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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	03
6. Surveillance of Human Rabies	03
7. Surveillance of Enteric Fever	03
8. Surveillance of Viral Hepatitis	04
9. Surveillance of Dysentery	04
10. Surveillance of Japanese Encephalitis	04
11. Surveillance of Malaria	04
12. Surveillance of Dengue Fever	05
13. Surveillance of Rubella	06
14. Surveillance of Tuberculosis	07
15. Surveillance at Sea Port	07
16. Surveillance at Air Port	07
17. Surveillance of Leprosy	08
18. Surveillance report on A E F I	09
19. Sexually Transmitted Diseases	11
20. Pattern of Enteric Pathogens isolated	12
21. Surveillance of IBD	12
22. Influenza Surveillance	13
23. Special Report	16
Surveillance Report on DF & DHF 2009	
24. Summary of Notifiable Diseases	20



1. POLIOMYELITIS

Eighteen Acute Flaccid cases were notified to the Epidemiology Unit during the 2nd quarter 2010. This contrasts with the 21 and 33 AFP cases each reported during the 2nd quarter 2009 and 2008 respectively. This number is below the expected number of AFP cases per quarter which is 31 according to WHO surveillance criteria. This required number for the quarter or 124 AFP cases per year (according to the latest population data) makes up a non-polio AFP rate of 2 per every 100,000 under 15 year olds. However the non - polio AFP rate was 1.2 per 100,000 under 15 population when the expected standard was considered as 1 case per every 100,000 under 15 year olds for the quarter.

Notification of AFP Cases from Hospitals

Over one third of all cases (6 cases), were notified from the main sentinel site for AFP, the Lady Ridgeway Children's Hospital (LRH), Colombo. LRH as a tertiary care center receives referrals from other hospitals in the country. TH Kandy reported 5 cases. Another children's referral institution, Sirimavo Bandaranaike Memorial Children's Hospital (SBMCH) reported 2 cases for the quarter. A few other hospitals reported one AFP case each and all the hospitals that notified AFP cases in the quarter are given in the list below.

Table 01

GEOGRAPHICAL DISTRIBUTION OF AFP CASES 2ND QUARTER 2010

Province	District	MOH Area	No of AFP Cases	
Southern	Matara	Hakmana	1	
		Kirinda	1	
		Deniyaya	1	
Central	Kandy	Gampola	1	
		Werellagama	1	
		Nuwara Eliya	Walapane	1
			Maskeliya	1
	Matale	Mathurata	1	
		Yatawatta	1	
		Ukuwela	1	
Sabaragamuwa	Ratnapura	Matale	1	
		Embillipitiya	1	
North Western	Puttalam	Anamaduwa	1	
		Marawila	1	
Eastern	Trincomalee	Trincomalee	1	
North Central	Anuradhapura	Mihintale	1	
Uva	Badulla	Mahiyangana	1	
Northern	Jaffna	Jaffna MC	1	
Total			18	

Distribution of AFP Cases by Provinces, Districts & MOH Areas

Matara district of Southern Province and Matale and Nuwara Eliya districts of Central Province had the highest number of AFP cases reported from a district in the 2nd quarter. The number of cases reported from each of these was 3 (17%). Jaffna from the Northern Province reported 1 case in this quarter. Incidentally there were no cases reported from the highly populated Western Province. The complete list of distribution of AFP cases according to the province, district and MOH area is given in Table 01.

Seasonal Distribution of AFP Cases

Eight cases (44%) were reported in June. The number reported for the months of April and May was 3 and 7 cases respectively.

Distribution of AFP Cases by Age and Sex

Majority of the AFP cases (8 (44%)) reported in the 2nd quarter this year were between 1 - 4 years of age. This is in contrast to the trend seen in the respective quarter in the previous year where the majority (43%) of the AFP cases reported was in the older 5 - 9 year age group. In this quarter, 6 (33%) children each belonged to 5 - 9 year age group and 4 cases were in the 10-14 year age group. None of the cases reported were below 1 year of age.

Sixty one percent of the AFP cases (11) in the 2nd quarter 2010 were boys. This is similar to the pattern seen in the 2nd quarter of 2009 where the majority of the cases were boys (57%) (Table 02).

Table 02

DISTRIBUTION OF AFP CASES BY AGE AND SEX - 2ND QUARTER 2010

Age Group	Sex		Total
	Male	Female	
<1 year old	0	0	0
1-4 year old	5	3	8
5-9 year old	3	3	6
10-15 year old	3	1	4
Total	11	7	18

Laboratory Surveillance of AFP Cases

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 complete to make the samples of 'good condition'.

Ninety four percent of AFP cases (17) reported in the quarter had at least one stool sample sent to MRI for polio virology. Medical Research Institute received two timely stool samples from 13 cases (72%) out of the 18 AFP cases reported in the quarter for polio virology. It is below the expected percentage (80%) according to the standards of the global programme but it is an improvement from the timely stool collection rate (62%) achieved out of 21 AFP cases recorded in the respective quarter 2009.

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2nd Quarter 2010. Last case of cholera was reported in the country in January 2003.

3. TETANUS

During the 2nd Quarter 2010, 4 suspected tetanus cases were notified to the Epidemiology Unit. This is in comparison to 5 cases reported during the previous quarter and 8 cases in the corresponding quarter of 2009.

Of the notified, 3 cases were compatible with case definition and field investigations were carried out. No deaths were reported and characteristics of investigated cases are given in Table 03 .

4. MEASLES

During the 2nd Quarter 2010, 20 cases of suspected measles were notified to the Epidemiology Unit compared to 15 cases notified during the previous quarter and 28 cases in the corresponding quarter of last year.

Ten cases of the 13 reported were compatible with the case definition and detailed field investigations were carried out. Of them 4 cases were presented from Kurunegala, 2 cases were from Kandy and others were one each from Jaffna, Kalutara, Kegalle and Puttalam districts. (Table 4).

5. LEPTOSPIROSIS

During the 2nd Quarter 2010, 949 cases and 29 deaths (CFR 3%) due to Leptospirosis were notified to the Epidemiology Unit compared to 1105 cases and 23 deaths in the previous quarter and 903 cases and 39 deaths during corresponding quarter of 2009 .

Special surveillance conducted regarding Leptospirosis revealed that Majority (66%) were in the 25-54 years age group and male:female ratio is 6:1.

6. HUMAN RABIES

Fifteen (15) cases of human rabies were notified to the Epidemiology Unit in the 2nd Quarter 2010, compared to 11 cases in the previous quarter and 11 cases in the corresponding quarter of year 2009. Distribution of cases by district is given in Table 22.

Animal Rabies

According to MRI data during the quarter, 129 dogs were reported positive for rabies virus compared to 155 in the previous quarter and 188 in the corresponding quarter of 2009. In addition the following animals were also reported positive;

Cats -11, Wild Animals - 01

Domestic Ruminants - 01

Rabies Control Activities*

Dog vaccination - A total of 218467 dogs were immunized during the 2nd Quarter 2010 when compared to 262307 in the previous quarter and 265582 in the corresponding quarter of last year.

