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CONTENTS	PAGE NO
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
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	06
13. Surveillance of Rubella	07
14. Surveillance of Tuberculosis	08
15. Surveillance at Sea Port	08
16. Surveillance at Air Port	08
17. Surveillance of Leprosy	09
18. Surveillance report on A E F I	10
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 Japanese Encephalitis 2010	17
24. Summary of Notifiable Diseases	20



1. POLIOMYELITIS

Twenty three (23) Acute Flaccid cases were notified to the Epidemiology Unit during the 2nd quarter 2011. This contrasts with the 18 and 21 AFP cases each reported during the 2nd quarter 2010 and 2009 respectively. This number is lower than the expected number of AFP cases per quarter to meet the WHO surveillance criteria of 2:100,000 under 15 population, which is 31 according to the current population estimates. The non-polio AFP rate for the second quarter of 2011 was 1.5/100,000 under 15 population.

Notification of AFP Cases from Hospitals

The majority of the cases (35% or 8 cases) were notified from the main sentinel site hospital for AFP surveillance, the Lady Ridgeway Children's Hospital (LRH). Other sentinel site hospitals of G.H.Ratnapura reported 3 cases, G.H.Nuwara Eliya and T.H.Peradeniya reported 2 cases each and other hospitals of T.H.Karapitiya, T.H.Kandy, G.H.Baticaloa, G.H.Badulla, G.H.Anuradhapura and G.H.Puttlam reported one case each as mentioned below.

Hospital	Number reported	%
LRH	8	35
G.H.Ratnapura	3	13
G.H.Nuwara Eliya	2	9
T.H.Peradeniya	2	9
G.H.Vavuniya	2	9
T.H.Karapitiya	1	4
T.H.Kandy	1	4
G.H.Baticaloa	1	4
G.H.Badulla	1	4
G.H.Anuradhapura	1	4
G.H.Puttlam	1	4
Total	23	100

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

The highest number of cases 5(22%) was reported from Western Province during this quarter and the complete list of distribution of AFP cases according to the province, district and MOH area is given below.

Table 1. Distribution of AFP cases by district & MOH area – 2nd Quarter 2011

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Maharagama	1
		Kolonnawa	1
	Gampaha	Attanagalle	1
		Mahara	1
	Kalutara	Bandaragama	1
Southern	Galle	Udugama	1
		Rideemaliyadda	1
Sabaragamuwa	Kegalle	Galigamuwa	1
		Balangoda	2
		Kuruwita	1
		Imbulpe	1
		Mannar	Musali
Northern	Vavuniya	Vavuniya	1
		Puttlam	Puttlam
North Western		Chillaw	1
		Anuradhapura	Anuradhapura
		Madawachchiya	1
		Polonnaruwa	Dimbulagala
Eastern	Baticaloa	Baticaloa	1
		Trincmalee	Kuchchaveli
Central	Nuwara Eliya	Lindula	1
		Ragala	1
Total			23

Seasonal Distribution of AFP Cases

Majority of cases were reported during the month of June (10 cases, 44%) and May (9 cases, 39%). Month of April reported the lowest number of cases 4 (17%). Similar pattern of seasonal distribution was observed during the 2nd quarter 2010 with the proportion of 44% and 39% reported during June and May respectively with the lowest reported during the month of April.

Age and Sex Distribution of AFP Cases

Majority (14, 61%) of the cases were girls during the 2nd quarter 2011 and this was in contrast to the trend reported during the 2nd quarter 2010 which was 61% of boys among the reported AFP cases.

Majority (48%) of cases were between 1-4 years during the second quarter this year and the trend was more or less similar (44%) to the compatible quarter in the previous year.

Table 2. Distribution of AFP cases by Age & Sex, 2nd Quarter 2011

Laboratory Surveillance of AFP Cases

Age Group	Sex		Total
	Male	Female	
1-4 year old	3	8	11
5-9 year old	2	2	4
10-15 year old	4	4	8
Total	9	14	23

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 at the laboratory are the criteria to complete to make the samples of 'good condition'.

Timely stool collection rate was 89% (20 cases), which is above the WHO expected rate and out of the remaining 3 cases, in 2 cases

both stool samples were collected after 14 days and from the other case only one stool sample was collected. Reasons for inadequate or late stool samples were the transfer of patients from one Institute to the other or discarded the initially/timely collected samples due to delay in transportation. Timely stool collection rate in the compatible quarter in the previous year was 72%.

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2011. Last case of cholera was reported in the country in January 2003.

3. TETANUS

During the 2nd Quarter 2011, 06 suspected Tetanus cases were notified to the Epidemiology Unit. This is in comparison to 06 cases reported during the previous quarter and 07 cases in the corresponding quarter of 2010.

4. MEASLES

Forty nine (49) suspected cases of Measles were reported during the second quarter 2011 but only 28 (57%) were clinically confirmed as measles. The reported and confirmed numbers were almost double the number reported during the second quarter 2010 (20 cases). Of these clinically confirmed 28 cases, 27 (96%) were field investigated by the Public Health Inspector (PHI) or the Medical Officer of Health (MOH). The trend of presentation of cases during the quarter was 6 cases during May, 12 cases in June and 9 cases during July. Twelve of these field investigated cases were identified to be compatible with the surveillance case definition of measles which is "fever and rash with one of the signs of cough, coryza or conjunctivitis". Of them majority reported from districts of Colombo (Homagama, Kaduwela, Kolonnawa) and Kurunegala (Rideegama, Ganewatte) where 3 cases were presented from each district.

Laboratory investigations of fever and rash patients suspected of Measles/Rubella (108) were carried out in the WHO accredited Laboratory in Medical Research Institute (MRI) and identified only 1 case positive for Measles IgM antibodies. This patient was 18 months old returnee to the country and missed measles vaccination and the investigations were carried out at Provincial General Hospital Badulla. Virus isolation was not carried out in this patient. Outbreaks of measles were not reported during the quarter.

Table 3

SELECTED CHARACTERISTICS OF CONFIRMED CASES (WITH SPECIAL INVESTIGATIONS) OF MEASLES – 2ND QUARTER 2011

Sex	Male	8
	Female	4
Age Group	<1 year	4
	10-19 years	2
	20-29 years	3
	30-39 years	2
	>40 years	1
Immunization Status	Non - Immunized	5
	Immunized	5
	Unknown	2

Table 4

SELECTED CHARACTERISTICS OF LEPTOSPIROSIS PATIENTS -2ND QUARTER 2011

Age Group	Sex	
	Male	Female
0-10 years	0.1%	0.0%
11-20 years	8.0%	1.1%
21-30 years	17.6%	1.3%
31-40 years	23.0%	1.3%
41-50 years	20.0%	4.0%
51-60 years	13.4%	2.1%
>60years	7.3%	0.8%

5. LEPTOSPIROSIS

During the 2nd Quarter 2011, 1930 cases and 13 deaths (CFR 0.7%) due to Leptospirosis were notified to the Epidemiology Unit compared to 2437 cases and 48 deaths in the previous quarter and 1105 cases and 23 deaths during corresponding quarter of 2010.

