

**Volume 50**  
**April - June**  
**2009**



# **Epidemiological Bulletin**

**SRI LANKA**

***Second Quarter***  
***2009***

**Epidemiology Unit**  
**Ministry of Health**

<http://www.epid.gov.lk>

## **Contents :**

1. Surveillance of Poliomyelitis
2. Surveillance of Cholera
3. Surveillance of Tetanus
4. Surveillance of Measles
5. Surveillance of Leptospirosis
6. Surveillance of Human Rabies
7. Surveillance of Enteric Fever
8. Surveillance of Viral Hepatitis
9. Surveillance of Dysentery
10. Surveillance of Japanese Encephalitis
11. Surveillance of Malaria
12. Surveillance of Dengue Fever (D.F.) & Dengue Haemorrhagic Fever (D.H.F.)
13. Surveillance of Tuberculosis
14. Surveillance at Sea Port
15. Surveillance at Air Port
16. Surveillance of Leprosy
17. Antibiotic Sensitivity Pattern of Enteric Pathogens isolated - 2<sup>nd</sup> Quarter 2009
18. Surveillance report on Adverse Events Following Immunization - up to 2<sup>nd</sup> Quarter 2009
19. Sexually Transmitted Diseases - 2<sup>nd</sup> Quarter 2009
20. Surveillance report on Dengue Fever/ Dengue Haemorrhagic Fever - 2008
21. Surveillance report on Invasive Bacterial Diseases - 2009
22. Summary of Notifiable Diseases - 2<sup>nd</sup> Quarter 2009

## 1. POLIOMYELITIS

Twenty one (21) Acute Flaccid Paralysis cases were notified to the Epidemiology Unit during the 2<sup>nd</sup> quarter 2009. This contrasts with the 33 and 25 AFP cases each reported during the 2<sup>nd</sup> quarter 2008 and 2007 respectively. This number is below the expected number of AFP cases per quarter which is 28 according to WHO surveillance criteria. This required number for the quarter or 56 AFP cases per year (according to the latest population data) makes up a non-polio AFP rate of 1 per every 100,000 under 15 year olds. A non - polio AFP rate of 1.5 per 100,000 under 15 population has been achieved for the quarter.

### Notification of AFP Cases from Hospitals

Almost one half of all cases (10 i.e.48%) 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 Anuradhapura and TH Kandy reported 3 and 2 cases respectively. TH Ragama, TH Kurunegala, GH Trincomalee, TH Jaffna, TH Colombo South and TH Batticaloa reported one case each.

### Distribution of AFP Cases by Provinces, Districts & MOH Areas

Colombo district of Western Province and Puttalam district of North western Province had the highest number of AFP cases reported from a district in the 2<sup>nd</sup> quarter. The number of cases reported from these was 5 (24%) each. Two of the case from Colombo belonged to Colombo municipality area. Mulativu from the Northern Province reported 2 cases in this quarter. Both these cases were from the relief villages in the district. The complete list of distribution of AFP cases according to the province, district and MOH area is given in Table 1.

### Seasonal Distribution of AFP Cases

April recorded the majority of the AFP cases reported in the 2<sup>nd</sup> quarter. The number reported for the month was 10 (48%). In May, 7 (33%) cases were reported. June had only 4 cases of AFP.

### Distribution of AFP Cases by Age and Sex

Majority of the AFP cases (9 i.e.43%) reported in the 2<sup>nd</sup> quarter this year were between 5 -9 years of age. This is similar to the trend seen in the respective quarter in the previous year where the majority (42%) of the AFP cases reported in the 2<sup>nd</sup> quarter 2008 were in the same age group. In this quarter, 9 (28.5%) children each belonged to 1- 4 year age group and 10-14 year age group. None of the cases were below 1 year of age.

Fifty seven percent of the AFP cases (12) in the

Table 1

### GEOGRAPHICAL DISTRIBUTION OF AFP CASES – 2<sup>ND</sup> QUARTER 2009

Province	District	MOH Area	Number of AFP cases	
Western	Colombo	CMC	2	
		Kolonnawa	1	
		Homagama	1	
		Kotte	1	
Southern	Hambantota	Tissamaharama	1	
Central	Kandy	KMC	1	
		Nuwara Eliya	Thalavakele	1
Sa-baragama	Ratnapura	Kolonna	1	
North Western	Kurunegala	Nikaweratiya	1	
		Puttalam	Chilaw	2
			Anamaduwa	1
			Dankotuwa	1
		Marawila	1	
Eastern	Trincomalee	Eachchilampattu	1	
		Batticaloa	Batticaloa	1
		Anuradhapura	Nochchiyagama	1
Northern	Mulativu	Mulativu	2	
		Jaffna	Chavakachcheri	1
			Kuliyapitiya	1
			Narammala	1
Eastern	Trincomalee	Trincomalee	1	
		Batticaloa	Batticaloa	1
North Central	Anuradhapura	Kebithigollewa	1	
Uva	Badulla	Badulla	1	

2<sup>nd</sup> quarter 2009 were male. This is in contrast to the 2<sup>nd</sup> quarter 2008 where the majority of the cases were female (52%).

Table 2 shows the age and sex distribution in 2<sup>nd</sup> quarter 2009.

### 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'.

All 21 AFP cases (100%) 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 (62%) out of the 21 AFP cases reported in the quarter for polio virology. It is far below the expected percentage (80%) according to the standards of the global programme and it is also lower than the timely stool collection rate (79%) achieved out of 33 AFP cases recorded in the respective quarter 2008.

Table 2

**DISTRIBUTION OF AFP CASES BY AGE AND SEX -- 2<sup>ND</sup> QUARTER 2009**

Age Group	Sex		Total
	Male	Female	
<1 year old	0	0	0
1-4 year old	3	3	6
5-9 year old	6	3	9
10-15 year old	3	3	6
Total	12	9	21

## 2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 2<sup>nd</sup> quarter 2009. Last case of cholera was reported in the country in January 2003.

## 3. TETANUS

During the 2<sup>nd</sup> quarter 2009, 08 tetanus cases were notified to the Epidemiology Unit. This is in comparison to 7 cases reported during the previous quarter and 8 cases in the corresponding quarter of 2008.

Eight cases were investigated and confirmed as tetanus during the current quarter (Table 3). No deaths due to tetanus were reported during the quarter.

## 4. MEASLES

During the 2<sup>nd</sup> quarter 2009, 28 cases of measles were notified to the Epidemiology Unit compared to 36 cases notified during the previous quarter and 29 cases in the corresponding quarter of last year.

Only fourteen (14) cases have been investigated during the current quarter which needs improvement since this data is used to monitor the progress of measles immunization programme in the country. Only 4 cases had symptoms compatible with the case definition of measles (Table 4).

Table 3

**SELECTED CHARACTERISTICS OF CONFIRMED CASES OF TETANUS – 2<sup>ND</sup> QUARTER 2009**

(N = 08)

Sex	Male	7
	Female	1
Age group	40-44	2
	45-49	1
	55-59	2
	>=60	3
District	Anuradhapura	2
	Badulla	1
	Batticaloa	2
	Kalutara	1
	Kandy	2
Immunization status	Immunized	2
	Non immunized	0
	Unknown	7

Table 4

**SELECTED CHARACTERISTICS OF CONFIRMED CASES OF MEASLES – 2<sup>ND</sup> QUARTER 2009**

Sex	Male	1
	Female	3
Age group	< 9 months	2
	30-34	1
	55-59	1
District	Kandy	1
	Kegalle	1
	Nuwara-Eliya	1
	Polonnaruwa	1

## 5. LEPTOSPIROSIS

During the 2<sup>nd</sup> quarter 2009, 903 cases and 31 deaths (CFR 3.4%) due to Leptospirosis were notified to the Epidemiology Unit compared to 866 cases and 36 deaths in the previous quarter and 2033 cases and 59 deaths during 2<sup>nd</sup> quarter 2008.