Animal Birth Control

Chemical - 8989 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical - 12176 female dogs were subjected to sterilization by surgical method during the quarter under review.

*source - Director / PHVS

Table 03

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF TETANUS –2ND QUARTER 2010

Sex	Male	2
	Female	1
Age Group	>45 years	3
Districts	Kalmunai	1
	Kandy	1
	Trincomalee	1
Immunization Status	Immunized	0
	Non - Immunized	0
	Unknown	3

7. ENTERIC FEVER

In the 2nd Quarter 2010, a total of 309 cases of enteric fever were notified to the Epidemiology Unit, compared to 543 cases in the previous quarter and 518 cases in the corresponding quarter of 2009. The district of Jaffna (97) reported the highest number of cases. (Table 22).

MOH area of Karaveddi (16) notified the highest number of cases during the quarter under review.

Table 04**SELECTED CHARACTERISTICS OF CONFIRMED CASES OF MEASLES –2ND QUARTER 2010**(N = 10)

Sex	Male	5
	Female	5
Age Group (Years)	< 1	4*
	10 - 14	1
	25 - 29	2
	30 - 34	2
	35 - 39	1
Immunization Status	Non-Immunized	9
	Unknown	1

*3 children were below 9 months

8. VIRAL HEPATITIS

In the 2nd Quarter 2010, 294 cases of viral hepatitis were reported to the Epidemiology Unit, compared to 384 cases in the previous quarter and 3555 cases in the corresponding quarter of 2009, mainly in IDP/ Vavuniya.

Among the reported cases, 235 were investigated and confirmed as viral hepatitis. RDHS area Badulla notified the highest number of cases (41) accounting for 14% of the total case load. RDHS areas of Gampaha and Kurunegala notified 27 cases each.

9. DYSENTERY

In the 2nd Quarter 2010, 1616 cases of dysentery were notified to the Epidemiology Unit, compared to 1018 cases in the previous quarter and 2601 cases in the corresponding quarter of 2009. The Districts of Ratnapura (203), Nuwara Eliya(198) Colombo (97) and Kandy (97) notified the highest number of cases.

Table 06 :**RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES—2ND QUARTER 2010**

	2nd Quarter 2009	2nd Quarter 2010
No. of blood smears examined	216909	229477
No. of positives	122	165
No. of <i>P. vivax</i>	119	161
No. of <i>P. falciparum</i>	1	3
No. of mixed infections	2	1
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.06%	0.07%
P.v. : P.f. ratio	40:1	40:1
Percentage of infant positives	0%	0%
No. imported cases from other countries	2	13

10. JAPANESE ENCEPHALITIS (JE)

During the 2nd quarter in 2010, 65 cases of Encephalitis were reported to the Epidemiology Unit. Among the reported cases 28 (43%) case based investigations were performed by Medical Officers of Health. Six were found to be serologically confirmed as JE. Out of these 6 confirmed cases, only 5 case based investigations had been performed by the MOH.

Among them 3 (50%) were under 5 years of age and one (16.7%) was in the age group 10-15 years. Number of cases in the age groups of 30-40 years and 60-70 years was one each. No deaths were reported due to JE during the 2nd quarter (Table 05). Fifty two cases of encephalitis, six confirmed JE and two deaths were reported in the 2nd quarter of 2009

11. MALARIA

The number of microscopically confirmed malaria cases detected during the 2nd quarter of 2010 was higher than the number detected during the corresponding period of 2009 as seen in Table 6. The number of *P.vivax* infections reported during the period under review has increased. This increase can be attributed to enhance disease surveillance in the North-East province during year 2010. The number of imported cases also has increased in 2nd quarter 2010.

Table 05**SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE-2ND QUARTER 2010**

Sex	Male	4
	Female	2
Age group	<5y	3
	10y - 15y	1
	30y - 40y	1
	60y - 70y	1
District	Matara	1
	Gampaha	4
	Unknown	1
Immunization status	Immunized	0
	Non - immunized	2
	Unknown	4

Table 07
DISTRIBUTION OF MALARIA CASES BY RMO
DIVISION - 2ND QUARTER 2010

RMO	Blood smears	Positives	P.v.	P.f./ Mixed
Colombo	8884	0	0	0
Gampaha	7393	0	0	0
Kalutara	1732	0	0	0
Kandy	10552	1	0	1
Matale	5032	1	1	0
Nuwara Eliya	573	0	0	0
Galle	3626	0	0	0
Matara	4459	0	0	0
Hambantota	5474	28	28	0
Jaffna	14776	1	1	0
Kilinochchi	7851	38	38	0
Mannar	4437	11	11	0
Vavuniya	8471	6	6	0
Mullaitivu	61	61	60	1
Batticaloa	20043	0	0	0
Ampara	5416	1	1	0
Trincomalee	19828	2	2	0
Kurunegala	16799	0	0	0
Maho	5972	0	0	0
Puttalam	7517	0	0	0
Anuradhapura	22516	4	3	1
Polonnaruwa	16601	1	1	0
Badulla	4652	0	0	0
Moneragala	11936	10	9	1
Ratnapura	5406	0	0	0
Kegalle	2537	0	0	0
Kalmunai	6926	0	0	0
TOTAL	229470	165	161	4

P.v.– Plasmodium vivax

P.f.- Plasmodium falciparum

12. DENGUE FEVER (DF)/ DENGUE HAEMORRHAGIC FEVER (DHF)

During the 2nd Quarter 2010, 7391 cases of DF/DHF and 37 deaths were reported (CFR 0.50%) when compared to 11630 cases and 88 deaths (CFR 0.76%) reported during the previous quarter. Proportion of cases notified in April, May and June was 30.9%, 29.9%, 39.2% respectively.

Table 8 shows the distribution of confirmed DF/DHF cases and deaths in the RDHS divisions during the quarter.

Special surveillance data on 2356 confirmed cases were received and analysed for the second quarter 2010. Age distribution of reported cases showed that 729 cases (30.9%) were below 15

Table 08
MORBIDITY AND MORTALITY DUE TO DF/DHF
- 2ND QUARTER 2010

RDHS Division	Cases	Percentage	Deaths
Colombo	481	20.4	14
Gampaha	173	7.3	8
Kalutara	267	11.3	5
Kandy	146	6.2	2
Matale	7	0.3	0
Nuwara Eliya	45	1.9	1
Galle	98	4.2	4
Hambantota	89	3.8	1
Matara	140	5.9	0
Jaffna	-	-	0
Kilinochchi	-	-	0
Mannar	26	1.1	0
Vavuniya	2	0.1	0
Mullaitivu	1	0.0	0
Batticaloa	150	6.4	3
Ampara	6	0.3	0
Trincomalee	1	0.0	2
Kurunegala	7	0.3	0
Puttalam	6	0.3	1
Anuradhapura	91	3.9	0
Polonnaruwa	58	2.5	0
Badulla	222	9.4	2
Moneragala	20	0.8	0
Ratnapura	123	5.2	3
Kegalle	195	8.3	1
Kalmunai	2	0.1	0
TOTAL	2356	100	47

Source DF/DHF special surveillance data

years of age. The majority of the cases 293 (12.4%) were between 10-14 years of age.