Age and sex distribution of patients, revealed by the special surveillance data is given in table 4

6. HUMAN RABIES

Twelve cases of Human Rabies were notified to the Epidemiology unit in the 2nd quarter 2011, compared to 7 cases in the previous quarter and 15 cases in the corresponding quarter year 2010. Among the notified cases, all the cases (12 cases) were investigated and confirmed as Human Rabies. Out of the total of 12 Human Rabies cases, 10(83.3%) were males and 2 (16.7%) were females. Kurunegala district reported the highest number of cases (3 cases) accounting for 25% of the total case load followed by Batticaloa (2 cases i.e. 16.7%), Gampaha (2 cases i.e. 16.7%), Galle (2 cases i.e. 16.7%), Colombo (1 case i.e. 8.3%), Nuwara Eliya (1 case i.e. 8.3%) and Rathnapura (1 case i.e. 8.3%)

Animal Rabies

During the quarter 103 dogs were reported positive for rabies, compared to 157 in the previous quarter and 129 positive in the same period in the last year In addition the following animals were also reported positive;

Cats -10, Domestic Ruminants -04,

Wild Animals – 03

Rabies Control Activities

Dog vaccination - A total of 287097 dogs were immunized during the 2nd Quarter 2011 when compared to 241554 in the previous quarter and 218467 in the corresponding quarter of last year.

Animal Birth Control

Chemical - 14130 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical - 13559 female dogs were subjected to sterilization by surgical method during the quarter under review.

*Source – Director/PHVS

7. ENTERIC FEVER

In the 2nd Quarter 2011, a total of 280 cases of Enteric Fever were notified to the Epidemiology Unit, compared to 352 cases in the previous quarter and 309 cases in the corresponding quarter of 2010. The districts which reported high number of cases in 2nd quarter 2011 were Jaffna (64) and Kegalle (29).

8. VIRAL HEPATITIS

In the 2nd quarter 2011 a total of 220 cases of Viral Hepatitis were notified to the Epidemiology Unit, compared to 199 cases in the previous quarter and 294 cases in the corresponding quarter of 2010. Gampaha (45) and Kegalle (44) districts reported the highest number of Viral Hepatitis cases in 2nd quarter 2011, while Moneragala (17) and Colombo (15) also reported high number of cases.

9. DYSENTERY

In the 2nd quarter 2011 a total of 2224 cases of Dysentery were notified to the Epidemiology Unit, compared to 1311 cases in the previous quarter and 1616 cases in the corresponding quarter of 2010. Trincomalee (348), Batticaloa (345) and Kalmunai (315) districts reported high number of cases in 2nd quarter

10. MALARIA

The number of microscopically confirmed malaria cases detected during the 2nd quarter of 2011, shows a considerable reduction in comparison to the number of malaria cases detected during the same period of 2010 as seen in Table 6.

11. JAPANESE ENCEPHALITIS (JE)

During the 2nd quarter 2011, 44 cases of Encephalitis were reported to the Epidemiology Unit. Among the reported cases 26 (59%) were investigated and 3 (6.8%) were found to be clinically confirmed as Japanese Encephalitis. All of these confirmed cases, were investigated and sent by the MOH. Among them two(66%) were under 40 years of age and one was(33.3%) in the age group 50-60 years. No deaths were reported due to Japanese Encephalitis during the quarter.

This is in comparison to 65 cases of encephalitis, five confirmed Japanese Encephalitis and no deaths reported in the corresponding quarter of 2010.

Table 5
SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – 2nd QUARTER 2011

Sex	Male	01
	Female	02
Age group	31-40Y	2
	51-60Y	1
District	Galle	01
	Gampaha	02
MOH Areas	Welivitiya	01
	Minuwangoda	01
	Katana	01
Immunization	Immunized	00
	Non immunized	00
	Unknown	03

Table 6

Results of Blood smear examination for malaria parasites - 2nd Quarter 2011

	2nd Quarter 2010	2nd Quarter 2011
No. of blood smears examined	229,477	236,735
No. of positives	165	27
No. of <i>P. vivax</i>	161	25
No. of <i>P. falciparum</i>	3	1
No. of mixed infections	1	1
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.07%	0.01%
P.v. : P.f. ratio	40:1	12:1
Percentage of infant positives	0%	0%

Table 7

DISTRIBUTION OF MALARIA CASES BY RMO DIVISION - 2ND QUARTER 2011

RMO	Blood smears	Positives	P.v.	P.f.	Mixed
Colombo	22865	0	0	0	0
Gampaha	6716	0	0	0	0
Kalutara	2991	0	0	0	0
Kandy	9512	0	0	0	0
Matale	3391	0	0	0	0
Nuwara Eliya	862	0	0	0	0
Galle	3868	0	0	0	0
Matara	4043	0	0	0	0
Hambantota	6357	4	3	1	0
Jaffna	15226	0	0	0	0
Kilinochchi	8253	4	4	0	0
Vavuniya	9700	6	6	0	0
Mannar	6293	0	0	0	0
Mullaitivu	9780	13	12	0	1
Batticaloa	17796	0	0	0	0
Ampara	6990	0	0	0	0
Trincomalee	16841	0	0	0	0
Kurunegala	14042	0	0	0	0
Maho	3993	0	0	0	0
Puttalam	5714	0	0	0	0
Anuradhapura	20233	0	0	0	0
Polonnaruwa	13216	0	0	0	0
Badulla	5611	0	0	0	0
Moneragala	5691	0	0	0	0
Ratnapura	5531	0	0	0	0
Kegalle	1618	0	0	0	0
Kalmunai	9602	0	0	0	0
TOTAL	236735	27	25	1	1

P.v.– *Plasmodium vivax*

P.f.- *Plasmodium falciparum*

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

During the 2nd Quarter 2011, 7209 cases of DF/DHF and 49 deaths were reported (CFR 0.68%) when compared to 3088 cases of DF/DHF and 33 deaths (CFR 1.07%) reported during the 1st Quarter 2011. Proportion of cases notified in April, May, and June was 24.56%, 27.28%, and 48.15% respectively. Table 8 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 2nd quarter.

Special surveillance data on 1951 confirmed cases were received and analyzed for the 2nd quarter 2011. Age distribution of reported cases were < 5 years of age in 108 (5.54%), 5- 15 years of age in 308 (15.79%), 15-25 years of age in 495 (25.37%), 25-50 years of age in 850 (43.57%), and >50 years of age in 156 (7.99%).

