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1. POLIOMYELITIS

Twenty one (21) Acute Flaccid Paralysis cases were notified to the Epidemiology Unit during the 1st quarter 2009 in comparison to 19 and 23 cases each reported during the 1st quarter 2008 and 2007 respectively. This number does not reach the expected number of AFP cases per quarter which is 27 according to WHO surveillance criteria. Such a number for the quarter or 106 AFP cases per year would make up a non-polio AFP rate of 2 per every 100,000 under 15 year olds which is the expected standard of the WHO. The non-polio AFP rate for the first quarter of 2009 was 1.5.

Notification of AFP Cases from Hospitals

The majority of the cases (8 i.e.38%) 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. There was one case notified within the quarter from Asiri Hospital Colombo which is a private health institution. Other hospitals that notified the AFP cases in the 1st quarter are as follows:

Hospital	Number of Cases Reported
LRH	8
TH Karapitiya	1
TH Peradeniya	2
GH Ratnapura	1
TH Ragama	1
GH Badulla	2
TH Batticaloa	1
GH Ampara	1
GH Polonnaruwa	1
SBMCH Peradeniya	1
Asiri Hospital	1
National Hospital Sri Lanka	1
Total	21

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

The highest number of cases reported from a single district this quarter was 4 reported by Gampaha of the Western Province (19%). Colombo district of the Western Province and Badulla of Uva Province reported 3 cases each (14%). Kalutara of Western Province, Kandy of Central Province and Kalmunai of the Eastern province each had 2 AFP cases (10%) each. The complete list of distribution of AFP cases according to the province, district and MOH area is given below.

Table 1

GEOGRAPHICAL DISTRIBUTION OF AFP CASES 1ST QUARTER 2009

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Kaduwela	1
		CMC	2
	Gampaha	Kelaniya	1
		Wattala	2
		Attanagalla	1
	Kalutara	NIHS	1
Agalawatta		1	
Southern	Galle	Bope Poddala	1
Central	Kandy	Udunuwara	1
		Akurana	1
Sabaragamuwa	Ratnapura	Nivithigala	1
	Kegalle	Warakapola	1
Uva	Badulla	Hali Ela	1
		Kandeketiya	1
		Haldummulla	1
Eastern	Kalmunai	Pothuvil	2
North Central	Anuradhapura	NuwaraGam palatha	1
		Thmankaduwa	1
Total			21

Seasonal Distribution of AFP Cases

March recorded the majority of the AFP cases reported in the 1st quarter. The number reported for the month was 9 (43%). In January, 7 (33%) cases were reported. February had 5 cases of AFP.

Age and Sex Distribution of AFP Cases

Majority of the AFP cases (9 i.e.3%) reported in the 1st quarter this year were between 5-9 years of age. In comparison, the majority of the AFP cases reported in the 1st quarter 2008 were between 1- 4 years of age. Seven (33%) children belonged to 1-4 year age group. Five cases were aged between 10-14 years and no cases were reported within the below 1 year age group.

Two third of the AFP cases in the 1st quarter 2009 (14) were male. A similar trend was observed in 1st quarter 2008; twelve of the 19 cases (63%) reported in that quarter was also males. A similar trend was also evident within individual age groups and the majority in each group was male.

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'.

Eighteen AFP cases out of the 21 reported (86%) had at least one stool sample sent to MRI for polio virology. There were 2 cases with late stools and one case with only one sample of stools collected. This is in contrast to the respective quarter 2008 where a timely collection rate of 100% was achieved out of 19 AFP cases reported.

The table below shows the age and sex distribution in the 1st quarter 2009.

Table 2

DISTRIBUTION OF AFP CASES BY AGE AND SEX - 1ST QUARTER 2009

Age Group	Sex		Total
	Male	Female	
<1 year old	0	0	0
1-4 year old	4	3	7
5-9 year old	7	2	9
10-15 year old	3	2	5
Total	14	7	21

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 1st Quarter. The last case of cholera was reported in the country in January 2003.

