPV	2	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	8
Measels	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	16
DT	2	37	5	8	19	1	0	9	1	0	0	0	0	0	1	0	18	101
Π	0	13	0	1	0	0	0	1	0	0	0	0	0	0	0	0	5	20
JE	4	40	0	0	29	1	0	1	0	0	0	0	0	2	0	0	24	101
aTd	0	11	0	1	1	0	0	0	0	0	0	0	2	0	0	0	43	58
MR	0	6	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	9
MMR	6	103	2	4	36	0	0	5	1	0	0	0	2	1	0	21	19	200
Hexava- lent	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Total	43	355	45	31	387	4	0	158	5	0	0	3	5	23	1	21	207	1288

# 15. TUBERCULOSIS

A total of 2410 Tuberculosis patients were registered for 2<sup>nd</sup> Quarter 2012 by the National Programme for Tuberculosis Control and Chest Diseases. Of this, total 1615 patients had pulmonary TB and 600 patients were with extra pulmonary TB. Of these patients, 1089 were smear positive. The distribution of tuberculosis patients by RDHS division is given in Table 14.

#### Table 14

TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 2nd Quarter 2012

RDHS		Ne	Retreat- ment &	Total		
DIVISION	PTB sp+ve	PTB sp-ve	ЕРТВ	Total	other	
Colombo	273	73	143	489	67	556
Gampaha	120	58	68	246	15	261
Kalutara	86	30	56	172	7	179
Kandy	66	50	36	152	14	166
Matale	12	12	12	36	3	39
Nuwara Eliya	21	11	11	43	3	46
Galle	47	35	24	106	6	112
Matara	40	4	13	57	5	62
Hambantota	19	5	11	35	1	36
Jaffna	23	21	20	64	4	68
Vavuniya	12	1	7	20	3	23
Batticaloa	8	2	2	12	0	12
Ampara	2	1	2	5	1	6
Kalmunai	4	9	1	14	0	14
Trincomalee	19	7	10	36	7	43
Kurunegala	14	6	4	24	0	24
Puttalam	20	16	9	45	8	53
Anuradhapura	21	69	9	99	2	101
Polonnaruwa	48	31	29	108	34	142
Badulla	25	4	20	49	2	51
Moneragala	25	25	17	67	3	70
Rathnapura	12	9	8	29	2	31
Kegalle	32	13	13	58	1	59
Mannar	19	7	7	33	1	34
Mulathiv	77	3	37	117	3	120
Kilinochchi	44	24	31	99	3	102
Total	1089	526	600	2215	195	2410

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 2012, is as follows;

		Total
Α.	Yellow fever	995
В.	Meningococcal meningitis	104

# **17. SURVEILLANCE AT AIRPORT**

Surveillance activities carried out at the International Airport, Katunayaka during the second Quarter 2012 is given below.

#### 1. Yellow Fever Surveillance

a. No. with valid certificate	-	197
b.No. without valid certificate & Deported	-	00
c. No. without valid certificate & Iso- lated	-	00
2. Disinfection of Aircrafts		
a No. of flights arrived	-	5297
b No. of flights has to be disinfected	-	4786
c No. of flights disinfected	-	3923
3. Surveillance of other Infectious diseases	-	Nil
4. Airport Sanitation		
a. No. of sanitary inspections carried out including food establishments	-	15
b. No. of food sample taken under food act	-	00
c. No. found defective	-	00
d.No. of court cases/prosecuted/ warned	-	00
5 Release of Human Remains		
a No. of Human Remains released b No .of released to J.M.O. for post	-	103
c No. of alleged suicide	-	05 06
6 Other Health activities		
<sup>a</sup> Polio Vaccination No of doses given	-	00
b Health talk given to staff	-	09