Table 8

MORBIDITY AND MORTALITY DUE TO DF/DHF - 2ND QUARTER 2011

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	2836	39.33	18
Gampaha	938	13.01	10
Kalutara	466	6.47	4
Kandy	196	2.72	0
Matale	110	1.53	0
Nuwara Eliya	56	0.78	0
Galle	267	3.70	1
Hambantota	205	2.84	0
Matara	163	2.26	2
Jaffna	46	0.64	0
Kilinochchi	20	0.28	0
Mannar	6	0.08	0
Vavuniya	23	0.32	0
Mullaitivu	9	0.12	1
Batticaloa	438	6.08	6
Ampara	59	0.82	0
Trincomalee	56	0.78	0
Kurunegala	266	3.69	3
Puttalam	101	1.40	2
Anuradhapura	91	1.26	1
Polonnaruwa	110	1.53	1
Badulla	132	1.83	0
Moneragala	67	0.93	0
Ratnapura	320	4.44	0
Kegalle	219	3.04	0
Kalmunai	9	0.12	0
TOTAL	7209	100	49

According to the clinical findings majority of the reported cases (87.75%) were classified as dengue fever.12.25% were classified as DHF with 5.18%, 1.69%, 1.64%, 2.82% 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 9.

During the 2nd Quarter 2011, 1237 blood samples were tested using IgM capture ELISA test and Haem Agglutination Inhibition test (HAI) at the Department of Virology, MRI. From the total 666 (53.84%) samples were confirmed as positive (Table 10).

Table 9

RESULTS OF LARVAL SURVEY CARRIED OUT BY DEPARTMENT OF ENTOMOLOGY, MRI 2ND QUARTER 2011

Area	April 2011		May 2011		June 2011	
	Breteau Index		Breteau Index		Breteau Index	
	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus
Colombo						
Maharagama	00	1.1	00	5.1	0.62	3.8
Moratuwa	4.3	7.4	2.28	1.7	1.0	1.5
Kaduwela	0.66	5.33	1.0	16	00	16.5
Nugegoda	4.0	2.0	2.0	4.5	5.5	9.0
Piliyandala	00	11.1	5.0	19	00	8.4
Dehiwala	-	-	7.0	1.0	1.8	1.8
Gampaha						
Ragama	00	6.4	00	10	0.4	8.5
Ja Ela	00	1.14	2.9	12	0.4	8.5
Kelaniya	00	5.14	0.5	2.5	0.5	5.5
Mahara	00	8.65	00	9.7	6.9	8.5
Wattala	0.97	6.38	00	3.9	-	-
Seeduwa	4.1	11.3	3.8	7.6	1.8	2.7
Minuwangoda	-	-	00	8.6	0.94	16.0

Table 10

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI 2ND QUARTER 2011

Month	Clinically Suspected cases of DF/DHF	Serologically confirmed Cases of DF/DHF
April	326	166
May	343	186
June	568	314
Total	1237	666

13 RUBELLA

During the whole quarter 282 suspected Rubella disease cases were reported and 278 (98%) of them were compatible with surveillance case definition during field investigations carried out by the Medical Officer of Health. Comparing the compatible quarter in the previous year (2010) only 3 cases of suspected Rubella cases were reported and 2 of them were compatible with surveillance case definition.

Four Rubella disease outbreaks were reported during the quarter from districts of Gampaha, (a factory in Dompe), Moneragala (Military camp in KudaOya), Polonnaruwa (Army camp, Minneriya), and Badulla (Army camp in Diyathalawa). All 4 outbreaks were Epidemiologically investigated and laboratory confirmed. The total number of outbreak cases were 269 giving the proportion of 97% of the clinically confirmed cases included to 4 outbreaks reported. Of the 278, total number of clinically confirmed cases, 273 (98%) were epidemiologically, specially investigated in the field by the Medical Officer of Health and special investigation forms were filled. Of these specially investigated 270 (97%) cases were identified as clinically possible and compatible with the case definition of Rubella disease which is fever and maculopapular rash, with arthralgia/arthritis, lymphadenopathy (suboccipital, post auricular and cervical) or conjunctivitis. Selected characteristics of these confirmed cases are given in the table 11

Table 11

Selected characteristics of confirmed cases of Rubella disease -2nd quarter 2011 (n=270)

Sex	Male	249
	Female	21
Age group	<1 year	4
	10-19 years	88
	20-29 years	161
	30-39 years	12
	>40 years	5
Immunization status	Non immunized	192
	Immunized	55*
	Unknown	23

*Of the number who expressed that they received the vaccination, some were uncertain as to whether aTd or Rubella vaccine was given due to unavailability of vaccination records

Laboratory investigations of fever and rash patients suspected of Measles/Rubella (108) were carried out in the WHO accredited Laboratory in Medical Research Institute (MRI) and identified 62 cases were positive for Rubella IgM antibodies. It is identified non measles/rubella rate of 42% among fever and rash patients suspected of Measles and Rubella and laboratory investigated.

Congenital Rubella syndrome cases were not reported during the second Quarter.

14. TUBERCULOSIS

A total of 2384 Tuberculosis patients were notified for 2nd Quarter 2011 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total 1814 patients had pulmonary TB and 573 patients were with extra pulmonary TB. Of these patients, 1158 were sputum smear positive. The distribution of tuberculosis patients by RDHS division is given in Table 12.

Table 12.

**TUBERCULOSIS PATIENTS BY RDHS DIVISIONS
- 2nd Quarter 2011**

RDHS DIVISION	PTB	EPTB	TOTAL	NEGA-TIVE	POSITIVE	PTB SS+VE (%)
Colombo	251	53	304	41	210	83.67
Gampaha	216	102	318	49	167	77.31
Kalutara	113	45	158	23	90	79.65
Kandy	123	40	163	63	60	48.78
Matale	39	12	51	22	17	43.59
Nuwara Eliya	39	14	53	15	24	61.54
Galle	102	39	141	37	65	63.73
Matara	60	19	79	18	42	70.00
Hambantota	28	7	35	10	18	64.29
Jaffna	50	25	75	21	29	58.00
Mannar	4	1	5	0	4	100.00
Vavuniya	22	14	36	3	19	86.36
Mulathiv	2	1	3	2	0	0.00
Kilinochchi	8	7	15	2	6	75.00
Trincomalee	147	5	152	129	18	12.24
Batticaloa	28	18	46	6	22	78.57
Ampara	18	5	23	7	11	61.11
Kurunegala	113	35	148	55	58	51.33
Puttalam	22	7	29	6	16	72.73
Anuradhapura	55	5	60	17	38	69.09
Polonnaruwa	40	11	51	18	22	55.00
Badulla	69	22	91	14	55	79.71
Moneragala	44	8	52	20	24	54.55
Rathnapura	100	35	135	25	75	75.00
Kegalle	77	32	109	28	49	63.64
Kalmunai	44	11	55	25	19	43.18
Total	1814	573	2387	656	1158	63.84

PTB-Pulmonary Tuberculosis

EPTB- Extra Pulmonary Tuberculosis

SP + ve - Sputum Positive

SP - ve - Sputum Negative

Data from Central TB Register

Source - National TB Register

15. SURVEILLANCE AT SEA PORT

Details of the vaccinations carried out by the Assistant Port Health Office during the 2nd quarter 2011, is as follows;