According to the clinical findings, majority of the reported cases (83.8%) were classified as dengue fever. Sixteen percent were classified as DHF with 8.3%, 6.1%, and 1.3% falling into DHF I, DHF II, DHF III 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 2010, 1816 blood samples were tested using IgM capture ELISA test and Haem Agglutination Inhibition test (HAI) at the Department of Virology, MRI and 1357 samples were confirmed as positive. (Table 10)

Table 9**AEDES LARVAL DENSITIES (BRETEAU INDEX) IN HIGH RISK AREAS OF THE WESTERN PROVINCE DURING THE 2ND QUARTER**

Area	Breteau Index		Breteau Index		Breteau Index	
	April 2010		May 2010		June 2010	
	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus
Moratuwa	03	06	0.57	2.28	1.1	3.4
Nugegoda	-	-	3.3	9.3	4.7	4.2
Kaduwela	00	20.12	00	18.3	0.5	14.5
Maharagama	-	-	01	11	00	23.8
Piliyandala	-	-	00	11.2	3.3	17.7
Kelaniya	6.7	5.7	03	09	3.62	6.67
Ragama	00	15	0.77	4.61	1.31	8.77
JaEla	4.0	13.5	04	09	2.9	13.1

Table 10**DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 2ND QUARTER 2009**

Month	Clinically Suspected cases of DF	Serologically confirmed Cases of DF
April	747	597
May	728	544
June	341	216
Total	1816	1357

13. RUBELLA

During the 2nd quarter 2010, three Rubella cases were reported to Epidemiology Unit from districts Colombo, Kurunegala and Anuradhapura. Two cases (Kurunegala and Anuradhapura) were compatible with clinical case definition. The case reported from Anuradhapura was laboratory confirmed , 20 years old, male and was not vaccinated. One Congenital Rubella Syndrome case was reported from Kurunegala during the second quarter 2010.

14. TUBERCULOSIS

A total of 2197 tuberculosis patients were registered for 2nd Quarter 2010 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 1677 suffered from pulmonary disease, and the balance 520 patients from non-pulmonary disease. Of these patients 1210 were bacteriologically confirmed with a bacteriological confirmation rate of 72.15%. The distribution of tuberculosis patients by RDHS division is given in Table 11.

B.C.G. vaccination

A total of 88,939 B.C.G. vaccinations were carried out during the quarter with 90.37% coverage.

Table 11
TUBERCULOSIS PATIENTS BY RDHS DIVISIONS
- 2ND QUARTER 2010

RDHS DIVISION	PTB	EPTB	Total	Pulmonary TB Direct Smear	
				No. +VE	%
Colombo	359	92	451	315	87.74
Gampaha	176	55	231	156	88.64
Kalutara	122	25	147	85	69.67
Kandy	79	41	120	40	50.63
Matale	38	07	45	26	68.42
N' Eliya	38	9	47	26	68.42
Galle	92	42	134	60	65.22
Hambantota	29	13	42	16	55.17
Matara	49	18	67	29	59.18
Jaffna	82	29	111	38	46.34
Vavunia	24	03	27	14	58.33
Kilinochchi	08	03	11	03	37.50
Mannar	06	01	07	03	50.00
Mullativu	02	02	04	01	50.00
Ampara	53	12	65	20	37.74
Batticaloa	29	14	43	27	93.10
Trincomalee	68	05	73	23	33.82
Kurunegala	84	29	113	55	65.48
Puttalam	30	10	40	25	83.33
Anuradhapu-	48	17	65	43	89.58
Polonnaru-	33	09	42	23	69.70
Badulla	45	17	62	33	73.33
Monaragala	24	11	35	19	79.17
Kegalle	83	25	108	69	83.13
Ratnapura	70	31	101	57	81.43
Kalmunai	06	00	06	04	66.67
Total	1677	520	2197	1210	72.15

PTB-Pulmonary Tuberculosis
EPTB- Extra Pulmonary Tuberculosis
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 2010, is as follows;

	Total
a. Yellow fever	754
b. Meningococcal meningitis	88
C. Polio vaccination	00

16. SURVEILLANCE AT AIR PORT

Surveillance activities carried out at the International Airport, Katunayake during the 2nd Quarter 2010 is given below.

1. Yellow Fever Surveillance

a. No. with valid certificate	-	04
b. No. without valid certificate & Deported	-	-
c. No. without valid certificate Isolated	-	-

2. Airport Sanitation

a. No. of sanitary inspections carried out including Food Establishments	-	42
b. No. of food samples taken under Food Act	-	00
c. No. found defective	-	00
d. No. of court cases/prosecuted/warned	-	00
e. No. of water samples tested	-	09
f. No. reported contaminated	-	00

3. Release of human remains

a. No. of human remains released	-	99
b. No. referred to JMO for post-mortem	-	06
c. No. alleged suicide	-	08

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 2010****Table 12****1. National**

	At the end of the quarter			Cumulative for end of the quarter		
	2nd Quarter 2010	2nd quarter 2009	Diff. (%)	2010	2009	Diff. (%)
New patients detected	490	471	3.87	1006	937	7.36
Children	50	39	28.20	97	87	11.49
Grade 2 Deformities	31	36	-13.88	67	62	8.06
Multi-Bacillary	225	234	-3.84	466	450	-3.55
Females	214	199	7.5	436	414	5.31

2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	94	6	16	30	48
Gampaha	79	2	9	31	38
Kalutara	49	3	5	21	24
Western	222	11	30	82	110
Galle	5	-	1	0	1
Matara	13	0	1	11	6
Hambantota	16	0	1	10	2
Southern	34	0	3	21	9
Kandy	8	2	0	3	3
Matale	4	0	0	2	2
Nuwara Eliya	2	0	0	2	0
Central	14	2	0	7	5
Anuradhapura	24	2	1	14	6
Polonnaruwa	26	4	4	13	13
North Central	50	6	5	27	19
Kurunegala	23	1	1	15	11
Puttalam	32	0	5	14	16
North Western	55	1	6	29	27
Kegalle	8	1	0	2	1
Ratnapura	20	1	1	9	7
Sabaragamuwa	28	2	1	11	8
Badulla	7	0	0	4	1
Moneragala	4	0	0	2	3
Uva	11	0	0	6	4
Trincomalee	12	1	2	9	1
Batticaloa	22	2	1	13	9
Ampara	15	1	1	8	8
Kalmunai	18	3	1	7	11
Eastern	67	7	5	37	29
Jaffna	2	1	0	1	1
Vavuniya	4	-	0	2	2
Mannar	-	-	-	-	-
Mullativu	1	-	0	1	0
Kilinochchi	2	1	0	1	0
Northern	9	2	0	5	3
Sri Lanka	490	31	50	225	214

Source : Anti Leprosy Campaign

18. SURVEILLANCE REPORT ON AEFI– 2010

Surveillance of Adverse Events Following Immunization (AEFI) has effectively continued in the 2nd quarter 2010 (Table 13). Completeness of reporting has reached 94.4%, while 43.6% of reports were received in time at the Epidemiology Unit indicating that timeliness is yet to be improved.