3. TETANUS

During the first quarter 2009, seven cases of tetanus were reported to the Epidemiology Unit out of which 3 have been investigated and found to be confirmed cases of tetanus. Of them two were females and one was a male. All of them were over 40 years of age. None of them have been immunized with tetanus vaccine in the past. These patients were reported from Ratnapura, Jaffna and Kalutara districts.

4. MEASLES

During the first quarter 2009, 36 cases of measles were notified to the Epidemiology Unit. Of the 36 reported cases only 7 cases have been investigated showing the poor timeliness and the completeness of the special investigations done by the relevant staff. Symptoms of 6 investigated cases were compatible with the case definition of measles. Of them 4 were females and 2 were males. Two of them were under two years of age and both have received a dose of measles vaccine. Both of them were from Nawathispane MOH area in the Nuwara Eliya district. Of the investigated cases another two who were 8 years and 35 years of age were also reported from the same MOH area. They had not received the measles vaccination.

Special investigation data reveal that lab tests have not been performed among any of these investigated cases.

Table 3

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF MEASLES - 1ST QUARTER 2009

(N = 06)

Sex	Male	02
	Female	04
Age group	< 1	01
	1-5	01
	5-10	01
	11-40	03
	>40	00
District	Nuwara Eliya	04
	Anuradhapura	02

5. LEPTOSPIROSIS

During the 1st Quarter 2009, 866 cases were notified to the Epidemiology Unit compared to 2046 cases in the previous quarter and 917 cases in the corresponding quarter of 2008. During the current quarter, 36 deaths due to Leptospirosis (CFR 4.1%) have been reported of which 10 were from the Colombo District .

The sentinel surveillance sites(52) reported 513 cases (59% of the total) and 31 deaths during the current quarter. Majority (56%) of the caseload is in the age group 30-54 years and the male:female ratio is 6:1.

6. HUMAN RABIES

Sixteen (16) cases of human rabies were notified to the Epidemiology Unit in the 1st Quarter 2009, compared to 12 cases in the previous quarter and 15 cases in the corresponding quarter of year 2008. The highest incidence (03) was reported from Galle. Distribution of cases by district is given in Table 23.

Animal Rabies

During the quarter 172 dogs were reported positive for rabies compared to 210 in the previous quarter and 167 in the corresponding quarter of 2008.

In addition the following animals were also reported positive by the Medical Research Institute.

Cats-28, Wild Animals-02, Domestic Ruminants-03

Rabies Control Activities*

Dog vaccination - A total of 299,535 dogs were immunized during the 1st Quarter 2009 when compared to 316,805 in the previous quarter and 207,655 in the corresponding quarter of last year.

Animal Birth Control

Chemical – 13,557 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical – 2040 female dogs were subjected to birth control surgeries during the quarter under review.

*Source – Director/PHVS

7. ENTERIC FEVER

Total cases of Enteric fever was 461 in first quarter 2009 when compared to 401 cases reported in the previous quarter. Rate of Enteric fever for the entire country is 2.27 per 100,000 population. The highest rate has been reported from Mannar (62.92), followed by Jaffna (19.28) and Nuwara Eliya (7.79). The MOH areas Mannar (32), Kalpitiya (23), Murunkan (22), and Manipay (20) reported highest number of cases.

8. VIRAL HEPATITIS

In the 1st Quarter 2009, 314 cases of viral hepatitis were reported to the Epidemiology Unit, compared to 381 cases in the previous quarter and 635 cases in the corresponding quarter of 2008.

Among the reported cases, 124 were investigated and confirmed as viral hepatitis. RDHS area Badulla notified the highest number of cases (78) accounting for 24.84% of the total case load followed by Kegalle (47 cases i.e. 15.0%) and Gampaha (27 cases i.e. 8.6%). The

MOH areas Passara (18 cases i.e. 5.7%) and Badulla (17 cases i.e. 5.4%) in the Badulla district and Aranayake (17 cases i.e. 5.4%) in the Kegalle district have reported the highest number of cases.

9. DYSENTERY

Total cases of Dysentery was 1217 in the first quarter 2009, which is less than the number of cases reported in the first quarter of 2008 (1358). Rate of dysentery is 5.05 per 100,000 populations. The highest rate has been reported from Vavuniya (19.92), followed by Rathnapura (17.21) and Nuwara Eliya (15.04).