	Total
a. Yellow fever	977
b. Meningococcal meningitis	29
C. Polio vaccination	00

16. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 2nd Quarter 2011 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. Airport Sanitation

a. No. of sanitary inspections carried out including food establishments	-	34
b. No. of food samples taken under Food Act	-	01
c. No. found defective	-	00
d. No. of court cases/prosecuted/warned	-	00
e. No. of water samples tested	-	00
f. No. reported contaminated	-	00

3. Release of Human Remains

a. No. of Human Remains released	-	78
b. No. referred to JMO for post-mortem	-	07
c. No. alleged suicide	-	06

4. Other Health Activities

a. Polio Vaccination No. of doses given	-	00
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17. LEPROSY

QUARTERLY RETURN OF LEPROSY STATISTICS - 2ND QUARTER 2011

Table 13

1. National

	At the end of the quarter			Cumulative for end of the quarter		
	2nd Quarter 2011	2nd Quarter 2010	Diff. (%)	2011	2010	Diff. (%)
New patients detected	567	496	14.31	1123	1026	9.45
Children	59	50	18.00	106	99	7.07
Grade 2 Deformities	35	31	12.90	73	68	7.35
Multi-Bacillary	290	229	26.63	545	473	15.22
Females	239	215	11.16	476	445	6.96

2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	107	6	10	48	43
Gampaha	80	6	5	34	36
Kalutara	61	1	9	22	37
Western	248	13	24	104	116
Galle	1	0	0	0	0
Hambantota	18	0	0	13	12
Matara	18	1	3	13	6
Southern	37	1	3	26	18
Kandy	13	4	0	7	4
Matale	6	0	1	4	1
Nuwara Eliya	5	1	1	2	1
Central	24	5	2	13	6
Anuradhapura	25	2	3	12	9
Polonnaruwa	26	2	2	14	7
North Central	51	4	5	26	16
Kurunegala	45	5	3	33	19
Puttalam	33	2	3	14	11
North Western	78	7	6	47	30
Kegalle	12	0	3	6	6
Ratnapura	11	1	1	6	3
Sabaragamuwa	23	1	4	12	9
Badulla	7	0	2	5	3
Moneragala	7	0	0	5	3
Uva	14	0	2	10	6
Trincomalee	6	0	0	3	0
Batticaloa	38	2	9	6	6
Ampara	22	1	2	18	18
Kalmunai	14	0	1	9	5
Eastern	80	3	12	47	33
Jaffna	9	1	1	4	5
Vavuniya	1	0	0	1	0
Killinochchi	1	0	0	0	0
Mannar	1	0	0	0	0
Northern	12	1	1	5	5
Sri Lanka	567	35	59	290	239

Source : Anti Leprosy Campaign

18. SURVEILLANCE REPORT ON AEFI 2ND QUARTER 2011

Surveillance of Adverse Events Following Immunization (AEFI) continued in the second Quarter of 2011 has reached 96.8% of completeness of reports, while 56.2% reports were received on time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Almost 52% districts in the country have found at least one adverse event during a month probably due to good awareness and enthusiasm for surveillance by the health staff in MOH areas. Colombo, Gampaha, Hambantota, Matara, Vavuniya, Anuradhapura, Polonnaruwa, Kegalle, Kalmunai were able to send all reports for Sri Lanka which was 96.8%. Best timeliness was reported from Kegalle district (93.9%) followed by Hambantota (88.9%). (Table 14)

Highest percentage of nil reports were received from Killinochchi (90.9%), followed by Vavuniya (83.3%) and Mullativu (81.8%) districts, which is much higher than the Sri Lanka average (48.3%) indicating the need for more attention for surveillance. The lowest percentage (15.2%) of such returns received was from the Kegalle district, followed by Puttalam district (17.9%).

Highest rate (662.9 per 100,000 immunizations) of AEFI with 32 cases was reported from the Mullativu district. Two deaths reported in the second quarter of 2011 were following Pentavalent vaccine. Causality assessment done by the national expert committee has concluded these deaths as "Possible" vaccine reactions, because clinical event with a reasonable time relationship to vaccine administration but which could also be explained by concurrent disease or other drugs and available evidence do not either exclude or confirm the vaccine reaction.

There were 2 reported anaphylactic reactions following MR vaccine. Both were non fatal, and laboratory investigations are pending. The highest number (476) and rate of AEFI (553.7 per 100,000 doses administered) were reported against DPT vaccine (4th dose) followed by Pentavalent vaccine (182.1 per 100,000 immunization administered) and JE vaccine (102.6 per 100,000 doses administered). Notably, the first dose of Pentavalent has given more AEFI than 2nd or 3rd doses of the vaccine. High fever (452), Allergic reaction (353), nodule (98) and severe local reactions (92) are the leading AEFI reported. Highest number of fever cases reported were following Pentavalent (218 cases: 89.6 per 100,000 doses administered) and DPT (168 cases: 195.4 per 100,000 doses administered) vaccines.

For allergic reactions, it was largely due to DTP (78 cases; 90.7 per 100,000 doses administered), Pentavalent (65 cases; 26.7 per 100,000 doses administered), JE (62 cases: 64.2 per 100,000 doses administered) and MR (60 cases; 69.3 per 100,000 doses administered).

All the reported antigen specific AEFI rates are much less than those reported by either manufacturers or available in medical literature.

The number and rates of reported different AEFI against different vaccines are given in table 15.

Table 14

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 2ND QUARTER 2011

DPDHS Division	% Completeness	% Timely Returns	% of Nil Returns	No. of AEFI	AEFI Rate (100,000
Colombo	100.0	50.0	26.2	86	73.2
Gampaha	100.0	77.8	31.1	102	79.7
Kalutara	91.7	30.3	39.4	55	72.3
Kandy	98.6	39.4	53.5	72	87.6
Matale	94.4	76.5	44.1	50	136.1
Nuwara Eliya	89.7	48.6	71.4	19	40.2
Galle	96.5	40.0	49.1	51	79.0
Hambantota	100.0	88.9	22.2	68	152.7
Matara	100.0	56.9	80.4	15	28.7
Jaffna	93.9	74.2	41.9	105	293.0
Kilinochchi	91.7	72.7	90.9	1	10.4
Mannar	86.7	46.2	76.9	3	46.2
Vavuniya	100.0	83.3	83.3	4	31.3
Mullativu	91.7	9.1	81.8	32	662.9
Batticaloa	97.6	63.4	70.7	37	92.5
Ampara	95.2	50.0	65.0	11	60.4
Trincomalee	97.0	59.4	53.1	24	69.1
Kurunegala	98.6	41.2	36.8	110	100.9
Puttalam	84.8	42.9	17.9	71	119.3
Anuradhapura	100.0	57.9	29.8	86	121.6
Polonnaruwa	100.0	61.9	47.6	28	91.9
Badulla	97.8	77.3	40.9	59	110.8
Moneragala	97.0	68.8	59.4	49	133.0
Ratnapura	96.3	36.5	51.9	59	82.7
Kegalle	100.0	93.9	15.2	84	167.9
Kalmunai	100.0	43.6	71.8	13	36.6
Sri Lanka	96.8	56.2	48.3	1294	97.4

Table 15.