# **18. LEPROSY**

# QUARTERLY RETURN OF LEPROSY STATISTICS - 2ND QUARTER 2012

# Table 15

1. National

	At the	end of the qua	rter	Cu	Cumulative for end of the quarter			
	1 <sup>st</sup> QTR,2011	2011 1 <sup>st</sup> QTR,2010 Diff (%) 2012 2011		2012 2011 Diff (%)				
New patients detected	498	537	-7.26	1022	1083	-5.63		
Children	39	52	-25.0	82	99	-17.1		
Grade 2 Deformities	32	34	-5.88	62	72	-13.8		
Multi-Bacillary	247	276	-10.5	492	527	-6.64		
Females	194	222	-12.6	421	451	-6.65		

2. Districts

District	New patients	Deformities	Children	MB	Females
Central	12	1	2	10	4
Kandy	6	1	2	4	2
Matale	5	0	0	5	2
NuwaraEliya	1	0	0	1	0
Eastern	73	3	5	36	30
Ampara	17	2	0	14	5
Batticaloa	36	0	4	12	17
Kalmunai	14	0	1	8	6
Trincomalee	6	1	0	1	2
Northern	8	0	1	3	4
Jaffna	5	0	1	2	3
Vavuniya	1	0	0	1	0
Mannar	2	0	0	0	1
Killinochchi	0	0	0	0	0
Mulathivu	0	0	0	0	0
North Central	39	1	0	25	10
Anuradhapura	25	1	0	17	5
Pollonnaruwa	14	0	0	8	5
North Western	63	6	2	28	24
Kurunegala	35	5	1	18	9
Puttalam	28	1	1	10	15
Sabaragamuwa	18	1	0	1	4
Kegalle	4	0	0	3	0
Rathnapura	14	1	0	8	4
Southern	55	4	2	40	16
Galle	17	3	1	15	4
Hambanthota	13	0	1	5	5
Matara	25	1	0	20	7
Uva	14	1	3	9	6
Baddulla	11	0	3	6	4
Monaragala	3	1	0	3	2
Western	216	15	24	85	96
Colombo	100	9	12	39	43
Gampaha	65	2	7	22	32
kaluthara	51	4	5	24	21
Sri Lanka	498	32	39	247	194

Source : Anti Leprosy Campaign

# **19. SEXUALLY TRANSMITTED DISEASES**

Table 16

# NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA 2ND QUARTER 2012

Disease		New cas sodes du	es or new di Iring the quar	sease epi- ter	Total new cases or new episodes for the calendar year up to end of the quar- ter **			
		Male	Female	Total	Male	Female	Total	
HIV positiv	/es <sup>1</sup>	24	17	41	49	32	81	
AIDS		8	4	12	17	10	27	
	Early Syphilis <sup>2</sup>	68	19	87	104	39	143	
Syphilis	Late Syphilis <sup>3</sup>	111	75	186	212	134	346	
	Congenital Syphilis <sup>4</sup>	1	1	2	3	2	5	
Gonorrhoe	pa <sup>5</sup>	60	15	75	129	29	158	
Ophthalmi	a Neonatorum <sup>6</sup>	0	0	0	0	0	0	
Non speci	fic cervicitis/urethritis	158	324	486	275	619	894	
Genital He	erpes	267	398	665	562	790	1352	
Genital Wa	arts	266	177	443	502	376	878	
Chancroid		0	0	0	0	0	0	
Trichomor	iiasis	0	17	17	2	31	33	
Candidiasi	is	242	342	584	455	693	1148	
Bacterial V	/aginosis	0	270	270	0	553	553	
Other sexu	ually transmitted diseases <sup>7</sup>	104	76	180	195	112	307	

(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
- Includes Lympho granuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.