The sentinel surveillance sites reported 441 cases (48.8% of the total) and 16 deaths (51.6% of the deaths) during the current quarter.

Majority (58%) were in the 30-54 years age group and male:female ratio is 7:1.

## 6. HUMAN RABIES

Eleven (11) cases of human rabies were notified to the Epidemiology Unit in the 2<sup>nd</sup> quarter 2009, compared to 16 cases in the previous quarter and 8 cases in the corresponding quarter of year 2008. Distribution of cases by district is given in Table 22.

### Animal Rabies

During the quarter 188 dogs were reported positive for rabies compared to 172 in the previous quarter and 139 in the corresponding quarter of 2009. In addition the following animals were also reported positive;

Cats-23, Wild Animals-03, Domestic Ruminants-04

### Rabies Control Activities\*

**Dog vaccination** - A total of 255860 dogs were immunized during the 2<sup>nd</sup> quarter 2009 when compared to 299535 in the previous quarter and 265041 in the corresponding quarter of last year.

### Animal Birth Control

**Chemical** - 14647 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

**Surgical** - 37656 female dogs were subjected to sterilization by surgical method during the quarter under review.

\*Source – Director/PHVS

## 7. ENTERIC FEVER

In the 2<sup>nd</sup> quarter 2009, a total of 515 cases of enteric fever were notified to the Epidemiology Unit, compared to 461 cases in the previous quarter and 496 cases in the corresponding quarter of 2008. The districts of Vavuniya (141) and Nuwara Eliya (72), reported the highest number of cases. (Table 22).

The MOH areas Cheddikulam (129) and Walapane(53) notified a large number of cases during the quarter under review.

## 8. VIRAL HEPATITIS

In the 2<sup>nd</sup> quarter 2009, 3339 cases of viral hepatitis were reported to the Epidemiology Unit, compared to 314 cases in the previous quarter and 500 cases in the corresponding quarter of 2008.

Among the reported cases, 191 were investigated and confirmed as viral hepatitis. RDHS area Vavuniya notified the highest number of cases (2740) accounting for 82.1% of the total case load. The MOH areas Cheddikulam (2335 cases) and Vavuniya (402 cases) in the Vavuniya district and Badulla (80 cases) in the Badulla district have reported the highest number of cases.

## 9. DYSENTERY

In the 2<sup>nd</sup> quarter 2009, 2566 cases of dysentery were notified to the Epidemiology Unit, compared to 1217 cases in the previous quarter and 1463 cases in the corresponding quarter of 2008. The MOH areas Cheddikulam (1151), and Kalavanchikudy(87) notified the highest number of cases.

## 10. JAPANESE ENCEPHALITIS (J.E.)

During the 2<sup>nd</sup> quarter 2009, 52 cases of Encephalitis were reported to the Epidemiology Unit. in comparison to 73 cases and 1 deaths reported during the previous quarter and 61 cases and 3 death reported in the corresponding quarter of 2008.

Among the reported cases, 17 were investigated and 4 were confirmed as JE by MOOH and none of them had been immunised. Six cases of laboratory confirmed JE and two deaths were reported during the quarter.

Table 5

### SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – 2<sup>ND</sup> QUARTER 2009 (N = 06)

Sex	Male	4
	Female	2
Age group	10-14 years	1
	15-19 years	1
	>20	4
District	Batticaloa	1
	Colombo	1
	Gampaha	1
	Kandy	1
	Kalmunai	1
	Kegalle	1
Immunization status	Immunized	0
	Non immunized	4
	Unknown	2

## 11. MALARIA

During the 2<sup>nd</sup> quarter 2009, there was an increase in the incidence of malaria in comparison to the same period of 2008 as seen in Table 6. The number of P.v. infections reported during the period under review have increased and P.f. infections have decreased. Distribution of malaria cases by RMO (Regional Malaria Officer) division is shown in Table 7.

Table 6

**RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 2<sup>ND</sup> QUARTER 2009**

	2 <sup>nd</sup> Quarter 2008	2 <sup>nd</sup> Quarter 2009
No. of blood smears examined	246,192	216,909
No. of positives	25	122
No. of <i>P. vivax</i>	11	119
No. of <i>P. falciparum</i>	12	1
No. of mixed infections	2	2
No. of infant positives	1	0
Slide positivity rate (S.P.R.)	0.01%	0.06%
P.v. : P.f. ratio	1:1.3	40:1
Percentage of infant positives	4.0%	0%

Table 7

**DISTRIBUTION OF MALARIA CASES BY RMO DIVISION - 2<sup>ND</sup> QUARTER 2009**

RMO	Blood smears	Positives	P.v.	P.f./ Mixed
Colombo	12654	0	0	0
Gampaha	9352	0	0	0
Kalutara	3062	0	0	0
Kandy	7617	0	0	0
Matale	3383	0	0	0
Nuwara Eliya	126	0	0	0
Galle	4638	0	0	0
Matara	5346	0	0	0
Hambantota	8264	2	2	0
Jaffna	20975	1	1	0
Kilinochchi	30	25	24	1
Mannar	9	9	9	0
Vavuniya	12322	9	9	0
Mullaitivu	32	29	28	1
Batticaloa	10184	1	1	0
Ampara	3761	0	0	0
Trincomalee	19245	2	1	1
Kurunegala	20224	1	1	0
Maho	8511	0	0	0
Puttalam	8923	1	1	0
Anuradhapura	18525	1	1	0
Polonnaruwa	13676	3	3	0
Badulla	3955	1	1	0
Moneragala	7664	37	37	0
Ratnapura	4483	0	0	0
Kegalle	1852	0	0	0
Kalmunai	8096	0	0	0
<b>TOTAL</b>	<b>216909</b>	<b>122</b>	<b>119</b>	<b>3</b>

P.v. - *Plasmodium vivax*P.f. - *Plasmodium falciparum*

Table 8

**MORBIDITY AND MORTALITY DUE TO DF/DHF - 2<sup>ND</sup> QUARTER 2009**

RDHS Division	Cases	Percentage	Deaths
Colombo	1517	12.3	13
Gampaha	1587	12.9	33
Kalutara	558	4.5	8
Kandy	1697	13.8	24
Matale	509	4.1	3
Nuwara Eliya	95	0.8	3
Galle	187	1.5	3
Hambantota	488	4.0	13
Matara	438	3.6	5
Jaffna	1	0.0	0
Kilinochchi	0	0.0	0
Mannar	1	0.0	0
Vavuniya	7	0.1	0
Mullaitivu	0	0.0	0
Batticaloa	185	1.5	8
Ampara	116	0.9	0
Trincomalee	210	1.7	3
Kurunegala	1120	9.1	10
Puttalam	225	1.8	4
Anuradhapura	256	2.1	3
Polonnaruwa	61	0.5	0
Badulla	126	1.0	0
Moneragala	63	0.5	1
Ratnapura	859	7.0	6
Kegalle	1929	15.7	13
Kalmunai	53	0.4	0
<b>TOTAL</b>	<b>12288</b>	<b>100.0</b>	<b>153</b>

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

During the 2<sup>nd</sup> quarter 2009, 12288 cases of DF/DHF and 153 deaths were reported (CFR 1.2%) when compared to 3095 cases and 32 deaths (CFR 1.03%) reported during the previous quarter.