NUMBER AND RATE OF SELECTED AEFI REPORTED BY VACCINE AND BY TYPE OF AEFI

Vaccine	Seizure	Allergic Reaction	Injection Site Abscess	Severe Local Reactions	High Fever	Lymphadenitis	HHE	Nodule	Arthralgia	Encephalitis	Anaphylactic Shock	Persistent Screaming	Others	Total	Rate/ 100,000 dosed
BCG	0	0	1	1	3	1	0	1	0	0	0	0	0	7	8.5
DPT	38	78	17	47	168	0	1	45	4	0	0	2	76	476	553.7
Penta	16	65	16	29	218	0	6	45	0	0	0	14	33	442	182.1
Penta 1 st	8	25	7	14	129	0	4	14	0	0	0	9	12	222	284.2
Penta 2 nd	2	22	4	8	39	0	1	18	0	0	0	3	12	11	139.6
Penta 3 rd	6	18	5	7	50	0	1	13	0	0	0	2	9	111	128.5
OPV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Measels	1	29	2	1	19	0	0	0	0	0	0	0	4	56	65.5
DT	2	17	2	6	17	0	0	5	0	0	0	0	15	64	75.6
TT	0	7	1	3	0	0	0	0	0	0	0	0	0	11	13.0
JE	7	62	4	3	16	0	0	1	0	1	0	1	4	99	102.6
aTd	0	34	0	0	2	0	0	1	0	0	0	0	19	56	98.7
MR	4	60	0	2	9	0	0	0	0	0	2	0	4	81	93.6
Rubella	0	1	0	0	0	0	0	0	0	0	0	0	0	1	16.3
Total	68	353	43	92	452	1	7	98	4	1	2	17	155	1294	97.4

19. SEXUALLY TRANSMITTED DISEASES

Table 16

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA* 2ND QUARTER 2011

Disease	New cases or new disease episodes during the quarter			Total new cases or new episodes for the calendar year up to end of the quarter **			
	Male	Female	Total	Male	Female	Total	
HIV positives ¹	22	17	39	40	31	71	
AIDS	7	3	10	12	5	17	
Syphilis	Early Syphilis ²	39	15	54	75	32	107
	Late Syphilis ³	70	51	121	130	96	226
	Congenital Syphilis ⁴	4	2	6	4	2	6
Gonorrhoea ⁵	39	18	57	78	37	115	
Ophthalmia Neonatorum ⁶	0	0	0	0	0	0	
Non specific cervicitis/urethritis	140	261	401	269	522	791	
Chlamydial Infection	0	0	0	0	0	0	
Genital Herpes	321	404	725	569	756	1325	
Genital Warts	218	162	380	397	279	676	
Chancroid	0	0	0	0	0	0	
Trichomoniasis	4	23	27	7	47	54	
Candidiasis	244	380	624	490	772	1262	
Bacterial Vaginosis	0	267	267	0	509	509	
Other sexually transmitted diseases ⁷	163	96	259	293	144	437	
Non STI/Uncertain							

* - Central STD clinic Colombo and peripheral STD clinics of National STD/AIDS Control Programme of Sri Lanka

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

¹ - Includes AIDS cases

² - Diagnosed within 2 years of infection and considered to be infectious

³ - Diagnosed after 2 years of infection and considered to be non-infectious

⁴ - Includes both early and late cases

⁵ - Includes presumptive Gonorrhoea

⁶ - Includes both gonococcal and chlamydial conjunctivitis in neonatal period

⁷ - Includes Lympho granuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.

20. BACTERIOLOGY REPORT –2ND QUARTER 2011 –MEDICAL RESEARCH INSTITUTE

Table 17

	Apr	May	June
(A) CHOLERA			
No. of stool specimens Examined	2	67	-
El Tor Cholera	-	-	-
Ogawa	-	-	-
Inaba	-	-	-
Cholera 0139	-	-	-
(B) SALMONELLA			
Blood– No. Examined	19	36	36
S.typhi	-	-	-
S.paratyphi A	-	-	1
Stools—No. examined	45	126	92
S.typhi	-	-	-
S.paratyphi A	-	-	-
Others	-	-	-
(C) SHIGELLA			
No. Examined	45	125	92
Sh.flexneri 1	-	-	-
Sh.flexneri 2	-	-	-
Sh.flexneri 3	-	-	-
Sh.flexneri 4	-	-	-
Sh.flexneri 5	-	-	-
Sh.flexneri 6	1	1	-
Sh. sonnei	-	-	-
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	3	4	6
No.+ve	-	-	1
(E) CAMPYLOBACTER			
No.Examined	2	1	2
No. Positive			
(F) SPECIAL TESTS			
Clinical	17	14	22
S. Typhi	1	-	2
S. Paratyphi A	1	1	10
Other Salmonella	4	-	-

21. SURVEILLANCE OF MENINGITIS

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 2nd quarter 2011, 205 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system .

Out of this 161 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Kurunegala district (56), followed by Ratnapura (21) and Gampaha (13) districts.

Twenty four percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 21% belonged to the age group 1 -4 years and 19% belonged to age group 5 – 14 years. Sixty two percent of the clinically confirmed cases were males and 38% were females.

Table 18

Summary findings for special investigations carried out for clinically confirmed cases of Meningitis up to 30th June 2011

CSF Culture Report		
CSF Culture	Number	(%)
CSF results available	77	44%
• No Growth	(63)	
• Group B streptococci	(06)	
• Haemophilus influenza	(03)	
• Meningococcal	(03)	
• Streptococcus pneumonia	(01)	
• TB	(01)	
Culture results not known	95	55%
Not done	02	01%
Total	174	100%
Final outcome of the patient		
Outcome	Number	(%)
Cured	149	86%
Died	08	04%
Information not available	17	10%
Total	174	100%
Final Diagnosis(based on clinical and lab findings)		
Diagnosis	Number	(%)
Culture confirmed	14	08%
Probable bacterial meningitis	15	09%
Probable viral meningitis	11	07%
Suspected Meningitis	134	76%
Total	174	100%

22 INFLUENZA SURVEILLANCE

Pandemic/Avian Influenza preparedness activities began in the country in 2005 following global Avian/Pandemic preparedness programme. As part of these activities influenza surveillance in animals and humans were initiated by the Department of Animal Production and Health (DAPH) of Ministry of Livestock Development and Epidemiology Unit of Ministry of Health respectively. These activities are supervised by the National Technical Committee for Avian/Pandemic Influenza Preparedness. This report summarizes progress of influenza surveillance activities for the 2nd quarter 2011, April to June.