Kalutara, Hambantota, Ampara, Polonnaruwa and Moneragala were able to send all reports while Kurunegala (99.2%), Anuradhapura (99.1%) and Kalmunai (98.7%) have also reported above Sri Lanka average (94.4%) for completeness. The highest timeliness was reported from Kegalle (73.8%) followed by Matara district (62.5%).

Highest percentage of nil reports were received from Killinochchi (94.7%) and Vavuniya districts (73.9%) followed by Kalmunai district (72.7%) which is much higher than the Sri Lanka average (40%). The lowest percentage (13.4%) of such returns was received from the Kurunegala district followed by Puttalam district (15.1%).

Table 13

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF “NIL” REPORTS OF AEFI BY RDHS DIVISIONS - 2ND QUARTER 2010

RDHS Division	(%) Completeness	(%) Timeliness	(%) “Nil” Returns	Reported AEFI	
				Number	Rate*
Colombo	97.6	43.9	15.9	231	83.7
Gampaha	97.8	47.7	15.9	234	85.9
Kalutara	100.0	27.8	33.3	149	93.8
Kandy	95.1	38.0	35.0	157	88.7
Matale	93.1	46.3	41.8	90	129.8
Nuwara Eliya	96.2	37.3	61.3	37	38.2
Galle	93.9	43.9	52.3	89	65.4
Hambantota	100.0	39.4	21.2	151	175.3
Matara	94.1	62.5	66.7	50	46
Jaffna	90.9	53.3	35.0	198	240.2
Kilinochchi	79.2	5.3	94.7	1	16.6
Mannar	43.3	0.0	61.5	9	74.6
Vavuniya	95.8	52.2	73.9	14	37.4
Mullativu	26.7	12.5	62.5	22	988.3
Batticaloa	92.9	30.8	57.7	82	92.8
Ampara	100.0	35.7	54.8	55	111.4
Trincomalee	95.0	49.1	70.2	36	54.5
Kurunegala	99.2	42.0	13.4	405	183.1
Puttalam	98.1	52.8	15.1	111	90.3
Anuradhapura	99.1	47.8	21.2	233	159.8
Polonnaruwa	100.0	54.8	33.3	82	137.6
Badulla	95.6	52.3	43.0	79	73.6
Moneragala	100.0	40.9	47.0	62	90.3
Ratnapura	94.4	34.3	43.1	134	90.3
Kegalle	98.5	73.8	16.9	160	162.5
Kalmunai	98.7	33.8	72.7	37	48.2
Sri Lanka	94.4	43.6	40.0	•2908	104.8

* Rate Per 100,000 immunizations

● Included Vitamin A Mega Dose & Other Vaccines

Interpretation of ‘ nil report ’ needs to be continued; while sending ‘ nil ’ reports assure that the system of reporting is in place, the high number of nil reports indicate the need for more scrutiny for surveillance to ensure that there were no missing AEFI cases.

Highest rate (988.3 per 100,000 immunizations) of AEFI (estimation based on pooling the number of all immunizations) was reported from Mullativu district with 22 AEFI. Highest number (405) was reported from the Kurunegala district with the rate of 183.1 per 100,000 immunizations which is higher than the rates up to the 2nd quarter 2009 (184 AEFIs and rate 74.5 per 100,000 immunizations).

There were two deaths reported as suspected AEFI following administration of penatvalant vaccine in Anuradhapura and Kandy RDHS divisions. Findings of causality assessment did not reveal any evidence to substantiate that these deaths were caused by vaccines.

The highest number (1379) and rate of AEFI (475.3 per 100,000 immunizations) were reported against DPT vaccine. When compared with the rate up to the 2nd quarter 2009 for same, there was a considerable decrease in the rate of AEFI reported for DPT in 2010. The number and rates of reported AEFI against different vaccines are given in Table 14.

Table 14

NUMBER AND RATE OF SELECTED AEFI REPORTED BY VACCINE AND BY TYPE OF AEFI - UP TO 2ND QUARTER 2010

Vaccine	Seizure	Allergic reaction	Abscess	Severe Local reactions	High Fever	Lymphadenitis	Encephalitis	Paralysis of body	Meningitis	Anaphylactic Shock	Nodule	GBS	Arthralgia	Encephalopathy	Persistent screaming	Injection Reaction	ADEM	**Others	*HHE	Total	Rate/ 100,000 dosed
BCG	1	1	5	2	3	3	0	0	0	0	0	0	0	0	1	0	0	1	0	17	9.9
DPT	104	243	153	130	425	0	0	0	1	0	178	0	8	0	24	0	1	108	4	1379	475.3
Penta	38	118	22	31	312	0	0	0	2	0	40	0	2	0	16	0	0	83	18	682	178.8
OPV	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	0.2
Measles	7	49	0	1	34	0	0	0	0	0	2	0	1	0	0	0	0	12	1	107	61.9
DT	4	34	9	11	15	0	0	0	0	0	5	0	0	0	0	0	0	19	4	101	61.5
TT	0	12	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	16	10.0
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JE	11	161	2	16	74	0	0	0	0	0	2	0	0	0	1	0	0	31	0	298	119.2
aTd	0	9	0	0	0	0	0	0	0	1	1	0	0	0	0	5	0	33	0	49	84.3
MR	5	166	0	3	27	0	0	0	1	0	0	0	1	0	0	0	0	17	1	221	131.7
Hep	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5	4.3
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	170	796	193	195	890	3	0	1	4	2	228	0	12	0	42	5	1	307	28	2877	103.7

* Characterizes hypo responsiveness, hypotonia & change of skin colour.

** Weakness of the body & injection which includes headache, vomiting faintish ness etc due to anxiety reaction.

● Excluded Vitamin A Mega Dose & Other Vaccines

19. SEXUALLY TRANSMITTED DISEASES

Table 15

**NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA*
2ND QUARTER 2010**

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	18	8	26	36	17	53
AIDS	3	0	3	5	2	7
Early Syphilis ²	36	14	50	91	30	121
Syphilis	67	73	140	148	139	287
Congenital Syphilis ⁴	2	0	2	3	0	3
Gonorrhoea ⁵	73	22	95	127	45	172
Ophthalmia neonatorum ⁶	0	0	0	3	0	3
Non specific cervicitis/urethritis	118	314	432	246	589	835
Chlamydial Infection	0	0	0	0	0	0
Genital Herpes	262	315	577	550	648	1198
Genital Warts	234	153	387	426	309	735
Chancroid	0	1	1	0	2	2
Trichomoniasis	5	20	25	8	37	45
Candidiasis	197	319	516	405	706	1111
Bacterial Vaginosis	0	284	284	0	540	540
Other sexually transmitted diseases ⁷	87	30	117	235	89	324
Non-verenial ⁸	910	523	1433	1763	1058	2821

* - 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.

8 - number of STD clinic attendees who were not having sexually transmitted diseases.