# 20. BACTERIOLOGY REPORT, MEDICAL RESEARCH INSTITUTE

# 2nd QUARTER 2012

## Table 17

	APR	MAY	JUN
(A) CHOLERA			
No. of stool specimens Exam- ined	38	20	6
No. of positives		-	-
(B) SALMONELLA			
Blood– No. Examined	50	55	49
S.typhi		-	-
S.paratyphi A	-	1	1
Stools—No. examined	49	37	49
S.typhi	-	-	-
S.paratyphi A	-	-	-
Others		-	1
(C) SHIGELLA			
No. Examined	48	37	49
Sh.flexneri 1		-	-
Sh.flexneri 2	-	-	-
Sh.flexneri 3	-	-	-
Sh.flexneri 4		-	
Sh.flexneri 5		-	
Sh.flexneri 6		-	
Sh. sonnei		1	-
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	9	7	6
No.+ve		1	-
(E) CAMPYLOBACTER			
No.Examined	19	25	24
No. Positive	2	2	-
(F) ISOLATES	10	23	49
Clinical	7	18	45
C. Tumbi			
S. Typni		-	
S. Paratyphi A	-	4	7
Other Salmonella	3	1	18
Shigella spp	-	1	-

# 21. SURVEILLANCE OF MENINGITIS-2nd quarter 2012

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 2<sup>nd</sup> quarter 2012, 229 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system.

Out of this, 118 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Anuradhapura district (13) followed by Kurunagala (12) and Matale(12) districts.

Fifty six percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 9% belonged to the age group 1-4 years and 9% belonged to age group 5 - 14 years. Sixty three percent of the clinically confirmed cases were males and 37% were females .

#### Table 18

Summary findings for special investigations carried out for clinically confirmed cases of Meningitis up to 30th June 2012

CSF Culture Report							
CSF Culture	Number	(%)					
CSF results available	63	42%					
No Growth	(50)						
Grouup B streptococci	(06)						
Haemophillus influenza	(03)						
Meningococal	(01)						
• TB	(01)						
Culture results not known	83	54%					
Not done	03	01%					
Total	149	100%					
Final outcome of the patient							
Outcome	Number	(%)					
Cured	131	88%					
Died	05	03%					
Information not available	13	09%					
Total	149	100%					
Final Diagnosis(based on clinical and	l lab findings)						
Diagnosis	Number	(%)					
Culture confirmed	13	09%					
Probable bacterial meningitis	15	10%					
Probable viral meningitis	10	07%					
Suspected Meningitis	111	74%					
Total	149	100%					

# 22 INFLUENZA SURVEILLANCE

### Human Influenza surveillance

Human Influenza surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory tract Infections (SARI) surveillance. ILI surveillance has been initiated in 20 hospitals identified as sentinel surveillance sites for Avian/Pandemic Influenza. SARI surveillance has been established in 3 hospitals in the country; Lady Ridgeway Children's Hospital (LRH), General Hospital Matara and Teaching Hospital Peradeniya.

#### ILI Surveillance – Laboratory Component

Under ILI laboratory surveillance, a total of 574 samples were received from sentinel hospitals for the said quarter. There were 171 samples in April, 204 in May and 199 in June. National Hospital of Sri Lanka (NHSL) and Colombo South Teaching Hospital (CSTH) sent in the highest number of samples (82) each while General Hospital Ratnapura sent 55 samples. All sentinel hospitals except Teaching Hospital Jaffna and General Hospital Ampara sent samples within the quarter. There were 12 samples from GH Vavuniya and 34 from TH Batticoloa. Similar to the previous quarter Influenza B was the predominant influenza viral strain during the guarter with 3, 15 and 26 cases being positive in the months of April, May and June respectively. Influenza A (H1N1pdm) 2009 re-appeared in May and replaced Influenza A (H3N2) as the second commonest circulating viral strain within the quarter. Presence of all 3 viruses; Influenza B, Influenza A (H1N1pdm) 2009 and Influenza A (H3N2) were being observed as seasonal influenza strains globally during this time which was reflected in the local circulating viral pattern.

These results show that 13% of ILI samples tested within this quarter had an influenza viral strain. This is similar to the first quarter of the year where 11% of the samples tested became positive for any influenza. Within the quarter, the proportion of influenza yield can be observed to be gradually increasing from a low 2% in April to a high 25% in June.