Human Influenza surveillance

ILI Surveillance –Laboratory Component

Under ILI laboratory surveillance a total of 421 samples were received from hospitals identified as sentinel surveillance sites for Avian/Pandemic Influenza for the said quarter. There were 134 samples in April, 148 in May and 139 in June. Lady Ridgeway Children's Hospital (LRH) and Teaching Hospital (TH) Peradeniya sent in the highest number of samples (61) each with Teaching Hospital Karapitiya sending in 49 and General Hospital (GH) Ratnapura 48 samples. However North Colombo Teaching Hospital (NCTH), GH Ampara, TH Jaffna and GH Badulla failed to send any samples within the quarter. There were 21 samples from GH Vavuniya and 8 from TH Batticaloa. Table 1 below shows the performance of sentinel hospitals in the laboratory component of the surveillance programme for this quarter.

These samples were processed in the Medical Research Institute (MRI) which is the National Influenza Centre (NIC) for the country. Influenza B remained as the predominant influenza viral strain during the quarter with 3, 8 and 5 cases being positive in the months of April, May and June. While the second wave of the H1N1 pandemic has subsided by end of the 1st quarter, there were 13 cases in June. One case of Influenza A (H3N2) was also recorded in June. Both Influenza B and Influenza A (H3N2) were being reported as seasonal influenza strains globally during this time (Table 20)

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. ICNO would collect information on the number of total OPD attendees and the number with ILI at the end of each day and would consolidate this information into a weekly return that is sent to the Epidemiology Unit.

In April 2011 there were 5331 ILI cases visiting OPD of sentinel hospitals and 3048 in May and 2885 in June.

The following graph in figure 1 shows the distribution of ILI attendance in OPD by month 2008-2011. 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. Year 2008 was a non-pandemic year.

Although ILI data are underestimated as few of the sentinel hospitals had sent in these data, 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 and therefore the second much higher peak was not evident. 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 the first two quarters of 2011 corresponded with the expected flu' pattern in the country showing clearly the first peak in the year.

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 1st quarter, GH Matara replaced CSTH as a SARI surveillance site. These are expected send in up to 20 respiratory samples per month from inward patients admitted with severe acute respiratory tract infections. For the epidemiology component of this activity ICNO with the help of surveillance officers of the programme stationed within these hospitals, would collect the information on the number of total inward patients in relevant wards and the number with SARI, daily and consolidate this information into a weekly return that is sent to the Epidemiology Unit.

There were a total of 151 samples from SARI patients in above 3 hospitals received by the MRI for the 2nd quarter 2011. May had the highest number of samples (70). In June there were 50 samples. For the whole quarter LRH had sent in the highest (77) for the quarter with 45 from GH Matara and 29 from TH Peradeniya. Table 21 below shows the performance of 3 SARI sentinel hospitals in the laboratory component of the SARI surveillance for this quarter.

Along with ILI samples, these SARI samples are processed at the NIC, MRI. In contrast to ILI results, Pandemic A H1N1 was seen predominantly among inward SARI patients while the presence of Influenza B was also observed throughout. There was 1 Influenza B case each in all 3 months of the quarter. Table 22 below shows the results yielded for SARI samples in the 2nd quarter 2011 at NIC.

SARI Surveillance – Epidemiological surveillance

There were total of 442 patients treated inward for severe respiratory tract infections in the said 3 hospitals within the 2nd quarter. The highest number (204) was reported from LRH and GH Matara had treated 162 and TH Peradeniya 76 patients. The highest number of patients was reported in June (229) and in May there were 208. Table 23 below shows the distribution of SARI patients in the 3 hospitals by month in the 2nd quarter 2011.

Animal Influenza Surveillance

This is carried out by the Department of Animal Production and Health (DAPH) of the Ministry of Livestock Development who is the partner of the Ministry of Health in Avian/Pandemic Preparedness activities.

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).

In the 2nd quarter 2011 there were 407 pooled samples and 1396 serum samples collected and tested at the VRI for HPAI. None of the samples had yielded HPAI.

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

Fig 1: OPD ILI visits by month 2008 - 2011

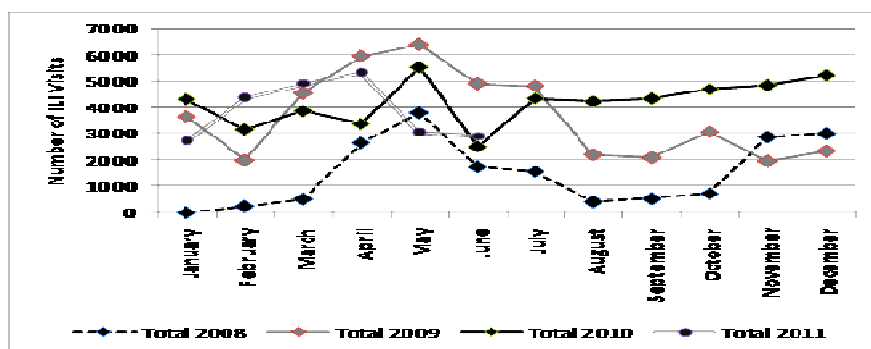


Table 19: performance of sentinel hospitals in the laboratory component of the surveillance programme - 2nd Quarter 2011

Institution	April	May	June	Total
LRH	16	22	23	61
NHSL	9	0	16	25
CSTH	1	2	0	3
IDH	3	1	2	6
SJGH	0	0	0	0
NCTH	0	0	0	0
TH Peradeniya	18	29	14	61
GH Nuwara Eliya	10	15	10	35
TH Karapitiya	4	20	25	49
GH Matara	16	15	11	42
TH Jaffna	0	0	0	0
GH Vavuniya	11	10	0	21
GH Ampara	0	0	0	0
TH Batticaloa	5	3	0	8
TH Kurunegala	0	0	0	15
GH Chilaw	11	5	6	22
TH Anuradhapura	16	8	0	24
GH Polnanauwa	0	0	0	1
GH Badulla	0	0	0	0
GH Ratnapura	14	18	16	48
Total	134	148	139	421

Table 20: Types of Respiratory Viruses Isolated in ILI samples – 2nd Quarter 2011

MONTH	TOTAL	INFLU B	PA(H1N1)	H3N2	A UN-TYPED
Jan	134	3	2	0	0
Feb	148	8	0	0	0
Mar	139	5	13	1	1

Table 21: performance of sentinel hospitals in the laboratory component of the SARI surveillance - 2nd Quarter 2011

Institution	April	May	June	Total
LRH	23	31	23	77
GH Matara	7	24	14	45
TH Peradeniya	1	15	13	29
Total	31	70	50	151

Table 22: Types of Respiratory Viruses Isolated in SARI Samples - 2nd Quarter 2011