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

During the 2nd quarter 2009, 3575 blood samples were tested using 1gM capture ELISA test and haemagglutination inhibition test at the Department of Virology, MRI and 2335 samples were confirmed as positive (Table 9). Diagnosis of dengue by RT-PCR was carried out on 55 samples and virus isolation was carried out in 265 samples at MRI during the 2<sup>nd</sup> quarter. 17 samples were positive by PCR and virus isolation was positive in 11 samples (DEN 1– 6, DEN 3 –1, Untyped—21)

Table 9.

### DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 2ND QUARTER 2009

Month	Clinically Suspected	Serologically confirmed
April	556	345
May	1194	765
June	1825	1225
<b>Total</b>	<b>3575</b>	<b>2335</b>

Table 10.

### AEDES LARVAL DENSITIES (BRETEAU INDEX) IN COLOMBO AND GAMPAHA DISTRICTS - 2<sup>ND</sup> QUARTER 2009

MOH Area	July		August		September	
	A	B	A	B	A	B
Nugegoda	4.5	13.7	8.0	8.0	6.5	1.0
Maharagama	3.0	14.5	0	8.0	8.0	6.0
Moratuwa	1.10	4.0	3.2	8.8	4.0	11.0
Kaduwela	0.7	18.7	1.3	13.3	4.5	14.5
Panadura	8.0	18.0	2.8	8.8	6.0	12.0
Piliyandala	1.0	16.0	0	8.5	1.0	10.6
Kelaniya	8.0	18.0	2.0	8.0	2.0	10.9
Ragama	0.37	7.06	2.4	11.9	0	7.8
Ja-Ela	2.6	12.8	1.7	7.8	0	10.0
Wattala	13.2	10.1	9.0	15.5	9.33	16.6
Dompe	Not done		0	29.2	0	7.50
Mahara	Not done		0	17.5	0.9	32.7
Katana	Not done		Not done		0	12.1
Biyagama	Not done		Not done		0	16.53
Minuwangoda	Not done		0	12.2	0	12.15

(A) = *Aedes aegypti*

(B) = *Aedes albopictus*

Number of premises examined per area = 300

### 13. TUBERCULOSIS

A total of 2508 tuberculosis patients were registered for 2<sup>nd</sup> quarter 2009 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 1896 suffered from pulmonary disease, and the balance 612 patients from non-pulmonary disease. Of these patients 1382 were bacteriologically confirmed with a bacteriological confirmation rate of 72.89%. The distribution of tuberculosis patients by RDHS division is given in Table 11.

#### B.C.G. vaccination

A total of 98328 B.C.G. vaccinations were carried out during the quarter with 89.02% coverage.

Table 11.

**TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 2<sup>ND</sup> QUARTER 2009**

RDHS DIVISION	PTB	EPTB	Total	Pulmonary TB Direct Smear	
				No. +VE	%
Colombo	402	136	538	319	79.35
Gampaha	187	56	243	168	89.84
Kalutara	227	72	299	167	73.57
Kandy	103	34	137	66	64.08
Matale	37	20	57	24	64.86
Nuwara Eliya	33	17	50	19	57.58
Galle	81	38	119	60	74.07
Hambantota	34	10	44	20	58.82
Matara	53	11	64	34	64.15
Jaffna	59	14	73	22	37.29
Vavunia	21	1	22	10	47.62
Kilinochchi	6	0	6	3	50.00
Mannar	7	0	7	3	42.86
Mullativu	7	0	7	3	42.86
Ampara	42	7	49	18	42.86
Batticaloa	33	11	44	29	87.88
Trincomalee	37	2	39	17	45.95
Kurunegala	100	45	145	70	70.00
Puttalam	37	16	53	31	83.78
Anuradhapura	79	20	99	62	78.48
Polonnaruwa	22	6	28	12	54.55
Badulla	48	20	68	39	81.25
Monaragala	39	3	42	29	74.36
Kegalle	68	21	89	49	72.06
Ratnapura	106	48	154	90	84.91
Kalmunai	28	4	32	18	64.29
<b>Total</b>	<b>1896</b>	<b>612</b>	<b>2508</b>	<b>1382</b>	<b>72.89</b>

PTB-Pulmonary Tuberculosis

EPTB- Extra Pulmonary Tuberculosis

Data from Central TB Register

Source - National TB Register

### 14. SURVEILLANCE AT SEA PORT

Surveillance activities carried out by the Port Health Office at Colombo Sea Port during the 2<sup>nd</sup> quarter 2009, is given below.

<b>1. Yellow Fever Vaccination</b>	<b>Total</b>
Total number vaccinated	- 27
<b>2. Granting Pratique to Vessels</b>	
Number issued	- 1049
<b>3. Deratting Certification</b>	
Number issued	- 151

Details of the vaccinations carried out by the Assistant Port Health Office, Colombo 8, during the 2<sup>nd</sup> quarter 2009, is given below.

	<b>Total</b>
a. Yellow fever	676
b. Meningococcal meningitis	101
C. Polio vaccination	75

### 15. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 2<sup>nd</sup> quarter 2009 is given below.

#### 1. Yellow Fever Surveillance

a. No. with valid certificate	-	26
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	-	17
b. No. of food samples taken under Food Act	-	00
c. No. found defective	-	04
d. No. of court cases/prosecuted/warned	-	01
e. No. of water samples tested	-	06
f. No. reported contaminated	-	00

#### 3. Release of human remains

a. No. of human remains released	-	117
b. No. referred to JMO for post-mortem	-	03
c. No. alleged suicide	-	02

#### 4. Other Health Activities

a. Polio Vaccination No. of doses given	-	0
---	---	---

## 16. LEPROSY

### QUARTERLY RETURN OF LEPROSY STATISTICS - 2<sup>ND</sup> QUARTER 2009

Table 12.

#### 1. National

	At the end of the quarter			Cumulative for end of the quarter		
	2 <sup>nd</sup> quarter 2009	2 <sup>nd</sup> quarter 2008	Diff. (%)	2 <sup>nd</sup> quarter 2009	2 <sup>nd</sup> quarter 2008	Diff. (%)
New patients detected	411	430	-4.41	839	822	2.0
Children	38	44	-13.6	80	94	-14.8
Grade 2 Deformities	33	39	-15.3	56	68	-17.6
Multi-Bacillary	196	198	-1.0	389	357	8.96
Females	170	173	-1.7	367	320	14.6