#### ILI Surveillance– Epidemiological Component

In the sentinel hospitals ILI patients are diagnosed by the medical officers of the Out Patients' Departments (OPD) on the surveillance case definitions adopted. A total of 14,915 ILI visits had been recorded for the quarter. In April there were 5040 ILI cases visiting OPD of sentinel hospitals and 3389 in May and 6486 in June.IDH, GH Ampara and TH Jaffna remained the only hospitals that do not comply with the activity. LRH and TH Anuradhapura had performed well in sending in data while GH Ratnapura sent in extraordinary large numbers.

Table 19 below shows the performance of sentinel hospitals in the epidemiological component of the surveillance programme for this quarter.

The following graph in figure 1 shows the distribution of ILI attendance in OPD by month 2008-2012 to date. 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. Both 2008 and 2011 were non-pandemic years.

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

The trend for 2008 shows the two influenza peaks within a year with very low influenza activity in between. The first peak occurs in the warmer months from April to June and the second peak occurs towards the end of the year during the colder months of November - January. This trend was seen distorted in 2009 where only a large first peak was seen. ILI surveillance was totally disrupted during the pandemic period which began in October 2009 and therefore the second larger peak was not evident during this year. In 2010 special measures were taken to sustain the OPD ILI surveillance during the second pandemic wave and a second much higher peak was seen in addition to the smaller first peak. The trend in 2011 corresponded with the expected flu' pattern in the country showing clearly the two peaks within the year. A slight decreasing trend from the year end peak in 2011 is continuing for the first 2 months of the

# Severe Acute Respiratory Infections (SARI) Surveillance

SARI surveillance was initially established in 3 hospitals in the country; Lady Ridgeway Children's Hospital (LRH), Colombo South Teaching Hospital (CSTH) and Teaching Hospital Peradeniya. By end of the 1<sup>st</sup> quarter 2011, GH Matara replaced CSTH as a SARI surveillance site.

### SARI Surveillance – Lab surveillance

There were a total of 146 samples from SARI patients in above 3 hospitals received by the MRI for the 2<sup>nd</sup> quarter 2012. May had the highest number of samples (53). In April and June there were 49 and 44 samples respectively.

Table 21 below shows the performance of 3 SARI sentinel hospitals in the laboratory component of the SARI surveillance for this quarter.

In contrast to the SARI results previous quarter and similar to ILI lab findings this quarter, Influenza B featured as the predominantly seen viral strain among inward SARI patients with strong presence of Pandemic Influenza A(H1N1pdm) 2009. Proportion of influenza yield can be observed to be gradually increasing from a low 2% in April to 16% in June.

The results show that 9% of SARI patients tested within this quarter as having an influenza viral strain. This is much lower than that recorded for the previous quarter (15%) which is expected with the year end flu' peak drawing gradually to an end over the months of the quarter.



#### Figure 1: Distribution of OPD ILI visits by month - 2008 - 2011

#### SARI Surveillance –

#### Epidemiological surveillance

There were total of 531 patients treated inward for severe respiratory tract infections within the 2<sup>nd</sup> quarter 2012. However no epidemiological data on SARI patients were received from TH Peradeniya due to a delay in recruiting its surveillance officer. Two hundred and seventy nine (279) SARI patients were reported from GH Matara and LRH had treated 252. The highest number of patients was reported in April (193) and May and June had had 165 and 173 cases respectively. Table 23 below shows the distribution of SARI patients in the 3 hospitals by month in the 2<sup>nd</sup> quarter 2012.

## Animal Influenza Surveillance

This is carried out by the Department of Animal Production and Health (DAPH) of the Ministry of Livestock Development. Under routine animal influenza surveillance, pooled and serum samples are collected randomly from backyard farms, industrial farms and hot spots for migratory birds. These also include identified special targets such as wet markets, processing plants, parent stocks, pet birds and ducks. Any unusual bird deaths or disease outbreaks are also investigated. Sampling is mainly carried out by the Veterinary Investigation Officers (VIO). These samples are tested for Highly Pathogenic Avian Influenza (HPAI) viral strains at their laboratory, Veterinary Research Laboratory (VRI).