MONTH	TOTAL	INFLU B	PA(H1N1)	H3N2
April	31	1	0	0
May	70	1	6	0
June	50	1	3	0

Table 23: Distribution of SARI patients by month – 2nd Quarter 2011

Institution	April	May	June	Total
LRH	5	84	115	204
GH Matara	0	88	74	162
TH Peradeniya	0	36	40	76
Total	5	208	229	442

Table 24: Animal samples collected by month and district – 2nd Quarter 2011

Month	No. of samples		Districts samples were collected from
	Pooled	Serum	
April	72	115	Gampaha, Colombo, Polonnaruwa, Puttalam, Mannar
May	160	661	Gampaha, Colombo, Puttalam, Polonnaruwa, Matale, Anuradhapura
June	175	620	Gampaha, Colombo, Polonnaruwa, Kandy, Hambantota, Ampara
Total	407	1396	

SURVEILLANCE REPORT ON JAPANESE ENCEPHALITIS —2010

Japanese Encephalitis (JE) is an acute infection in the central nervous system caused by an arthropod-borne virus. It is the most common documented cause of viral encephalitis in Asia. Japanese Encephalitis virus was first isolated in Ceylon in 1968 at the Medical Research Institute, Colombo. Since then JE cases have been identified from various parts of the country.

The first recorded major outbreak of Japanese encephalitis (JE) in Sri Lanka occurred in 1985-86 with 385 cases and 64 deaths in Anuradhapura and Puttalam districts. Outbreaks occurred in 1986-87 and 1987-88, the latter being the largest with 812 cases and 192 deaths in two adjoining districts (Kurunegala and Polonnaruwa). Cases occurred in rice cultivating areas with a network of irrigation canals supported by seasonal, moderate to heavy rainfall. Children aged 5-9 and young adults aged 20-24 years were predominantly affected.

JE was also spreading to new areas with previously low transmission. To cope with this emerging challenge, Epidemiology Unit of the Ministry of Health initiated phased JE immunization in 1988. Children aged 1-10 years were offered three primary doses and a booster of inactivated vaccine in the inter-pandemic period through a campaign approach. Over the years, JE incidence decreased as immunisation coverage increased. However, cases and occasional outbreaks were reported in other districts where immunization was not carried out, and the programme was ultimately expanded to 18 districts.

In this background, the Epidemiology Unit conducts surveillance of Acute Encephalitis syndrome (AES) with the primary view to capturing Japanese encephalitis cases. In 2010, two hundred and seventeen cases of encephalitis were notified to the Epidemiology Unit by MOOH through the Weekly Return of Communicable Diseases (H 399). Of these 217 cases, 146 (67.3%) reported encephalitis cases were confirmed as notifiable while thirty (13.8%) reported encephalitis cases were found to be non-notifiable in the investigation. For the 146 encephalitis cases confirmed as notifiable, only 94 (64.3%) case-based investigations had been performed by the MOOH.

The case based investigations of these AES cases revealed that only 78 (83%) cases were compatible with the surveillance case definition of Acute Encephalitis (suspected JE). Based on the available Cerebro-Spinal Fluid (CSF) reports of the suspected JE cases, 41 (52.6%) cases were categorized as probable viral encephalitis.

The laboratory surveillance conducted by the National JE reference laboratory at the MRI, Colombo reported 27 serologically confirmed JE in 2010. JE sero-positivity rates for serum and CSF specimens were 4% and 3.2% respectively.

Twenty (74%) cases of these serologically confirmed JE cases had been reported to the Epidemiology Unit through the special encephalitis surveillance (EPID/DS/JE/2007).

The reporting rate of AES cases by hospitals in the country was 1.04 /100000 population. However, the rate of reported AES confirmed as notifiable by the MOOH subsequent to field investigations was 0.7 /100000 population. The rate of Suspected JE was found to be 0.4/100000 population while the same for probable JE was 0.2/100000 population. The laboratory confirmed JE rate was 0.13/100000 population. In 2010, there were 3 JE specific deaths and the case fatality rate was found to be 11.1%(Table 25).

The districts of Gampaha (29.6%), Galle (15%), Kurunegala (11%) and Matara (11%) reported the highest burden of confirmed JE cases in 2010 (Table 18). The same trend was visible for suspected JE cases determined based on the surveillance case definition in the special investigations of AES cases as a proxy measure of JE given the fact that all AES cases are not subject to serological confirmation of JE (Table 26).

Table 25

CASES, DEATHS AND CASE FATALITY RATE (CFR) OF JAPANESE ENCEPHALITIS 1990 – 2010

Year	Japanese Encephalitis			
	Cases		Deaths	CFR %
	No.	Rate		
1990	387	2.3	43	11.1
1991	325	1.9	25	7.7
1992	291	1.7	27	9.3
1993	289	1.6	52	18
1994	230	1.3	41	17.6
1995	173	1	32	18.5
1996	307	1.7	44	14.4
1997	164	0.9	19	11.9
1998	122	0.7	3	2.5
1999	102	0.5	3	2.9
2000	83	0.5	2	2.4
2001	66	0.4	9	13.6
2002	113	0.6	15	13.2
2003	133	0.7	20	15
2004	129	0.66	9	6.9
2005	65	0.33	6	9.2
2006	26	0.13	1	3.8
2007	39	0.19	0	0
2008	31	0.15	6	19.4
2009	34	0.16	4	11.8
2010	27	0.13	3	11.1

Table 27

DISTRIBUTION OF SUSPECTED, LAB CONFIRMED JE CASES AND DEATHS BY MONTHS –2010

Month	Suspected cases (%)	Lab confirmed cases (%)	Deaths
January	10(12.8)	7(25.9)	1(33.3)
February	3(3.8)	2(7.4)	1(33.3)
March	6(7.7)	0	0
April	5(6.4)	1(3.7)	0
May	7(9.0)	2(7.4)	0
June	10(12.8)	3(11.1)	0
July	6(7.7)	4(14.8)	0
August	2(2.6)	2(7.4)	0
September	2(2.6)	0	0
October	3(3.8)	1(3.7)	0
November	3(3.8)	0	0
December	2 (2.6)	4(14.8)	0
Unknown	19(24.3)	1(3.7)	1 (33.3)
Total	78 (100)	27(100)	3(100)

Table 26

DISTRIBUTION OF SUSPECTED ,LAB CONFIRMED JE CASES AND DEATHS BY DISTRICTS

District	Suspected cases	Lab confirmed JE cases	Deaths
Colombo	6 (7.7)	2(7.4)	0
Gampaha	15 (19.2)	8(29.6)	0
Kalutara	4 (5.1)	1(3.7)	0
Galle	7(9.0)	4(14.8)	1(33.3)
Hambantota	3 (3.8)	1(3.7)	1(33.3)
Matara	4(5.1)	3(11.1)	0
Matale	1 (1.3)	0	0
Monaragala	1(1.3)	0	0
Kurunegala	9 (11.5)	3(11.1)	1(33.3)
Trincomalee	8(10.2)	0	0
Polonnaruwa	2(2.6)	0	0
Ratnapura	2(2.6)	0	0
Kegalle	4(5.2)	1(3.7)	0
Batticaloa	3(3.8)	0	0
Kalmunai	1(1.3)	0	0
Puttalam	3(3.8)	2(7.4)	0
Nuwareliya	2 (2.6)	0	0
Unknown	3(3.8)	2 (7.4)	0
Total	78(100)	27(100)	3(100)