#### 2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	85	8	8	40	43
Gampaha	69	2	9	23	36
Kalutara	45	2	3	15	17
<b>Western</b>	<b>199</b>	<b>12</b>	<b>20</b>	<b>78</b>	<b>96</b>
Galle	03	00	00	01	01
Matara	20	01	02	13	13
Hambantota	14	00	00	08	02
<b>Southern</b>	<b>37</b>	<b>01</b>	<b>02</b>	<b>22</b>	<b>16</b>
Kandy	05	01	01	03	01
Matale	07	00	00	04	02
Nuwara Eliya	00	00	00	00	00
<b>Central</b>	<b>12</b>	<b>01</b>	<b>01</b>	<b>07</b>	<b>03</b>
Anuradhapura	17	00	02	07	04
Polonnaruwa	23	01	01	12	05
<b>North Central</b>	<b>40</b>	<b>01</b>	<b>03</b>	<b>19</b>	<b>09</b>
Kurunegala	24	05	00	20	06
Puttalam	07	01	02	05	01
<b>North Western</b>	<b>31</b>	<b>06</b>	<b>02</b>	<b>25</b>	<b>07</b>
Kegalle	05	00	00	01	00
Ratnapura	22	01	00	11	08
<b>Sabaragamuwa</b>	<b>27</b>	<b>01</b>	<b>00</b>	<b>12</b>	<b>08</b>
Badulla	02	00	01	00	01
Moneragala	03	01	00	02	01
<b>Uva</b>	<b>05</b>	<b>01</b>	<b>01</b>	<b>02</b>	<b>02</b>
Trincomalee	05	02	00	03	04
Batticaloa	18	02	02	10	10
Ampara	13	03	03	07	08
Kalmunai	22	03	04	11	06
<b>Eastern</b>	<b>58</b>	<b>10</b>	<b>09</b>	<b>31</b>	<b>28</b>
Jaffna	02	00	00	00	01
Vavuniya	00	00	00	00	00
Mannar	00	00	00	00	00
Mullativu	00	00	00	00	00
Kilinochchi	00	00	00	00	00
<b>Northern</b>	<b>02</b>	<b>00</b>	<b>00</b>	<b>00</b>	<b>01</b>
<b>Sri Lanka</b>	<b>411</b>	<b>33</b>	<b>38</b>	<b>196</b>	<b>170</b>

**17. ANTIBIOTIC SENSITIVITY PATTERN OF ENTERIC PATHOGENS ISOLATED IN MEDICAL RESEARCH INSTITUTE - 2<sup>ND</sup> QUARTER 2009**

Table 13.

Organism	Number Num-ber of sam-ples exam-ined	Ampicillin		Chlorampheni-col		Ciprofloxacin		Cortrimoxa-zole		Ceftriaxone		Cefotaxime		Erythromycin		Furozolidone		Nalidixic Acid		Mecillinam		
		S	I	R	S	I	R	S	I	R	S	I	R	S	I	R	S	I	R	S	I	R
Compylobacter species	221	02			100	100																
EPEC	67	01			100																	
Salmonella paratyphi A	566	06			100																	
Salmonella typhi	566	02			100																	
Salmonella others	566	10			90	10																
Shigella sonnei	566	09			44	22	33															
Shigella flexneri	566	03			33																	

S - Sensitive I - Intermediate Sensitivity R - Resistance

## 18. SURVEILLANCE REPORT ON AEFI- 2009

Surveillance of Adverse Events Following Immunization (AEFI) has effectively continued in the second quarter 2009 (Table 14). Ninety two percent of completed AEFI reports were received during the second quarter at the Epidemiology Unit indicating good compliance for the system by the MOOH. More than 50% districts in the country have found at least one adverse event during a month probably due to the awareness and enthusiasm for surveillance by the health staff in MOH areas.

Matale was able to send all the reports while Gampaha (90.0%) in the Western Province has sent fewer reports.

However, there was a marginal decline in overall timeliness (46%) when compared to the corresponding quarter last year (47%). Best timeliness of 73% has been reported from Polonnaruwa district with 98% completeness of the received reports.

Table 14.

**COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 2<sup>ND</sup> QUARTER 2009**

RDHS Division	(%) Completeness	(%) Timeliness	(%) "Nil" Returns	Reported AEFI	
				Number	Rate
Colombo	92.9	41.0	30.8	228	80.5
Gampaha	90.0	45.7	28.4	188	65.6
Kalutara	93.1	29.9	37.3	182	107.2
Kandy	93.1	44.8	46.3	222	103.2
Matale	100.0	63.9	41.7	93	117.5
Nuwara Eliya	97.4	48.7	60.5	66	55.4
Galle	96.5	42.7	50.9	134	97.2
Hambantota	92.4	32.8	16.4	193	208.3
Matara	97.1	55.6	58.6	88	72.1
Jaffna	95.2	20.0	30.0	94	139.7
Kilinochchi	0.0	0.0	0.0	0	0.0
Mannar	41.7	20.0	40.0	45	353.1
Vavuniya	91.7	27.3	86.4	8	26.6
Mullativu	0.0	0.0	0.0	0	0.0
Batticaloa	98.5	35.4	47.7	158	156.6
Ampara	95.2	35.0	47.5	34	71.1
Trincomalee	95.0	45.6	71.9	26	42.7
Kurunegala	98.2	36.6	38.4	184	74.5
Puttalam	92.6	46.0	42.0	63	45.7
Anuradhapura	91.2	52.9	40.4	131	89.0
Polonnaruwa	97.6	73.2	51.2	51	80.7
Badulla	93.3	67.9	17.9	181	145.7
Moneragala	95.5	50.8	50.8	60	81.3
Ratnapura	99.1	41.1	39.3	167	119.8
Kegalle	98.5	70.8	12.3	168	137.7
Kalmunai	93.6	31.5	75.3	43	52.0
<b>Sri Lanka</b>	<b>92.0</b>	<b>45.8</b>	<b>43.2</b>	<b>2807</b>	<b>94.7</b>

\* Rate Per 100,000 immunizations

Majority of nil returns were from Vavuniya (86%) and Kalmunai (75%) districts indicating the need for more attention for surveillance. However, lowest number of nil returns received from Hambantota (16%) followed by Gampaha (28%) reflect good motivation for AEFI surveillance.

Highest rate (353 per 100,000 immunizations) of AEFI was reported from the Mannar district with the number of 45 AEFI. Highest number (228) was reported from the Colombo district with the rate of 81% per 100,000 immunizations.

The highest number (2260) and rate of AEFI (348 per 100,000 immunizations) were reported against DPT vaccine followed by Rubella vaccine (161 AEFI with the rate of 166 per 100,000 immunizations) (Table 15).

There were four deaths temporally related to immunization reported during the period under review. Out of these two deaths had been reported following Rubella vaccination during March 2009 and another two deaths following DPT and aTd in May.

A causality assessment was carried out by the expert committee. The death of a child following Rubella vaccine in Matara district was identified as a vaccine reaction. The second case was from the Ginigathhena MOH area in the Nuwara Eliya district which took place three weeks following Rubella vaccination. The histopathological examination was carried out and a cyst in the third ventricle blocking the CSF pathway was found. The death was categorized as coincidental. The child who died following aTd vaccine in Badulla district had consolidation at the base of the right lung with a history of uncontrolled severe bronchial asthma. The committee categorized the death as coincidental.

The death incriminated to the DPT vaccine was discussed at the committee too. Histopathological findings of the postmortem specimen showed pneumonia changes in the lungs. Thus the death was recognized as unrelated and a

coincident.