Balangoda (55), Morawaka (36), Imbulpe (32) and Matugama (31) are the main MOH areas where high number of cases have been reported.

10. JAPANESE ENCEPHALITIS (J.E.)

During the 1st quarter in 2009, 73 cases of Encephalitis were reported to the Epidemiology Unit. Among the reported cases 21 (28%) were investigated and 13 were found to be clinically confirmed as JE. Out of these 13 confirmed cases, only 5 cases were investigated and sent by the MOH. Among them three were under 5 years of age and 2 were in the age group of 5-15 years. The other eight cases were over the age of 15 years. One death was reported due to JE during the quarter.

This is in comparison to 88 cases of encephalitis, 7 confirmed JE and one death reported in the corresponding quarter of 2008.

11. MALARIA

The number of microscopically confirmed malaria cases detected during the 1st quarter of 2009 was higher than the number detected during the corresponding period of 2008. Both the number of *P.v.* infections and *P.f.* infections reported during the period under review have increased (Table 4). All these cases were detected among personnel of the armed forces engaged in operations in the Northern province. The distribution of malaria cases by Regional Malaria Officer (RMO) divisions is given in Table 5.

Source : Anti Malaria Campaign

Table 4

RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 1ST QUARTER 2008/2009

	1st Quarter 2008	1st Quarter 2009
No. of blood smears examined	267,591	240,715
No. of positives	12	108
No. of <i>P. vivax</i>	10	95
No. of <i>P. falciparum</i>	1	10
No. of mixed infections	1	3
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.004%	0.04%
P.v. : P.f. ratio	10:01	9.5:1
Percentage of infant positives	0%	0%

Table 5

DISTRIBUTION OF MALARIA CASES BY RMO DIVISION - 1ST QUARTER 2009

RMO Region	Blood smears	Positives	P.v.	P.f.
Colombo	15607	2	0	2
Gampaha	10953	0	0	0
Kalutara	3623	0	0	0
Kandy	8079	0	0	0
Matale	3692	0	0	0
Nuwara Eliya	101	0	0	0
Galle	4992	0	0	0
Matara	5561	0	0	0
Hambantota	7869	3	1	2
Jaffna	15382	1	1	0
Kilinochchi	42	42	38	3
Mannar	4183	04	02	1
Vavuniya	12580	08	08	0
Mullaitivu	15	15	14	1
Batticaloa	15407	1	1	0
Ampara	5726	1	0	1
Trincomalee	16601	03	03	0
Kurunegala	20890	1	1	0
Maho	6126	0	0	0
Puttalam	9383	1	1	0
Anuradhapura	25718	4	3	0
Polonnaruwa	16498	1	1	0
Badulla	4468	0	0	0
Moneragala	8797	21	21	0
Ratnapura	5420	0	0	0
Kegalle	1784	0	0	0
Kalmunai	11218	0	0	0
TOTAL	229497	108	95	10

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

RMO—Regional Malaria Officer

Table 6

MORBIDITY AND MORTALITY DUE TO DF/DHF - 1ST QUARTER 2009

RDHS Division	Cases	Percentage	Deaths
Colombo	569	18.4	7
Gampaha	286	9.2	1
Kalutara	155	5.0	1
Kandy	522	16.9	4
Matale	177	5.7	0
Nuwara Eliya	20	0.6	0
Galle	33	1.1	2
Hambantota	42	1.4	1
Matara	171	5.5	1
Jaffna	8	0.3	0
Kilinochchi	0	0.0	0
Mannar	3	0.1	0
Vavuniya	4	0.1	0
Mullaitivu	0	0.0	0
Batticaloa	194	6.3	6
Ampara	24	0.8	0
Trincomalee	59	1.9	0
Kurunegala	217	7.0	1
Puttalam	48	1.6	0
Anuradhapura	99	3.2	0
Polonnaruwa	20	0.6	0
Badulla	23	0.7	0
Moneragala	10	0.3	0
Ratnapura	74	2.4	1
Kegalle	267	8.6	5
Kalmunai	70	2.3	2
TOTAL	3095	100.0	32

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

During the 1st quarter 2009, 3095 cases of DF/DHF and 32 deaths were reported (CFR 1.03%) when compared to 1317 cases and 5 deaths (CFR 0.38%) reported during the previous quarter.