20. BACTERIOLOGY REPORT— 2ND QUARTER 2010— MEDICAL RESEARCH INSTITUTE

Table 16

	April	May	June
(A) CHOLERA			
No. of stool specimens Examined	66	31	113
El Tor Cholera	00	00	00
Ogawa	00	00	00
Inaba	00	00	00
Cholera 0139	00	00	00
(B) SALMONELLA			
Blood— No. Examined	29	41	54
S.typhi	00	00	00
S.paratyphi	00	00	00
Stools—No. examined	115	102	197
S.typhi	00	00	00
S.paratyphi	00	00	00
Others	00	00	01
(C) SHIGELLA			
No. Examined	115	102	197
Sh.flexnery 1	00	00	00
Sh.flexnery 2	00	01	00
Sh.flexnery 3	00	00	00
Sh.flexnery 4	00	00	00
Sh.flexnery 5	00	00	00
Sh.flexnery 6	00	00	00
Sh. sonnei	00	01	02
Sh. Others	00	00	00
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	02	04	05
No.+ve Group A	00	01	00
(E) CAMPYLOBACTER			
No.Examined	74	69	47
No. Positive	04	01	00

21. SURVEILLANCE REPORT ON INVASIVE BACTERIAL DISEASES— 2ND QUARTER 2010

Surveillance of Invasive Bacterial Disease (IBD) was carried out by the Epidemiology Unit and the Microbiology laboratory of the LRH in collaboration with the SEAR office of the World Health Organization. Surveillance was conducted among children aged 2-59 months of age admitted to LRH for invasive bacterial infection (IBI). The total admissions in the wards where surveillance is carried out during the 2nd quarter of 2010 was 14341. Total admissions in the surveillance age group (2-59 months) were 8080 (56.3%). Total number of IBI (pneumonia, Meningitis, sepsis) in the age group of 2-59 months was 1376 (17%). Of these 1376 patients, 458 patients (33.3%) were enrolled for the IBD surveillance.

Number of blood cultures performed among enrolled patients were 433. Two *S.pneumoniae* isolates (0.5%) and one (0.2%) *Haemophilus influenzae* were isolated from blood cultures during the surveillance period. Number of CSF samples eligible for surveillance was 106. Neither *pneumococcus* nor *Haemophilus influenzae* were isolated from CSF cultures. Number of LATEX tests performed among patients enrolled was 342. None was tested positive for *S.pneumoniae* while 04 (1.2%) were positive for group B streptococcus.

Among 458 patients with IBI, the number of children positive for *S. pneumoniae* was 02 (0.4%). One (0.2%) child had IBD of *Haemophilus influenzae* aetiology. while 04 (0.8%) had group B streptococcus.

Table 17 : RESULTS OF SURVEILLANCE OF INVASIVE BACTERIAL INFECTIONS - 2ND QUARTER 2010

Month	Blood cultures			Cerebro spinal fluid (Cultures)			Cerebro spinal fluid (Latex test)				No of children			
	No of blood cultures	Positive for S. Pneumoniae	Positive for Haemophilus influenza	Total CSF samples	Positive for S. Pneumoniae	Positive for Haemophilus influenza	No tested with Latex antigen	Positive for S. Pneumoniae	Positive for Haemophilus influenza b	Positive for Gr. B Streptococci	No enrolled	Positive for S. Pneumoniae	Positive for Haemophilus influenza	Positive for Haemophilus influenza b
April	180	01 (0.6%)	00	38	00	00	105	00	00	01 (0.9%)	183	01 (0.5%)	00	00
May	180	00	00	38	00	00	118	00	00	00	183	00	00	00
June	73	01 (1.4%)	01 (1.4%)	30	00	00	119	00	00	03 (2.5%)	92	01 (1.1%)	01 (1.1%)	00
Total	433	02 (0.5%)	01 (0.2%)	106	00	00	342	00	00	04 (1.2%)	458	02 (0.4%)	01 (0.2%)	00

* *H. influenzae* type b patients include those tested positive for Hib in LATEX only. *Haemophilus influenzae* isolates were not typed .

22. INFLUENZA SURVEILLANCE

As part of the pandemic preparedness activities that was initiated in the country for Avian/Pandemic Influenza, this activity in humans had been established complementary to the influenza surveillance already initiated among animals by the Department of Animal Production and Health (DAPH). Both these activities are supervised by the National Technical Committee for Avian/Pandemic Influenza Preparedness. Human and animal influenza surveillance activities are expected to act as the early warning system for a possible Avian/Pandemic Influenza outbreak in the country.

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. These institutions have been selected considering their importance in geographical location and also in being a 'hot spot' for bird migration. They are expected to send at least thirty (30) samples per month from patients with influenza like illness (ILI) attending OPD to the Medical Research Institute (MRI).

MRI is the national Influenza Centre (NIC) in Sri Lanka for human influenza surveillance. ICN is the responsible officer for this activity supervised by the Microbiologist of the institution. Once ILI patients are diagnosed by the medical officers of the OPD, ICN would select those

from whom specimen are to be collected. She or he would also collect the information on the number of total OPD attendees and the number with ILI daily and consolidate this information into a weekly return that is sent to the Epidemiology Unit.

SARI surveillance has been established in 3 hospitals in the country; Lady Ridgeway Children's Hospital (LRH), Colombo South Teaching Hospital (CSTH) and Teaching Hospital Peradeniya. These hospitals are expected to 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 ICN 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.

Following case definitions are used for human influenza surveillance.

ILI: Sudden onset of a fever over 38⁰C and cough or sore throat in absence of other diagnosis.

SARI: Those who meet ILI case definition with shortness of breath or difficulty in breathing and who require hospital admission.

The following graph in Figure 1 shows the distribution of ILI attendance in OPD by month from 2008.

ANIMAL INFLUENZA SURVEILLANCE

This is carried out by the Department of Animal Production and Health (DAPH) of the Ministry of Livestock Development who is a 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 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).

Both human and animal influenza surveillance activities are monitored by the National Technical Committee for Avian/Pandemic Influenza Preparedness. This is a working group of high level technical officers of the two main Ministries (and other relevant governmental, non-governmental and international donor agencies). The committee is co-chaired by the Director General of Department of Animal Production & Health of the Ministry of Livestock Development and the Director General of Health Services of Ministry of Health.