Table 15

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

Vaccine	Seizure	Allergic	Abscess	Severe Local reactions	High Fever	Lymphadenitis	Encephalitis	Paralysis of body	Meningitis	Anaphylactic Shock	Nodule	GBS	Arthralgia	Encephalopathy	Persistent screaming	Injection Reaction	**Others	*HHE	Death	Total	Rate/ 100,000 dosed
<b>BCG</b>	0	2	13	2	3	2	0	0	0	0	2	0	0	0	0	0	0	2	0	26	<b>16.9</b>
<b>DPT</b>	197	309	285	190	801	0	0	0	0	0	384	0	11	1	62	3	7	9	1	2260	<b>347.6</b>
<b>OPV</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0.0</b>
<b>Measles</b>	10	79	2	7	36	0	0	0	0	0	2	0	0	0	1	0	0	0	0	137	<b>78.3</b>
<b>DT</b>	3	28	1	15	13	0	0	0	0	0	6	0	1	0	0	2	0	0	0	69	<b>43.8</b>
<b>TT</b>	1	14	0	6	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	26	<b>16.3</b>
<b>Rubella</b>	0	104	4	2	4	5	0	0	0	0	0	0	0	0	0	27	13	0	2	161	<b>166.4</b>
<b>JE</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	<b>9.8</b>
<b>ATd</b>	0	9	0	2	0	0	0	0	0	0	0	0	0	0	0	5	2	0	1	19	<b>19.3</b>
<b>MR</b>	5	73	1	4	8	0	0	0	1	2	0	0	0	0	0	0	0	0	0	94	<b>58.8</b>
<b>Hep</b>	0	8	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	<b>2.9</b>
<b>Others</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>Total</b>	<b>216</b>	<b>626</b>	<b>311</b>	<b>228</b>	<b>870</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>395</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>63</b>	<b>37</b>	<b>22</b>	<b>12</b>	<b>4</b>	<b>2807</b>	<b>94.7</b>

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

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

## 19. SEXUALLY TRANSMITTED DISEASES

Table 16.

### NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA\* - 2<sup>ND</sup> QUARTER 2009

Disease	New cases or new disease episodes during the quarter			Total new cases or new episodes for the calendar year up to end of the quarter **		
	Male	Female	Total	Male	Female	Total
HIV positives <sup>1</sup>	19	09	28	46	22	68
AIDS	1	03	04	04	04	08
Early Syphilis <sup>2</sup>	32	17	49	49	31	80
Syphilis    Late Syphilis <sup>3</sup>	80	44	124	152	97	249
Congenital Syphilis <sup>4</sup>	0	0	0	1	0	1
Gonorrhoea <sup>5</sup>	39	42	81	109	102	211
Ophthalmia neonatorum <sup>6</sup>	1	1	2	2	1	3
Non specific cervicitis/urethritis	160	235	395	311	513	824
Chlamydial Infection	0	2	2	0	4	4
Genital Herpes	215	297	512	416	576	992
Genital Warts	159	99	258	331	236	567
Chancroid	0	0	0	1	1	2
Trichomoniasis	5	21	26	8	47	55
Candidiasis	177	260	437	370	577	947
Bacterial Vaginosis		255	255		474	474
Other sexually transmitted diseases <sup>7</sup>	70	32	102	152	63	215
Non-venerial <sup>8</sup>	841	625	1466	1777	1308	3085

\* - 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. SURVEILLANCE REPORT ON DENGUE FEVER/ DENGUE HAEMORRHAGIC FEVER– 2008

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 1). The worst ever epidemic of DF/DHF occurred in year 2004 in which there were 15463 notified cases and 88 deaths reported to the Epidemiology Unit. During the following year (2005), the case load came down approximately by 40% (5965 cases and 28 deaths). This could be attributed to the enhanced control efforts adopted, especially the high-risk approach in which 48 MOH areas were identified as high risk for dengue transmission in the country and the disease situation and preventive and control activities were closely monitored by the Epidemiology Unit and the newly established Dengue Coordination Unit (DCU).

During the year 2008, 6560 suspected Dengue Fever /Dengue Haemorrhagic Fever cases and 28 deaths (CFR 0.9 %) were reported to the Epidemiology Unit, which was a 10% reduction in the number of cases when compared to 2007. The incidence rate for DF/DHF in 2008 was 3.2 per 10000 population.

The usual seasonal increase in incidence which occurs in June-July in relation to the South Western monsoon rains was not marked since 2004, but the increase of incidence following North-Eastern monsoon was continuously observed in the country. However, a level of high endemicity prevailed through out the period since 2005 (Figure 2 & 3).

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 45% of the total case load. Kurunegala district also reported a high case load accounting for 10.8% of the total case load. Although there was a reduction in the total number of cases when compared to 2007 for the entire country, the districts of Kurunegala (14%), Anuradhapura(112%) and Jaffna(350%) reported an increase in the case load whereas Ratnapura and Kegalle reported marginally less number of cases when compared to 2007. Distribution of cases by RDHS divisions is given in Figure 8 and Table 17.

Some of the 'high-risk ' MOH areas identified in 2004 continued to report a significant number of cases during the year 2008. Colombo Municipal Council area reported 480 cases (7.3% of the total case load) followed by the MOH areas Mawanella (218 cases i.e. 3.3%), Panadura (164 cases i.e. 2.5%) and Kolonnawa (172cases i.e.

2.6%). Furthermore, several MOH areas such as Mawanella, Aranayaka in Kegalle district, MC Matara in Matara district, Maharagama in Colombo district reported epidemic proportions during 2008. The MOH areas which had a major contribution to the case load are given in Table 18.

### Special Surveillance of DF/DHF

Special surveillance data were received from Infection Control Nursing Officers in health institutions where dengue patients were treated. District General Hospital Matara, Base Hospital Mawanella, National Hospital-Sri Lanka, Lady Ridgway Hospital for Children and Colombo South Teaching Hospital 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 3138 cases were received for the year 2008. All age groups were affected by the disease with 27% of the cases (843) being less than 15 years old while 25% of the cases (751) were in the 20-29 year age group (Figure 4).Deaths due to DF/DHF too had occurred among all age groups except 10-14 years and 50-54 years. The highest case fatality rate was for the infants followed by 55-59 years. The highest number of deaths was among the 01-04 year age group (Figure 5). Distribution of DF/DHF cases and deaths by sex showed that there was a male preponderance (Figure 6).

### Severity of the disease

According to the WHO disease classification 2370 cases (77%) received through the special surveillance mechanism were classified as dengue fever while the remaining 714 cases (23%) were classified as DHF. Case fatality rate for 2008 was 0.2% of DHF cases. Majority of the DHF cases were classified as DHF II (358 cases i.e. 50%), followed by DHF I (323 cases i.e.45%). Out of the DHF cases 5% (33) had developed Dengue shock syndrome (DHF III & IV) (Figure 7).

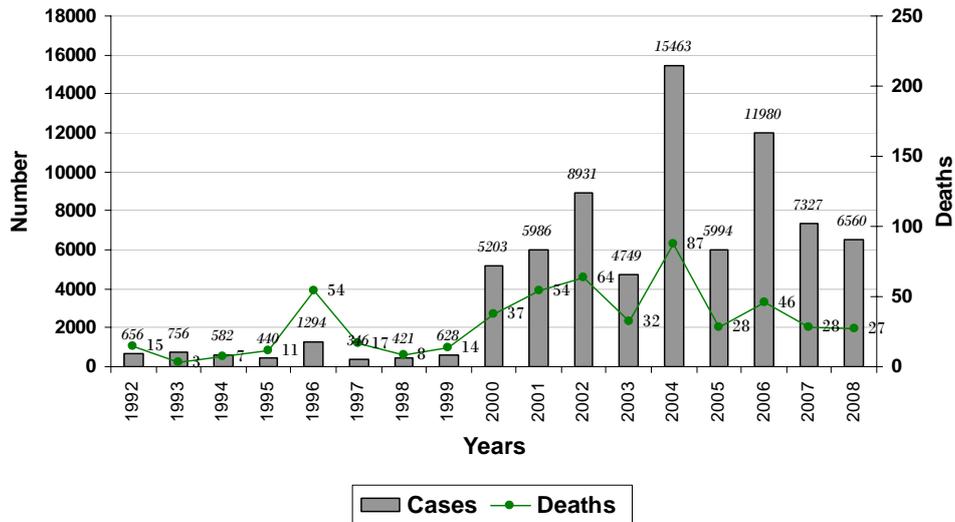
### Confirmation of the Diagnosis

Department of Virology, Medical Research Institute, Colombo had tested 1846 samples during the year using IgM capture ELISA test and Haemagglutination Inhibition test and 793 were serologically confirmed.