The following table 24 shows the number of samples collected by month and the districts they were collected from.

Table 19 performance of sentinel hospitals in the epidemiological component of the surveillance programme - 2nd Quarter 2011

Institution	April	Мау	June	Total
LRH	456	478	718	1652
NHSL	18	32	13	63
СЅТН	177	77	40	294
IDH	0	0	0	0
NCTH	47	45	78	170
TH Peradeniya	171	160	206	1772
GH Nuwara Eliya	109	0	79	2490
TH Karapitiya	23	28	39	90
GH Matara	95	148	81	324
TH Jaffna	0	0	0	0
GH Vavuniya	0	0	139	139
GH Ampara	0	0	0	0
TH Batticaloa	27	26	31	84
TH Kurunegala	94	0	139	233
GH Chilaw	125	420	248	793
TH Anurad- hapura	357	339	431	1127
GH Polonna- ruwa	140	147	190	477
GH Badulla	174	147	266	587
GH Ratnapura	3027	1342	3788	8157
Total	5040	3389	6486	14915

Table 20 : Types of Respiratory Viruses Isolated in ILI samples - 2nd Quarter 2012

MONTH	TOTAL	INFLU B	A(H1N1pdm) 2009	A(H3N2)	A UNTYPED	Influenza yield
Apr	171	3	0	0	0	1.7%
Ma y	204	15	5	1	2	11.3%
Jun	199	26	14	2	7	24.6%
To- tal	574	44	19	3	9	13.1%

Table 21: performance of sentinel hospitals in the laboratory component of the SARI surveillance -2nd Quarter 2012

Institution	Apr	May	Jun	Total
LRH	25	19	20	64
TH Peradeniya	1	3	2	6
GH Matara	23	31	22	76
Total	49	53	44	146

Table 22: Types of Respiratory Viruses Isolated in SARI Samples - 2nd Quarter 2012

MONTH	TO- TAL	IN- FLU B	A (H1N1 pdm) 2009	A (H3N2 )	A un- typed	Influ- enza yield
Apr	49	0	0	1	0	2.04%
May	53	0	2	1	0	5.7%
Jun	44	6	2	0	1	15.9%
Total	146	6	4	2	1	8.9%

Table 23: Distribution of SARI patients by month - 2nd Quarter 2012

Institution	Apr	Мау	Jun	Total
LRH	90	80	82	252
TH Peradeniya	0	0	0	0
GH Matara	103	85	91	279
Total	193	165	173	531

Table 24: Animal samples collected by month and district -2nd Quarter 2012

	No. of s	amples	
Month	Pooled	Serum	Districts samples were collected from
April	226	980	Colombo, Gampaha, Ham- bantota, Badulla, Trinco- malee, Kandy and Puttalam
May	314	690	Gampaha, Puttalam, Ku- runegala, Jaffna, Polonna- ruwa, Hambantota, Badulla, Anuradhapura, Ampara, Matale
June	179	1193	Ampara, Badulla, Chilaw, Colombo, Homagama, Jaffna, Kurunegala, Matara, Nuwara Eliya, Polonna- ruwa, Trncomalee
Total	719	2863	

#### 2<sup>nd</sup> Quarter

## Volume 53

# **Special Report**

#### Influenza Surveillance 2011

Pandemic/Avian Influenza preparedness activities began in the country in 2005 along the guidelines of the global Avian/Pandemic preparedness programme which aimed at preparing each country for a optimum response against a then possible Avian Influenza pandemic. As part of these activities influenza surveillance in animals and humans were initiated in Sri Lanka by the Department of Animal Production and Health (DAPH) of Ministry of Livestock Development and Epidemiology Unit of Ministry of Health respectively. National Technical Committee for Avian/Pandemic Influenza Preparedness was formed with participation from the programme's varied stakeholders as the supervisory body of the programme.

Influenza surveillance is one of the main activities of the national preparedness programme with an objective of detecting early warning of a possible pandemic by routinely monitoring the circulating influenza viral patterns among humans and animals in the country.