FIGURE 1: DISTRIBUTION OF OPD ILI VISITS BY MONTH 2008-2010

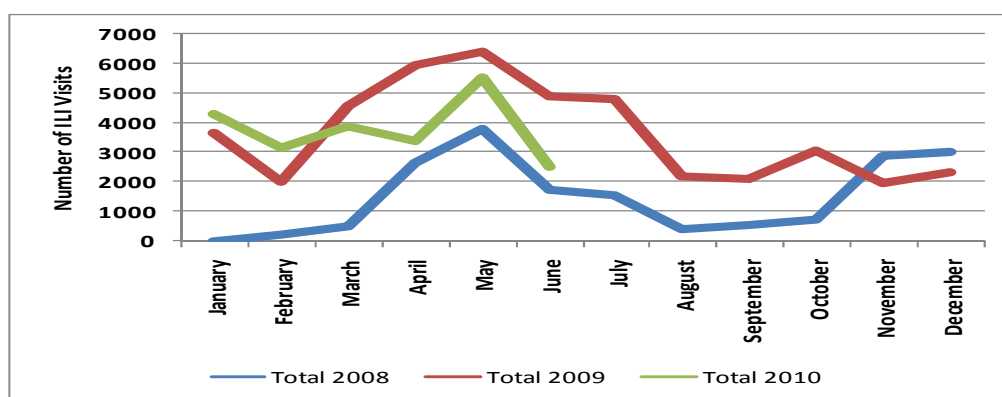


Table 18

ILI & SARI SURVEILLANCE 2010 - SAMPLES RECEIVED FROM SENTINEL HOSPITALS

Province	Institution	JAN	FEB	MAR	APR	MAY	JUN	Total
Western	LRH	36	32	27	15	23	25	158
	NHSL	7	11	4	0	8	3	33
	CSTH	7	0	1	2	7	10	27
	IDH	57	20	14	3	4	5	103
	SJGH	0	0	1	0	1	0	2
	NCTH	12	4	3	5	0	2	26
Central	TH Peradeniya	12	8	8	6	21	7	62
	GH Nuwara Eliya	15	1	15	14	0	14	59
Southern	TH Karapitiya	19	7	2	3	2	3	36
	GH Matara	27	19	21	10	8	14	99
Northern	TH Jaffna	0	0	0	0	0	0	0
	GH Vavuniya	2	0	1	0	0	0	3
Eastern	GH Ampara	15	2	1	2	1	0	21
	TH Batticaloa	19	8	16	8	0	8	59
North Western	TH Kurunegala	8	13	18	5	11	22	77
	GH Chilaw	8	2	1	0	0	0	11
North Central	TH Anuradhapura	23	12	3	1	8	16	63
	GH Polonnaruwa	3	0	1	0	0	0	4
Uva	GH Badulla	16	6	9	0	0	1	32
Sabaragamuwa	GH Rathnapura	12	11	4	7	0	9	43
Total		298	156	150	81	94	139	918

Table 19:

RESULTS OF INFLUENZA SURVEILLANCE CARRIED OUT AT MRI - 2010

MONTH	ADENO	INFLU A	INFLU B	PARA	RSV	PA (H1N1)	Flu A	H1N1	H3N2	UNTYPED
JAN	0	1	1	0	1	56	0	0	2	1
FEB	0	0	0	0	1	2	15	2	2	15
MAR	1	0	0	3	3	0	5	2	1	5
APR	0	0	0	1	1	1	3	0	2	3
MAY	0	1	0	2	5	0	9	0	16	10
JUN	2	0	0	1	1	0	0	0	4	0
Total	3	2	1	7	12	59	32	4	27	34

23. SURVEILLANCE REPORT ON DENGUE FEVER/ DENGUE HAEMORRHAGIC FEVER – 2009

Dengue Fever was serologically confirmed in Sri Lanka in 1962 and the first outbreak was reported in 1965. The disease which was earlier confined to urban areas has spread to peri urban and predominantly rural districts as well. At present it has become endemic in the country and epidemics have been experienced every other year since 2002. **(Figure 2- Dengue cases and deaths notified during 1992 – 2009)**

During 2009, 35,010 suspected Dengue Fever / Dengue Haemorrhagic Fever cases and 346 deaths (CFR 0.98 %) were reported to the Epidemiology Unit. This was the worst ever epidemic of Dengue reported in Sri Lanka. When compared to 2008, this was an exponential increase (6560 cases and 28 deaths). The incidence rate for DF/DHF in 2009 was 169 per 100,000 population.

The usual seasonal increase in incidence which occurs in May-July in relation to the South Western monsoon rains was well marked in 2009 with over 50% of reported cases within May to July. This is not marked since 2004, but, a level of high endemicity prevailed throughout the period since 2005.

The cases of DF/DHF were distributed in almost all the districts but the majority of the cases were reported from the Western Province which accounted for 31.5% of the total case load. Kandy, Kegalle and Matale districts reported a high case load accounting for 12%, 11% and 6% of the total case load respectively. Distribution of cases by RDHS divisions is given in Table 20.

Some of the 'high-risk' MOH areas identified in 2004 continued to report a significant number of cases during the year 2009. Colombo Municipal Council area reported 1591 cases (4.5% of the total case load) followed by the MOH areas Vavuniya (1062 cases i.e. 3.0%), Akurana (994 cases i.e. 2.8%), Warakapola (788 cases i.e. 2.2%). Furthermore, several MOH areas such as MC Kandy in Kandy district, Kelaniya, Wattala, Attanagalla in Gampaha district, Panadura in Kalutara district, Kurunegala and Rideegama in Kurunegala district reported epidemic proportions during 2009. The MOH areas which had a major contribution to the case load are given in Table 21.

Special Surveillance of DF/DHF

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

Special surveillance data in respect of 12417

cases were received for the year 2009. All age groups were affected by the disease with 27.5% of the cases (3422) being less than 15 years old while 24% of the cases (2984) were in the 20-29 year age group (Figure 3). Deaths due to DF/DHF too had occurred among all age. The highest case fatality rate was for those above 60 years of age followed by 55-59 years and 5-9 years group. The highest number of deaths was among the 5-9 year age group (Figure 4).

Distribution of cases and deaths by sex showed that there was a male preponderance (Figure 4).

Severity of the disease

According to the WHO disease classification 8095 cases (63%) received through the special surveillance mechanism were classified as dengue fever while the remaining 4667 cases (36%) were classified as DHF. The majority of the DHF cases were classified as DHF I (2953 cases i.e. 23%), followed by DHF II (1193 cases i.e. 9%). Out of the DHF cases 11% (521) had developed Dengue shock (DHF III & IV). Case fatality rate of reported DHF cases for 2008 was 7.4 % (346/4667).

Confirmation of the diagnosis

Department of Virology, Medical Research Institute, Colombo tested 9820 samples during the year using IgM capture ELISA test and Haem Agglutination Inhibition test while 6406 were serologically confirmed.