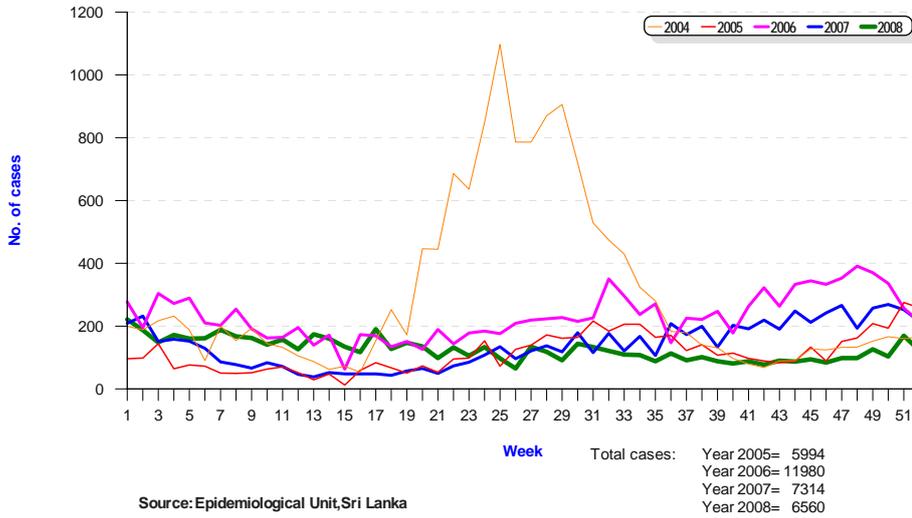
Special surveillance data revealed that 50.4% of the total case load (1628) had been tested serologically of whom 47.7%(1544) were positive for IgM antibodies whereas 37.6%(1216) were positive for IgG antibodies.

Nested PCR test was carried out to determine the serotype of dengue virus in 477 patients by Genetech Laboratory, Colombo 8 and 55 were found to be positive. The virus serotypes DEN 2(25%) and DEN 3 (19%) have been predominantly

**Figure 1 DENGUE CASES AND DEATHS NOTIFIED DURING 1992 - 2008**



**Figure 2 DISTRIBUTION OF NOTIFIED DF/DHF CASES BY WEEK – SRI LANKA 2004 - 2008**



**Figure 3**

**DISTRIBUTION OF NOTIFIED DF/DHF CASES BY MONTH – SRI LANKA 2004-2008**

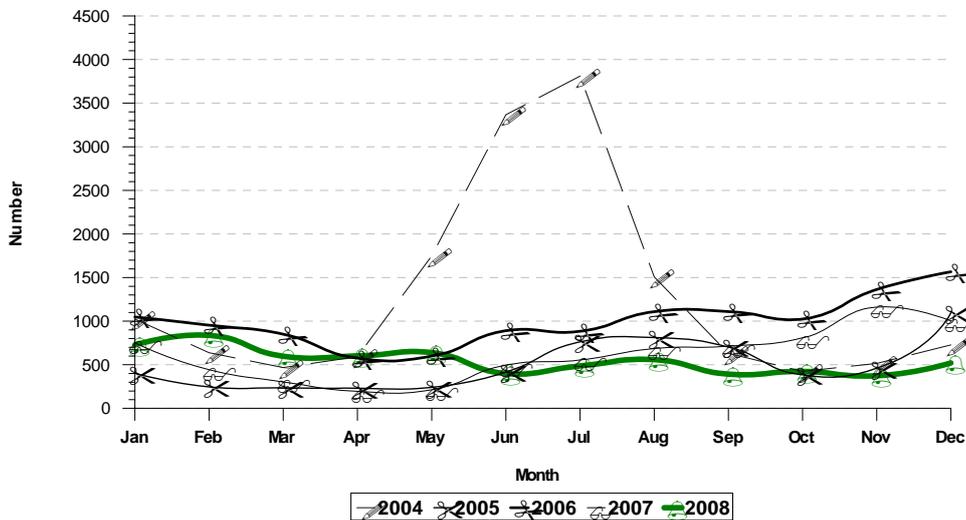


Table 17

## DISTRIBUTION OF NOTIFIED CASES AND DEATHS DUE TO DF/DHF BY DISTRICTS – 2008

RDHS Division	No of cases	(%)	Incidence Rate (per10,000 Population)	No. of Deaths	(%)
Colombo	1600	24.4	6.5	10	35.7
Gampaha	971	14.8	4.1	3	10.7
Kalutara	478	7.3	4.1	0	
Kandy	370	5.6	2.7	1	3.6
Matale	212	3.2	4.5	0	
Nuwara Eliya	30	0.5	0.4	0	
Galle	108	1.6	1.0	0	
Hambantota	136	2.1	2.4	0	
Matara	394	6.0	4.9	1	3.6
Jaffna	60	0.9	1.6	0	
Kilinochchi	1	0.0	0.1	0	
Mannar	38	0.6	4.2	0	
Vavuniya	12	0.2	0.7	0	
Mulativu	0	0.0	0.0	0	
Batticaloa	89	1.4	1.2	2	7.1
Ampara	33	0.5	1.2	0	
Trincomalee	185	2.8	4.7	3	10.7
Kurunegala	362	5.5	2.3	0	
Puttalam	291	4.4	3.6	1	3.6
Anuradhapura	122	1.9	1.5	1	3.6
Polonnaruwa	67	1.0	1.7	0	
Badulla	109	1.7	1.3	0	
Moneragala	64	1.0	1.4	0	
Ratnapura	316	4.8	2.9	1	3.6
Kegalle	474	7.2	5.8	5	17.9
Kalmunai	38	0.6	1.1		
<b>TOTAL</b>	<b>6560</b>	<b>100.0</b>	<b>3.2</b>	<b>28</b>	<b>100.0</b>