#### Human Influenza surveillance

## ILI Surveillance – Laboratory Component

Under ILI laboratory surveillance a total of 2066 ILI samples were received from hospitals identified as sentinel surveillance sites for Avian/Pandemic Influenza for the year. Lady Ridgeway Children's Hospital (LRH) sent in the highest number of samples (263) with Teaching Hospital (TH) Kurunegala and TH Peradeniya sending in over 180 samples. All sentinel hospitals from North and East sent in samples. There were 86 samples from GH Vavuniya, 105 from TH Batticoloa, 33 from GH Ampara and 7 from TH Jaffna.

Table 25 shows the performance of sentinel hospitals in the laboratory component of the surveillance programme in 2011.

Influenza B remained as the predominant influenza viral strain throughout the year with Influenza A (H3N2) emerging strongly towards the end of the year.

The second wave of the H1N1 pandemic subsided early in the year and Influenza A (H1N1) was occasionally isolated thereafter .

Out of 2066 samples, majority (101) were identified as Influenza type B, whereas 93, 39 and 16 samples were isolated with H3n2, H1N1 pdm and Infuenza A untyped viruses respectively. Out of 2066 samples, majority (101) were identified as Influenza type B, whereas 93, 39 and 16 samples were isolated with H3n2, H1N1 pdm and Infuenza A untyped viruses respectively.

Laboratory surveillance findings shows that 12% of ILI samples tested within the year had an influenza viral strain. Figure 2 shows the seasonal changes in the influenza positivity within the laboratory component of the surveillance programme in 2011.

This positivity rate shows two prominent peaks as expected. The higher peak is in the colder months towards the end of the year and the other peak is during May-July. Flu activity is higher during these two periods and that coincides with high influenza positivity.

#### ILI Surveillance – Epidemiological Component

In year 2011 there were 52562 ILI cases visiting OPD of sentinel hospitals out of 3218762 total OPD visits. GH Chilaw reported highest number of ILI visits. LRH, GH Nuwara Eliya, GH Ampara and GH Ratnapura also reported high numbers.

In 2011, ILI had contributed to 1.6% of OPD visits. 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. However 2011 was a non-pandemic year and two clear influenza peaks can be seen in mid year and end of the year.

# Severe Acute Respiratory Infections (SARI) Surveillance

#### Laboratory Component

A total of 743 samples from SARI patients treated in the 3 SARI sentinel hospitals received by the NIC/ MRI for the year.

LRH had sent in the highest number of samples (389). Along with ILI samples, these SARI samples are processed at the NIC/MRI.

Similar to the pattern seen in ILI results, Influenza B was the predominant virus subtype observed in 2011. Influenza A(H1N1pdm)2009 was also seen at the beginning of the year at the end of the second peak of the pandemic and also in mid year. Presence of Influenza A (H3N2) was observed towards the latter part of 2011.Laboratory surveillance findings in SARI component show that 15.5% of SARI patients tested within this year as having an influenza viral strain. This figure from inward patients, is much higher than the positivity rate obtained from ILI samples (1.6%).

Figure 3 shows the seasonal changes in the influenza positivity within the laboratory component of the SARI surveillance in 2011.In comparison to ILI surveillance, this positivity rate shows an increasing trend towards the end of the year. There is a mid-year peak which ascends to a much higher peak towards the colder months at the end of the year. Flu activity is expected to be higher during these months with high influenza positivity.

#### **Epidemiological Component**

There were total of 1815 patients treated inward for severe respiratory tract infections in the said 3 hospitals within 2011. The highest numbers (736) were reported from TH Peradeniya.

Figure 4 below shows the monthly distribution of the proportion of SARI in sentinel hospitals for the year 2011.An increasing trend of disease activity can be clearly observed from a mid-year peak towards the end of the year. This compares well with influenza positivity. The high proportion seen in January may be due to the tail end of the second wave of the Pandemic.