**Figure 2
DENGUE CASES AND DEATHS NOTIFIED
DURING 1992 - 2009**

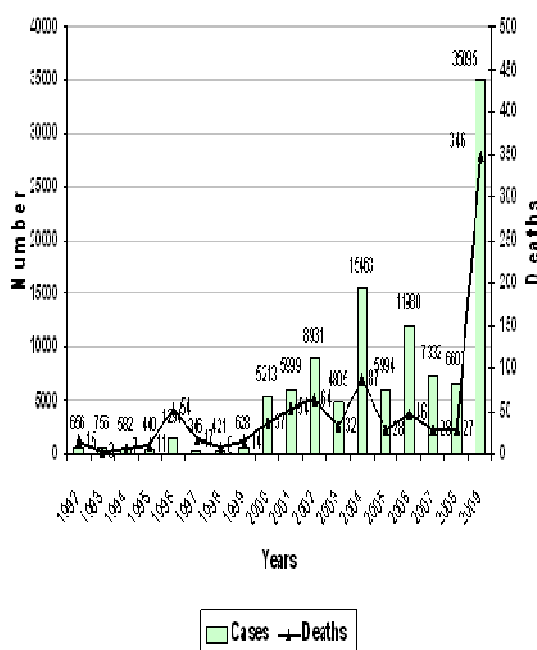


Table 20
DISTRIBUTION OF NOTIFIED CASES AND DEATHS
DUE TO DF/DHF BY RDHS DIVISION –2009

RDHS Division	No of cases	%	Incidence Rate (per 100,000 popu-0	No. of deaths	%
Colombo	4813	13.75	190.83	42	13.75
Gampaha	4677	13.36	190.00	64	13.36
Kalutara	1,538	4.39	130.04	13	4.39
Kandy	4,209	12.02	303.59	47	12.02
Matale	2,131	6.09	438.24	13	6.09
NuwaraEliya	298	0.85	39.86	4	0.85
Galle	654	1.87	60.54	6	1.87
Hambantota	982	2.80	170.06	19	2.80
Matara	1,159	3.31	141.37	6	3.31
Jaffna	410	1.17	65.64	6	1.17
Kilinochchi	0	0.00	0.00	0	0.00
Mannar	19	0.05	19.90	1	0.05
Vavuniya	1,122	3.20	372.22	20	3.20
Mullaitivu	0	0.00	0.00	0	0.00
Batticaloa	660	1.89	112.82	20	1.89
Ampara	266	0.76	93.8	0	0.76
Trincomalee	378	1.08	91.65	5	1.08
Kurunegala	2,976	8.50	189.12	19	8.50
Puttalam	839	2.40	101.40	9	2.40
Anuradhapura	679	1.94	82.61	6	1.94
Polonnaruwa	209	0.60	52.64	0	0.60
Badulla	402	1.15	47.73	2	1.15
Moneragala	199	0.57	42.64	1	0.57
Ratnapura	2,120	6.06	189.52	14	6.06
Kegalle	3,841	10.97	465.06	25	10.97
Kalmunai	429	1.23	95.87	4	1.23
TOTAL	35,007	100	169.65	346	100

PREVENTION AND CONTROL

The control strategy adopted in 2005 to closely monitor the high risk areas was continued during 2009. The Epidemiology Unit of the Ministry of Healthcare & Nutrition carried out surveillance and rapid response activities and the National Dengue Control Unit carried out the implementation of prevention and control activities including monitoring at district level. Dengue control activities were reviewed at district level by the National Dengue Control Unit in collaboration with the Epidemiology Unit.

Figure 3

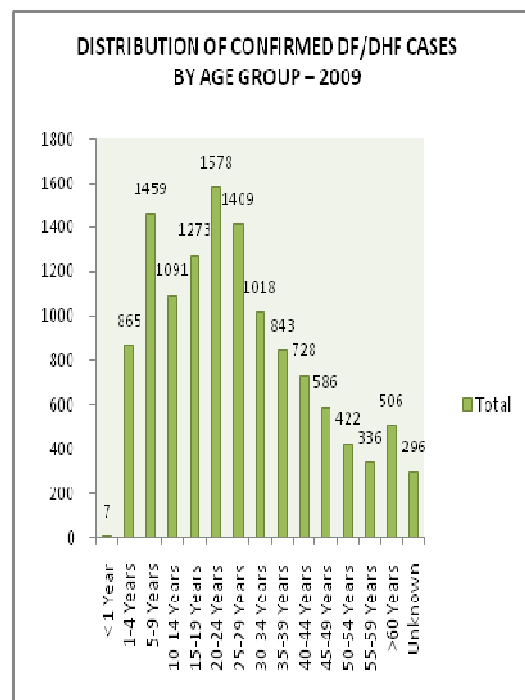


Table 21

DISTRIBUTION OF NOTIFIED CASES OF DF/DHF CASES BY HIGH RISK MOH AREAS – 2009

RDHS Division	MOH Area	No. cases	% of the country total	Incidence per 100,000 population
Colombo	MC Colombo	1591	4.5	222.5
	Dehiwala	460	1.3	196.9
Gampaha	Kelaniya	531	1.5	337.7
	Wattala	513	1.5	294.2
	Attanagalla	506	1.4	280.5
	Mahara	439	1.3	212.5
Kalutara	Mirigama	417	1.2	248.3
	Panadura	664	1.9	287.4
Kandy	Akurana	994	2.8	1663.5
	MC Kandy	636	1.8	548.3
Matale	Ukuwela	581	1.7	866.3
	MC Matale	438	1.2	1278.0
Matara	MC Matara	418	1.2	555.9
Vavuniya	Vavuniya	1062	3.0	864.1
Kurunegala	Kurunegala	612	1.7	371.6
	Rideegama	595	1.7	689.1
Kegalle	Warakapola	788	2.2	711.3
	Kegalle	477	1.4	523.5
	Bulathkohupitiya	472	1.3	987.3

Figure 4

DISTRIBUTION OF DEATHS DUE TO DF/DHF AND CASES FATALITY RATES BY AGE GROUPS - 2009 (SPECIAL SENTINEL SURVEILLANCE)