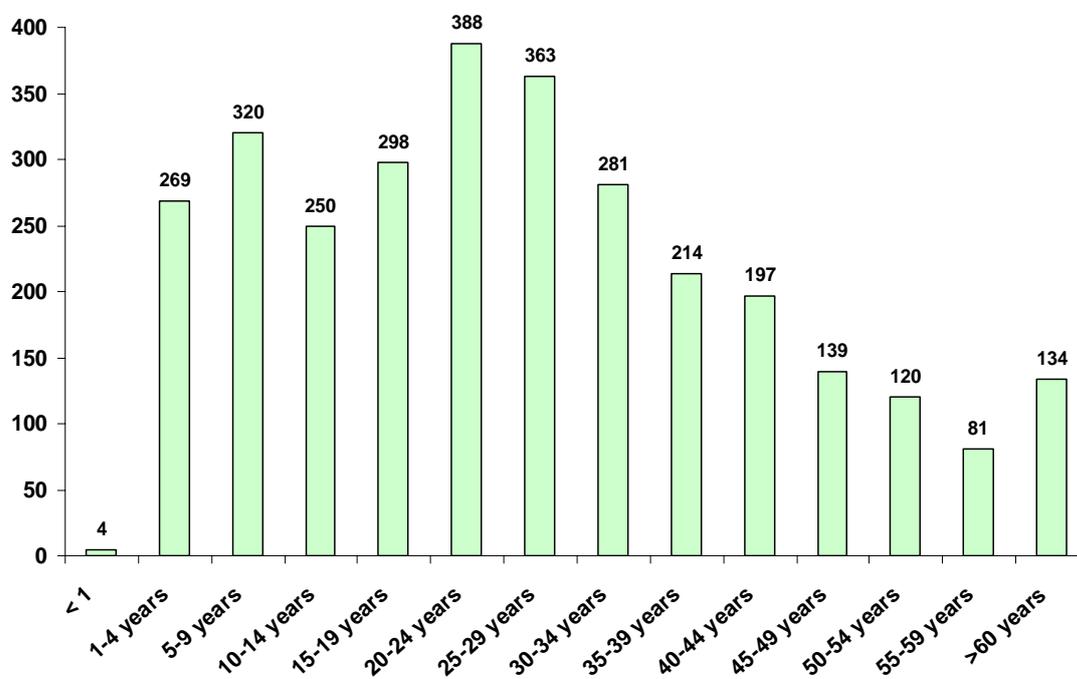
**Prevention & Control**

The control strategy adopted in 2005 to closely monitor the high risk areas was continued during 2008. The Epidemiology Unit of the Ministry of Healthcare & Nutrition carried out surveillance and rapid response activities and the Dengue Coordination Unit carried out the implementation

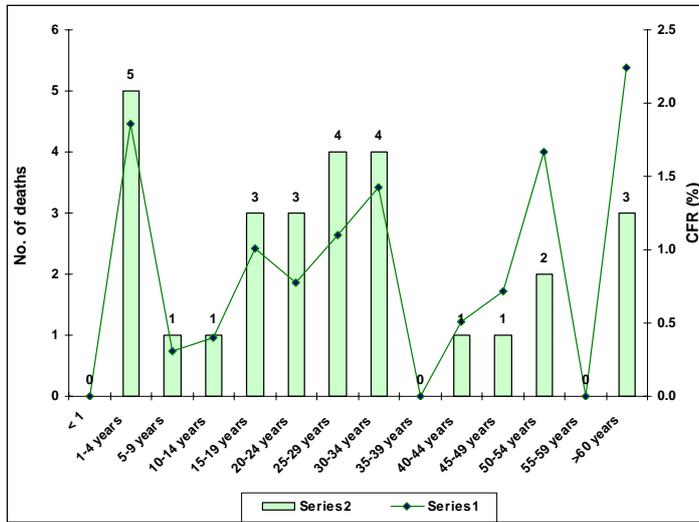
of prevention and control activities including monitoring at district level. Dengue control activities were reviewed at district level by the Dengue Coordination Unit in collaboration with the Epidemiology Unit.

**Table 18****DISTRIBUTION OF NOTIFIED CASES OF DF/DHF CASES BY HIGH RISK MOH AREAS –2008**

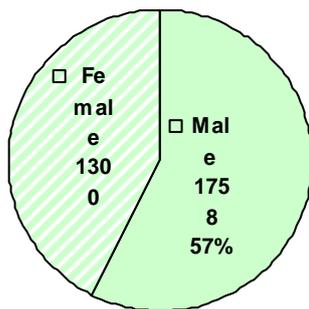
RDHS Division	MOH Area	No. of suspected cases	% of the total case load	Incidence Rate (per 10,000 population)
Colombo	MC Colombo	480	7.3	6.8
	Maharagama	167	2.5	10.8
	Kolonnawa	172	2.6	9.8
	Dehiwala	128	2.0	5.6
	Kaduwela	107	1.6	4.6
Gampaha	Kelaniya	127	1.9	8.2
	Wattala	112	1.7	6.5
	Mahara	102	1.6	5.0
Kalutara	Panadura	164	2.5	7.2
	Horana	72	1.1	7.3
Matara	MC Matara	139	2.1	17.2
Kandy	Yatinuwara (Kaduganawa)	74	1.1	7.1
Kegalle	Mawanella	218	3.3	20.8
	Aranayake	114	1.7	16.6
Kurunegala	Kurunegala	93	1.4	5.7

**Figure 4****DISTRIBUTION OF CONFIRMED DF/DHF CASES BY AGE GROUP – 2008**

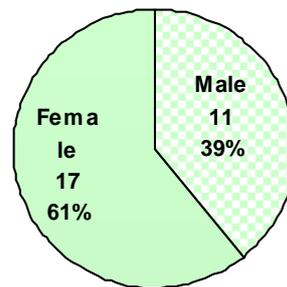
**Figure 5**  
**DISTRIBUTION OF DEATHS DUE TO DF/DHF AND CASES FATALITY RATES BY AGE GROUPS**  
**- 2008**



**Figure 6**  
**DISTRIBUTION OF CONFIRMED CASES AND DEATHS BY SEX – 2008**

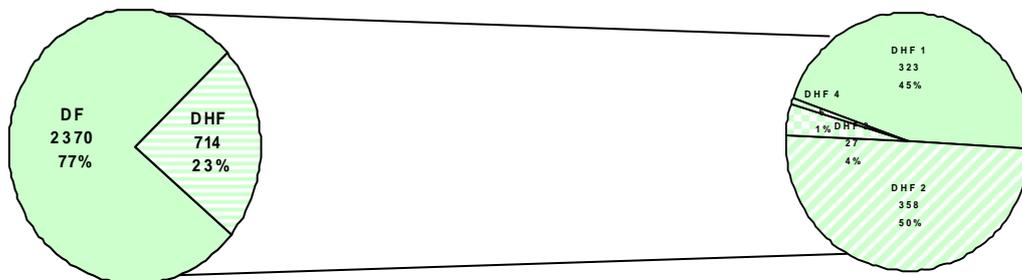


**Cases**

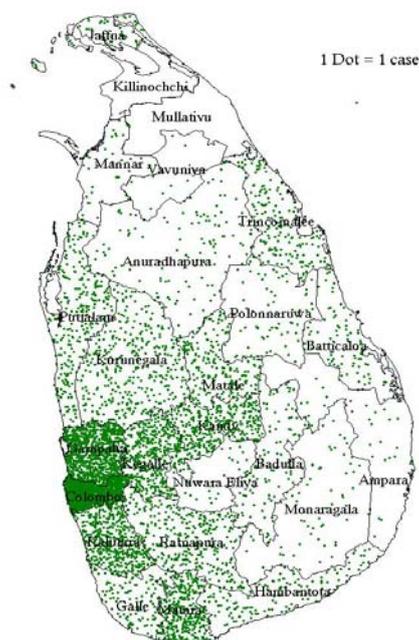


**Deaths**

**Figure 7**  
**CLASSIFICATION OF THE CASELOAD BY WHO CLASSIFICATION - 2008**



**Figure 8**  
**NOTIFIED DF/DHF CASES BY DISTRICT - 2008**



## 21. SURVEILLANCE REPORT ON INVASIVE BACTERIAL DISEASES- 2009

Invasive bacterial disease surveillance was carried out among children aged 2-59 months at Lady Ridgeway Children's Hospital and 4 other surveillance sites (Colombo South Teaching Hospital, National Institute of Health Sciences, Teaching Hospital Ragama and Teaching Hospital Galle). Till the end of 2nd quarter of 2009, 239 blood cultures were studied. Number of *S. pneumoniae* isolates was only 01. The isolation rate was 0.41%. Only five (2.1%) *Haemophilus influenzae* isolates were found while there were no type B isolates.

The number of CSF cultured was 56. There was no *S. pneumoniae* isolates detected among them. One *H.influenzae* (1.8%) was isolated while there was no type B detected.