#### Animal Influenza Surveillance

In 2011 there were 3180 pooled samples and 8719 serum samples collected and tested at the VRI for HPAI. None of the samples had yielded HPAI. The table 26 shows the number of samples collected by month and the districts they were collected from. Figure 2: Seasonal Patterns in Influenza Positivity within the ILI laboratory component of Influenza surveillance 2011



Figure 3: Seasonal Patterns in Influenza Positivity within the SARI laboratory component of SARI surveillance 2011





Figure 4: Distribution of Proportion of SARI cases by month – 2011

Hospital	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
LRH	19	20	27	16	22	23	20	22	25	16	28	25	263	
NHSL	0	11	7	9	0	16	0	0	0	0	11	30	84	
CSTH	2	6	5	1	2	0	0	1	0	0	24	33	74	
IDH	0	0	0	3	1	2	0	0	6	6	1	2	21	
NCTH	20	22	2	0	0	0	1	8	11	17	11	0	92	
Peradeniya	0	6	12	18	29	14	20	16	26	16	22	6	185	
GH N'Eliya	13	20	10	10	15	10	6	10	12	11	13	13	143	
TH Karapitiya	1	13	5	4	20	25	16	9	15	3	8	2	121	
GH Matara	0	5	11	16	15	11	0	7	12	5	7	11	100	
TH Jaffna	1	0	0	0	0	0	0	0	3	0	1	2	7	
GH Vavuniya	5	0	0	11	10	0	0	16	18	14	7	5	86	
GH Ampara	0	0	10	0	0	0	0	0	0	7	7	9	33	
TH Batticoloa	1	10	16	5	3	0	1	6	15	16	27	5	105	
TH Kurune- gala	13	10	10	0	0	15	14	28	23	29	8	30	180	
GH Chilaw	6	16	15	11	5	6	0	5	17	6	0	0	87	
TH Anurad- hapura	11	6	6	16	8	0	7	18	16	23	16	18	145	
GH Polonna- ruwa	17	12	11	0	0	1	0	9	5	23	17	27	122	
GH Badulla	0	0	0	0	0	0	0	6	18	10	9	2	45	
GH Rat- napura	8	6	5	14	18	16	9	12	21	21	26	14	170	
Total	117	166	152	134	148	139	94	173	243	223	243	234	2066	

Table 25: performance of sentinel hospitals in laboratory component of Influenza surveillance - 2011

Table 26: Animal samples collected by month and district - 2011

	No. of sam	ples								
Month			Districts samples were collected from							
	Pooled	Serum								
January	137	163	Gampaha, Colombo, Puttalam, Badulla, Mulativu, Kurunegala							
February	216	257	Gampaha, Colombo, Jaffna, Puttalam, Kurunegala, Kandy, Hambantota, Badulla							
March	106	432	Gampaha, Colombo, Matale, Polonnaruva, Anuradhapura, Ampara, Kegalle, Kandy							
April	72	115	Gampaha, Colombo, Polonnaruwa, Puttalam, Mannar							
Мау	160	661	Gampaha, Colombo, Puttalam, Polonnaruwa, Matale, Anuradhapura							
June	175	620	Gampaha, Colombo, Polonnaruva, Kandy, Hambantota, Ampara							
July	176	529	Gampaha, Colombo, Ratnapura, Anuradhapura, Kandy, Badulla, Trincomalee, Matale,							
			N'Eliya , Ampara							
August	304	1435	Gampaha, Colombo, Puttalam, Kurunegala, Polonnaruwa, Ratnapura, Kandy, Badulla,							
			Trincomalee, Matale, Matara, Ampara							
September	295	1420	Gampaha, Colombo, Puttalam, Hambantota, Nuwara Eliya, Jaffna, Anuradhapura,							
			Polonnaruwa, Ratnapura, Kandy, Badulla, Trincomalee, Matale, Kegalle							
October	471	1038	Gampaha, Colombo, Puttalam, Hambantota, Anuradhapura, Ratnapura, Badulla, Trin-							
			comalee, Kegalle							
November	532	1164	Gampaha, Colombo, Puttalam, Hambantota, Jaffna, Polonnaruwa, Ratnapura, Am-							
			para, Vavuniya, Kurunegala, Matale, Kegalle							
December	536	885	Colombo, Puttalam, Hambantota, Jaffna, Polonnaruwa, Ratnapura, Ampara, Va-							
			vuniya, Trincomalee							
Total	3180	8719								