Table 6 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the quarter.

Special surveillance data on 1159 confirmed cases were received and analysed for the first quarter 2009. Of the total cases reported, the majority (49%) were in January followed by February (28%) and March (22%). Forty per cent (40%) of the cases were from the Western Province with Colombo, Gampaha and Kalutara districts contributing to 25%, 10% and 06% respectively. All other districts contributed to less than 10% each, except for Kandy & Batticaloa contributing 12%.

Age distribution of reported cases showed that 458 cases (40%) were below 15 years of age. Majority of the cases 495 (43%) were between 15-39 years of age and 165 (14%) were aged 40 years or above. Age was not available for 41 cases.

According to the clinical findings, majority of the reported cases (61%) were classified as Dengue Fever. Thirty six percent (36%) were classified as DHF with 25% and 11% falling into DHF1 and DHF II categories respectively. The deaths were reported from Colombo (07), Gampaha (1) and Kalutara(1), Kandy (04), Galle (02), Hambantota (01), Matara (01), Batticaloa (06), Kurunegala (01), Ratnapura (01), Kegalle (05) and Kalmunai (02) districts.

During the 1st quarter 2009, 1400 blood samples were tested using IgM capture ELISA test and Haemagglutination Inhibition test at the Dept. of Virology, MRI and 743 samples were confirmed as positive (Table 7).

Table 7.

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 1ST QUARTER 2009

Month	Clinically Suspected	Serologically confirmed
January	490	203
February	359	209
March	551	331
Total	1400	743

12.1 ENTOMOLOGICAL SURVEILLANCE OF DENGUE VECTORS

Results of the entomological surveillance carried out by the Medical Research Institute in selected MOH areas of Colombo, Gampaha and Kalutara districts, for the 1st Quarter 2009 are given in Table 8.

Surveillance activities were carried out in locations identified as 'high-risk' by the respective MOOH and action was taken to eliminate the breeding sites detected.

Breteau Index

$$= \frac{\text{No. of Positive containers}}{\text{No. of Premises inspected}} \times 100$$

Table 8.

AEDES LARVAL DENSITIES (BRETEAU INDEX) IN COLOMBO, GAMPAHA AND KALUTARA DISTRICTS - 1ST QUARTER 2009

MOH Area	January		February		March	
	A	B	A	B	A	B
Nugegoda	2.00	3.00	5.00	1.00	2.50	9.00
Dehiwala	Not Done	Not Done	8.00	4.00	5.00	13.00
Moratuwa	3.20	4.00	1.33	0.00	5.00	4.50
Maharagama	0.80	5.60	0.00	12.50	0.00	10.60
Kaduwela	2.90	13.14	0.00	9.00	6.00	24.60
Piliyandala	0.00	2.00	0.00	10.00	0.00	5.30
Panadura	0.80	1.60	0.00	8.00	0.00	16.00
Ragama	0.79	3.90	0.00	2.00	0.00	2.34
Kelaniya	2.00	11.60	2.00	9.00	1.60	3.20
Mahara	0.00	4.80	0.00	7.00	0.00	24.00
Dompe	0.00	4.00	0.00	12.00	0.00	21.00
Ja Ela	2.00	6.00	1.00	5.00	2.80	12.00
Negombo	1.60	3.90	14.28	10.57	7.00	22.00
Katana	1.30	6.70	1.00	2.00	6.90	13.90
Biyagama	1.60	7.20	0.00	10.60	Not Done	Not Done
Wattala	2.00	4.00	4.00	3.00	2.00	5.00

13. TUBERCULOSIS

A total of 1350 tuberculosis patients were registered for 1st Quarter 2009 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 1039 suffered from pulmonary disease, and the balance, 311 patients from non-pulmonary disease. Of these patients 770 were bacteriologically confirmed with a bacteriological confirmation rate of 74.11%. The distribution of tuberculosis patients by RDHS division is given in Table 9.