Latex antigen test results are sensitive even if prior antibiotics are used. Of 19 Latex antigen tests done, 1 (5.3%) was found to be positive for *S.pneumoniae* whereas two (10.5%) were positive for *H.influenzae*. The test positivity rate was higher than isolation rates from both blood and CSF as anticipated. Thus, it is apparent that isolation of bacterial pathogens is an under estimate due to prior use of antibiotics. There were 4(1.6%) patients confirmed as invasive pneumococcal disease and 7(2.8%) patients with *H. influenzae*.

Table 19

### RESULTS OF SURVEILLANCE OF INVASIVE BACTERIAL INFECTIONS - 2005-2008

Year / month	Blood cultures				Cerebro spinal fluid (Cultures)			Cerebro spinal fluid (Latex test)				No of children			
	No of blood cultures	Positive for <i>S.Pneumoniae</i>	Positive for <i>Haemophilus influenzae</i>	Positive for <i>Haemophilus influenzae</i> b	Total CSF samples	Positive for <i>S.Pneumoniae</i>	Positive for <i>Haemophilus influenzae</i>	Positive for Hib	No tested with Latex antigen	Positive for <i>S.Pneumoniae</i>	Positive for <i>Haemophilus influenzae</i>	Positive for <i>Haemophilus influenzae</i> b	Positive for <i>S.Pneumoniae</i>	Positive for <i>Haemophilus influenzae</i>	Positive for <i>Haemophilus influenzae</i> B
<b>2005</b>	1398	8	15	14	430	1	5	0	312	7	25	25	18	36	35
<b>2006</b>	1686	10	18	16	361	4	11	0	338	3	16	15	16	29	27
<b>2007</b>	1113	10	15	0	257	1	5	0	236	6	14	0	19	26	0
<b>2008</b>	5298	37	50	30	1227	9	21	0	975	21	60	40	68	99	62
<b>2009</b>															
Jan	36	0	1	0	9	0	0	0	1	0	0	0	1	1	0
Feb	70	1	0	0	14	0	1	0	5	1	0	0	3	1	0
Mar	105	0	3	0	27	0	0	0	11	0	2	0	0	4	0
Apr	09	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	11	0	0	0	2	0	0	0	0	0	0	0	0	0	0
June	08	0	1	0	4	0	0	0	2	0	0	0	0	1	0
<b>Total</b>	<b>239</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>56</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>0</b>

Table 20

**DISTRIBUTION OF ISOLATED SEROTYPES OF *S. PNEUMONIAE***

Serotype	Number	Percentage
1	1	0.8
3	4	3.3
4	1	0.8
13	1	0.8
14	20	16.7
15	1	0.8
16	1	0.8
20	1	0.8
29	1	0.8
38	2	1.7
11c	1	0.8
15b	4	3.3
15c	1	0.8
16a	1	0.8
17f	1	0.8
18a	1	0.8
18f	1	0.8
19c	1	0.8
19f	28	23.3
22f	2	1.7
23a	5	4.2
23f	8	6.7
33b	1	0.8
3542	1	0.8
47f	4	3.3
6a	4	3.3
6b	10	8.3
9n	1	0.8
9v	5	4.2
NT	7	5.8
Total	120	100

Total of 120 pneumococcal isolates obtained from the LRH (73) and sentinel hospitals (47) were serotyped at the Reference laboratory at Christian Medical College, Vellore, India( Table 20).

The commonest serotype found in Sri Lanka was type 19F (23%) followed by type 14 (16.7%). The distribution of serotypes shows that the currently available Seven valent conjugate pneumococcal vaccine covers 60% of serotypes isolated in Sri Lanka.

Table 21

**ANTIBIOTIC SENSITIVITY OF *S. PNEUMONIAE* ISOLATES**

Antibiotic	Sensitivity No.(%)	Resistance %	Intermediate resistance %
Penicillin	48 (40.0)	31 (25.8)	41 (34.2)
Cotrimoxazole	30 (25.0)	69 (57.5)	21 (17.5)
Chloramphenicol	95 (79.2)	25 (20.8)	0 (0.00)
Erythromycin	42 (35.0)	77 (64.2)	1 (0.8)
Cefotaxime	89 (74.2)	6 (5.0)	25 (20.8)

The above isolates were further tested for antibiotic sensitivity at LRH as well as the Reference laboratory in India. The results are given in Table 21.

Of the tested antibiotics, isolated pneumococci were most sensitive to Chloramphenicol (79%) followed by Cefotaxime (74%). The most resistant antibiotic was Erythromycin (64%) followed by Cotrimoxazole (58%).

Table 22.

**22. SUMMARY OF NOTIFIABLE DISEASES – 2<sup>ND</sup> QUARTER 2009**

Health Region	Cholera	Acute Flaccid Paralysis (AFP)	Dysentery	Dengue Haemorrhagic Fever	Encephalitis	Enteric Fever	Food Poisoning	Human Rabies	Leptospirosis	Measles	Simple Contd. Fever	Tetanus	Typhus Fever	Viral Hepatitis
Colombo	0	5	58	1517	2	37	26	2	186	0	41	0	2	30
Gampaha	0	0	56	1587	12	10	0	1	85	0	5	0	4	20
Kalutara	0	0	84	558	6	19	16	1	81	0	5	1	1	13
Kandy	0	1	81	1697	4	8	2	0	68	0	3	2	69	20
Matale	0	0	34	509	2	9	1	1	100	1	4	0	1	6
Nuwara Eliya	0	1	157	95	1	72	750	0	9	1	11	0	22	19
Galle	0	0	56	187	3	2	15	0	42	0	4	0	2	3
Hambantota	0	1	26	488	0	3	2	0	34	1	3	0	16	8
Matara	0	0	76	438	2	0	11	1	38	1	4	0	21	12
Jaffna	0	1	39	1	0	88	8	0	0	1	2	0	38	95
Kilinochchi	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mannar	0	0	37	1	1	22	0	0	0	0	0	1	0	21
Vavuniya	0	0	1215	7	2	141	0	0	0	6	2	0	1	2740
Mullaitivu	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Batticaloa	0	1	134	185	3	2	36	0	6	0	1	1	2	7
Ampara	0	0	20	116	0	0	5	0	2	0	1	0	0	2
Trincomalee	0	1	32	210	1	4	0	1	15	0	0	0	10	4
Kurunegala	0	1	55	1120	5	24	4	2	24	3	15	0	11	26
Puttalam	0	5	42	225	2	20	0	0	8	1	4	0	6	5
Anuradhapura	0	1	44	256	1	1	1	1	13	3	1	1	5	25
Polonnaruwa	0	0	12	61	1	6	0	0	13	3	1	0	0	17
Badulla	0	0	80	126	0	11	5	1	20	0	14	1	37	122
Moneragala	0	0	19	63	0	8	5	0	7	0	8	0	15	22
Ratnapura	0	1	136	859	2	14	3	0	77	5	36	0	11	54
Kegalle	0	0	55	1929	2	11	5	0	75	1	0	0	10	60
Kalmunai	0	0	18	53	0	3	0	0	0	1	5	1	1	8
<b>TOTAL</b>	<b>0</b>	<b>21</b>	<b>2566</b>	<b>12288</b>	<b>52</b>	<b>515</b>	<b>895</b>	<b>11</b>	<b>903</b>	<b>28</b>	<b>170</b>	<b>8</b>	<b>285</b>	<b>3339</b>

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

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

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

This document is available on the internet [www.epid.gov.lk](http://www.epid.gov.lk).

Figures given may be subject to revision.

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

Such reports should be addressed to:

The Editor, Quarterly Epidemiological Bulletin

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

## ON STATE SERVICE

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