			S 10		-			10 E.	120		0.101
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2<sup>nd</sup> Quarter

# Volume 53 Table 29

SUMMARY OF NOTIFIABLE DISEASES - 2nd QUARTER 2012

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	Rubella	Chickenpox	Mumps	Meningitis	Leishmaniasis
Colombo	43	2	45	7	3	41	1	3	0	0	44	5	2246	1	152	101	17	0
Gampaha	20	4	12	11	0	63	1	1	0	4	93	2	1944	0	42	60	11	0
Kalutara	28	0	10	22	1	67	0	3	0	1	15	1	751	0	49	127	6	0
Kandy	34	0	5	35	0	12	1	0	0	22	30	3	614	1	30	24	4	0
Matale	23	1	1	0	0	15	2	0	0	0	22	0	148	0	17	23	7	9
Nuwara-Eliya	60	0	3	2	1	9	3	0	0	20	6	0	101	0	45	27	5	0
Galle	34	1	3	6	0	35	0	12	0	12	1	2	412	0	58	36	9	0
Hambantota	6	2	2	10	0	33	0	1	0	10	9	1	130	0	15	54	10	58
Matara	13	3	4	13	0	43	1	3	0	17	20	4	325	0	55	59	4	23
Jaffna	42	3	74	24	0	0	2	4	1	21	6	0	85	0	73	66	7	0
Kilinochchi	3	1	8	1	0	1	0	1	0	5	2	0	38	0	0	2	0	0
Mannar	37	1	4	1	0	1	0	0	0	10	1	0	30	0	1	2	0	0
Vavuniya	5	5	5	2	0	2	0	0	0	0	0	0	9	0	14	3	11	1
Mullaitivu	4	0	1	1	0	0	0	0	0	1	0	0	8	0	0	1	1	0
Batticaloa	51	1	5	25	3	2	0	0	1	0	3	3	99	0	4	25	4	2
Ampara	16	0	1	8	0	6	1	0	0	0	1	0	45	0	42	64	8	0
Trincomalee	44	1	1	1	0	17	2	0	0	7	2	0	30	0	22	52	8	0
Kurunegala	37	4	27	21	0	54	0	1	0	7	59	0	582	1	133	100	32	16
Puttalam	4	3	6	0	1	8	0	0	0	6	2	1	331	0	21	18	4	1
Anuradhapura	22	1	3	6	0	27	0	0	0	6	20	2	111	2	80	90	27	54
Polonnaruwa	16	0	0	121	0	17	0	1	0	0	10	0	65	0	34	55	9	46
Badulla	33	0	24	2	0	11	0	1	0	31	11	0	88	0	32	28	5	0
Moneragala	19	2	6	6	2	19	0	3	0	12	59	0	75	0	49	52	-5	12
Ratnapura	51	5	16	3	1	60	0	0	0	10	14	0	1314	0	64	43	27	0
Kegalle	10	2	6	4	0	51	0	0	0	15	153	0	916	0	86	121	5	0
Kalmunai	76	0	0	55	0	2	0	3	0	0	2	0	41	0	58	133	3	0
Total	731	42	272	387	12	596	14	37	2	217	585	24	10538	5	1176	1366	229	222

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

Epidemiology Unit, Ministry of Health, 231, De Saram Place, Colombo 10. Telephone : 2695112, FAX No : 2696583, E-mail: <u>chepid @ sltnet.lk</u>

This document is available on the internet www.epid.gov.lk.

Figures given may be subject to revision.

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

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 EPIDEMIOLOGIST EPIDEMIOLOGY UNIT 231, DE SARAM PLACE COLOMBO 10.