Table 28

DISTRIBUTION OF SUSPECTED,LAB CONFIRMED JE CASES AND DEATHS BY AGE GROUPS— 2010

Age group	Suspected cases	Confirmed cases	Deaths
<1	0	1	0
1-4	19(24.4)	6(22.2)	0
5-9	10(12.8)	1(3.7)	0
9-14	08 (10.2)	1(3.7)	0
15-19	09(11.5)	2(7.4)	0
20-24	02(2.6)	1(3.7)	0
25-29	06(7.7)	1(3.7)	1(33.3)
30-34	04(5.1)	3 (11.1)	0
35-39	03(3.9)	1(3.7)	1(33.3)
40-44	01(1.3)	0	0
45-49	02(2.6)	0	0
50-54	02(2.6)	1(3.7)	0
55-59	01(1.3)	3(11.1)	0
>60	08(10.2)	6(22.2)	1(33.3)
Unknown	03(3.9)	0	0
Total	78(100)	27(100)	3(100)

Lab confirmed JE cases had occurred throughout the year but 26 % of the confirmed JE cases had occurred in January while 15% had occurred in December. AES cases that were compatible with the surveillance case definition (suspected JE cases) and considered as a proxy measure of JE burden too demonstrated a similar trend of onset (Table 27).

It should be noted that only 64% of AES cases confirmed as notifiable had been subject to special investigations by the MOOH. Hence, the suspected cases of JE reported here reflects an under estimate of the proxy measure of JE.

Almost all age groups were affected by the disease. However, it is worth paying attention to the fact that 47% of the suspected JE and 30% of the laboratory confirmed JE had occurred in children under 15 years of age.

The proportion of laboratory confirmed JE cases was the highest (22%) in age categories of 1-4 and 20-24 years. (Table 28).

The proportion of females and males who were laboratory confirmed as having JE was 37% (n=10) and 63% (n= 17) respectively.

The status of immunization against JE among laboratory confirmed JE cases is given in the Table 29 in 2010, laboratory confirmed JE has not occurred among those who had been immunized with JE vaccines. Four (15 %) laboratory confirmed JE patients had not been exposed to any JE immunization. However, the immunization status was unknown for 23 (85.1%) due to many reasons such as inability to trace patients and non performance of case based investigation by the MOOH.

Given the fact that the immunization against JE commenced in 1989, those who were above 21 years of age could not have been exposed to JE vaccination in Sri Lanka.

Table 29

JE Immunization status of confirmed JE cases in 2010

Age group (years)	Immunized	Non immunized	unknown	Total
<10	0	2(25%)	6(75%)	8
11-20	0	0	3(100%)	3
21-30	0	0	2(100%)	2
31-40	0	0	4(100%)	4
41-50	0	0	1(100%)	1
>50	0	2(22.2%)	7(77.8%)	9
Total	0	4 (14.8%)	23 (85.1%)	27

On the basis of this assumption, among JE cases with an unknown immunization status, 14 patients (52%) are expected to have been non immunized against JE. Thus, 67% (n=18) of laboratory confirmed patients altogether could not have been exposed to any JE vaccination during their life time.

Table 25

SUMMARY OF NOTIFIABLE DISEASES - 2ND QUARTER 2011

Health Region	Dysentery	Encephalitis	Enteric Fever	Food Poisoning	Human Rabies	Leptospirosis	Measles	Simple Con. Fever	Tetanus	Typhus Fever	Viral Hepatitis	Whooping Cough	DHF	Rubella	Chickenpox	Mumps	Meningitis	Leishmaniasis
Colombo	48	4	21	5	1	131	16	2	0	2	15	0	2836	1	85	62	10	0
Gampaha	50	5	12	17	2	129	4	3	2	5	45	0	938	42	40	29	13	0
Kalutara	49	2	6	12	0	98	0	0	0	0	2	0	466	0	97	33	10	0
Kandy	117	1	6	7	0	62	0	0	0	39	15	0	196	1	30	31	5	0
Matale	30	1	11	5	0	78	2	0	0	6	0	0	110	0	12	16	4	2
Nuwara-Eliya	151	2	17	77	1	13	1	3	2	21	9	1	56	1	19	36	1	0
Galle	22	4	4	0	2	67	1	3	0	5	1	0	267	0	105	37	8	0
Hambantota	11	1	1	8	0	246	1	10	0	13	5	0	205	0	22	25	3	44
Matara	23	1	3	9	0	88	2	4	0	23	7	0	163	2	70	24	5	17
Jaffna	59	1	64	38	0	0	1	0	0	34	5	0	46	0	72	22	3	0
Kilinochchi	8	1	3	10	0	1	0	0	0	4	2	0	20	0	2	0	2	0
Mannar	6	0	9	78	0	0	0	0	0	2	2	0	6	0	7	1	1	0
Vavuniya	11	3	3	37	0	4	0	0	0	0	1	0	23	0	5	4	1	0
Mullaitivu	17	0	1	4	0	2	1	0	0	1	1	0	9	0	0	1	2	0
Batticaloa	345	2	2	3	2	10	0	0	1	1	1	0	438	0	4	1	2	0
Ampara	32	0	2	4	0	22	5	0	0	1	3	1	59	0	46	86	0	0
Trincomalee	348	0	1	3	0	31	0	0	0	3	3	1	56	0	22	11	5	1
Kurunegala	104	3	18	18	3	322	6	8	1	17	7	0	266	1	111	141	56	13
Puttalam	47	0	11	8	0	45	2	0	0	9	4	0	101	1	17	9	9	0
Anuradhapura	39	0	0	16	1*	60	1	1	0	5	4	0	91	1	66	30	5	73
Polonnaruwa	55	0	6	4	0	34	3	0	1	5	0	0	110	6	43	9	7	23
Badulla	105	3	24	4	0	17	0	2	0	31	13	0	132	97	31	13	4	0
Moneragala	26	3	9	6	0	119	0	14	0	23	17	1	67	126	17	35	10	1
Ratnapura	171	1	17	10	1	206	0	7	0	10	8	0	320	1	109	30	21	4
Kegalle	35	6	29	15	0	143	3	0	0	10	44	0	219	2	103	95	11	0
Kalmunai	315	0	0	14	0	2	0	2	0	1	1	0	9	0	28	26	7	0
Total	2224	44	280	412	12	1930	49	62	6	267	220	4	7209	282	1163	807	205	178

No polio cases. (from AFP surveillance system).

* This patient was admitted to the hospital during the 1st quarter 2011

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Figures given may be subject to revision.

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

Such reports should be addressed to:

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ON STATE SERVICE

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