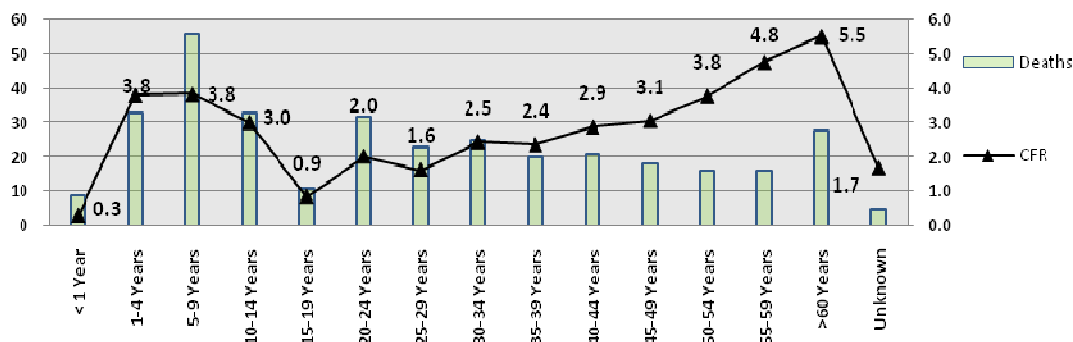


Figure 5

DISTRIBUTION OF CONFIRMED CASES AND DEATHS BY SEX-2009

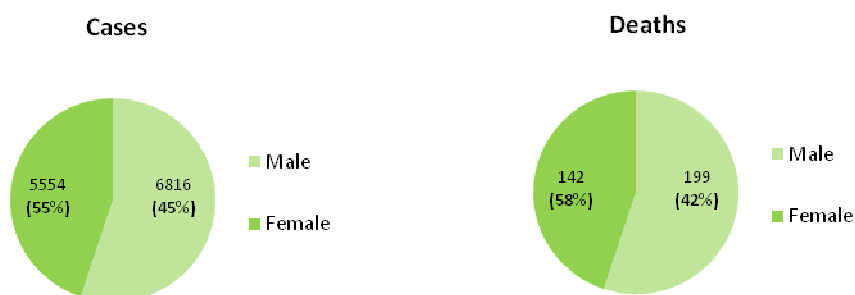


Figure 6

CLASSIFICATION OF THE CASE LOAD BY WHO CLASSIFICATION 2009

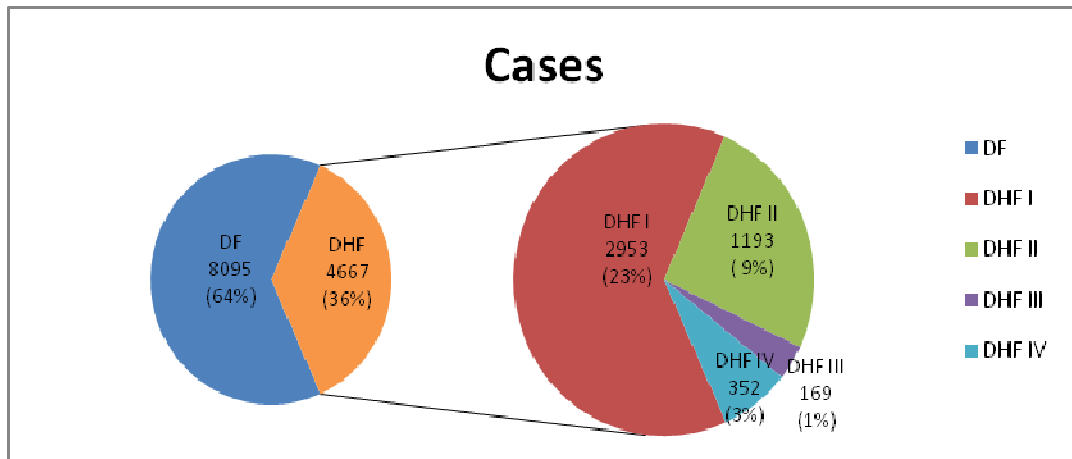


Figure 7

DISTRIBUTION OF NOTIFIED DF/DHF CASES BY MONTH – SRI LANKA 2004 – 2009

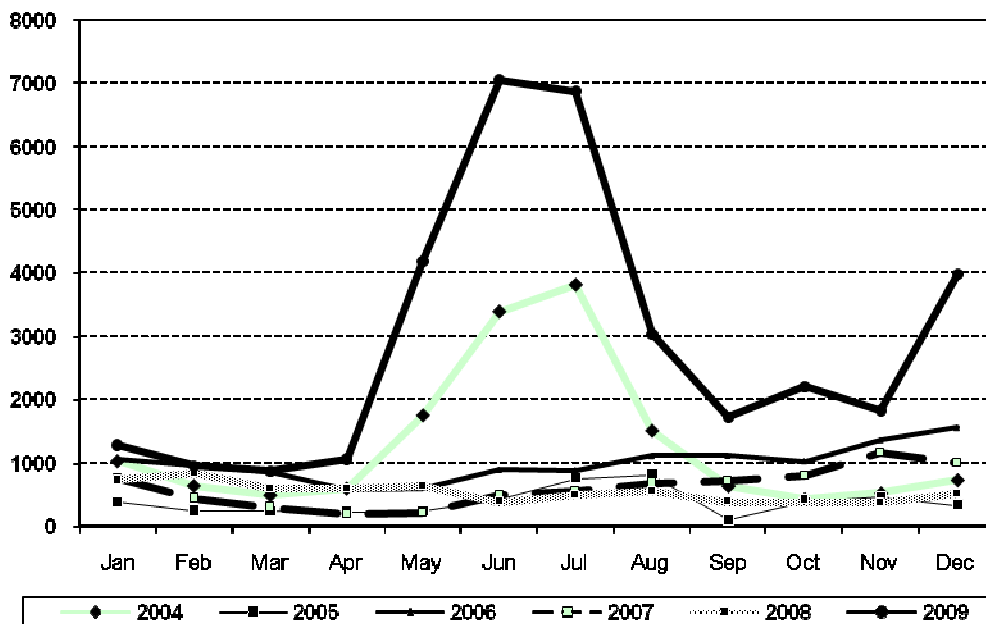


Table 22.

SUMMARY OF NOTIFIABLE DISEASES - 2ND QUARTER 2010

Health Region	Dysentery	Enteric Fever	Enteric Fever	Food poisoning	Human Rabies	Leptospirosis	Measles	Tetanus	Typhus Fever	Viral Hepatitis	Whooping Cough	Dengue Haemorrhagic Fever/DF	Rubella	Chicken Pox	Mumps	Meningitis	Leishmaniasis
Colombo	97	8	19	20	0	167	0	0	3	12	1	1220	1	41	13	68	1
Gampaha	43	8	15	1	4	87	1	0	4	27	1	881	0	19	9	25	0
Kalutara	71	7	7	45	0	82	2	1	1	3	1	593	0	59	28	32	0
Kandy	97	1	8	2	1	30	3	1	36	13	0	379	0	23	5	14	0
Matale	39	3	11	10	0	38	0	0	4	14	0	116	0	15	9	16	0
Nuwara-Eliya	198	0	47	79	0	8	3	1	15	13	1	33	0	53	10	11	0
Galle	71	1	3	6	1	25	3	0	2	2	1	343	0	51	15	25	0
Hambantota	32	1	0	6	0	41	0	0	12	2	0	156	0	13	5	8	18
Matara	75	2	2	7	0	91	1	0	18	2	0	124	0	45	20	14	6
Jaffna	86	2	97	0	1	1	0	0	13	16	0	464	0	48	12	1	0
Kilinochchi	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
Mannar	13	0	12	8	0	0	0	0	0	4	0	80	0	5	13	1	0
Vavuniya	10	1	7	1	1	2	0	0	1	4	0	41	0	8	3	1	0
Mullaitivu	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Batticaloa	51	1	5	19	2	9	0	1	0	3	0	291	0	9	0	3	0
Ampara	27	0	2	0	0	14	0	0	0	3	0	34	0	44	10	9	0
Trincomalee	50	6	0	2	0	5	0	2	6	4	1	120	0	27	11	12	0
Kurunegala	91	12	11	3	2	78	5	0	9	27	0	305	1	76	23	89	0
Puttalam	29	2	11	4	1	7	1	0	0	14	1	207	0	19	4	9	0
Anuradhapura	17	3	2	11	0	36	0	0	8	9	0	107	1	65	20	31	39
Polonnaruwa	27	0	3	5	0	16	0	0	1	18	0	171	0	34	13	26	1
Badulla	66	1	28	3	0	24	0	1	28	41	0	234	0	36	7	24	0
Moneragala	58	1	8	1	1	14	0	0	13	26	0	213	0	53	7	6	0
Ratnapura	203	0	3	14	1	118	0	0	10	23	2	976	0	44	15	69	0
Kegalle	67	4	5	5	0	56	1	0	3	13	0	219	0	72	27	23	0
Kalmunai	95	1	2	2	0	0	0	0	0	1	0	78	0	7	3	20	0
Total	1616	65	309	254	15	949	20	8	187	294	9	7391	3	866	282	537	65

No polio cases. (from AFP surveillance system).

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Figures given may be subjected 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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