B.C.G. vaccination

A total of 98,328 B.C.G. vaccinations were carried out during the quarter with 91.02% coverage.

Table 9.

TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 1ST QUARTER 2009

RDHS DIVISION	PTB	EPTB	Total	Pulmonary TB Direct Smear	
				No. +VE	%
Colombo	337	102	439	292	86.65
Gampaha	117	31	148	94	80.34
Kalutara	15	02	17	12	80.00
Kandy	57	15	72	22	38.60
Matale	27	05	32	20	74.07
Nuwara Eliya	25	10	35	14	56.00
Galle	21	8	29	15	71.43
Hambantota	5	14	19	11	220.0
Matara	32	14	46	26	81.25
Jaffna	49	17	66	11	22.45
Vavunia	3	0	3	1	33.33
Kilinochchi	2	1	3	2	100.0
Mannar	3	1	4	1	33.33
Mullativu	2	0	2	0	0.00
Ampara	16	6	22	6	37.50
Batticaloa	17	8	25	12	70.59
Trincomalee	28	1	29	9	32.14
Kurunegala	16	17	33	38	237.5
Puttalam	11	0	11	3	27.27
Anuradhapura	32	08	40	28	87.50
Polonnaruwa	27	03	30	5	18.52
Badulla	33	11	44	27	81.82
Monaragala	22	4	26	14	63.64
Kegalle	63	20	83	48	76.19
Ratnapura	51	9	60	39	76.47
Kalmunai	28	4	32	20	71.43
Total	1039	311	1350	770	74.11

PTB-Pulmonary Tuberculosis

EPTB- Extra Pulmonary Tuberculosis

Data from Central TB Register

14. SURVEILLANCE AT SEA PORT

Surveillance activities carried out by the Port Health Office at Colombo Sea Port during the 1st Quarter 2009, is given below.

1. Yellow Fever Vaccination	Total
Total number vaccinated	- 31
2. Granting Pratique to Vessels	
Number issued	- 991
3. Deratting Certification	
Number issued	- 18

Details of the vaccinations carried out by the Assistant Port Health Office, Colombo 8, during the 1st Quarter 2009, is given below.

Yellow fever	Total 621
Meningococcal meningitis	380
Polio vaccination	75

15. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 1st Quarter 2009, is given below.

1. Yellow Fever Surveillance	
a. No. with valid certificate	- 16
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	- 51
b. No. of food samples taken under Food Act	- 00
c. No. found defective	- 03
d. No. of court cases/prosecuted/warned	- 03
No. of water samples tested	- 06
No. reported contaminated	- 00
3. Release of human remains	
a. No. of human remains released	- 98
b. No. referred to JMO for post-mortem	- 06
c. No. alleged suicide	- 03
4. Other Health Activities	
a. Polio Vaccination No. of doses given	- 34

16. LEPROSY**QUARTERLY RETURN OF LEPROSY STATISTICS - 1ST QUARTER 2009**

Table 10.

1. National

	At the end of the quarter			Cumulative for end of the quarter		
	1st Quarter 2009	1st Quarter 2008	Diff. (%)	2009	2008	Diff. (%)
New patients detected	394	489	-19.42	394	489	-19.42
Children	25	57	-56.14	25	57	-56.14
Grade 2 Deformities	40	37	8.10	40	37	8.10
Multi-Bacillary (MB)	179	199	-10.05	179	199	-10.05
Females	175	189	-7.40	175	189	-7.40

2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	96	3	16	40	42
Gampaha	67	3	4	24	36
Kalutara	30	1	2	14	13
Western	193	7	22	78	91
Galle	2	0	0	1	1
Matara	7	0	2	2	3
Hambantota	1	1	0	1	1
Southern	10	1	2	4	5
Kandy	13	2	1	7	2
Matale	2	0	0	1	0
Nuwara Eliya	3	0	1	1	1
Central	18	2	2	9	3
Anuradhapura	15	0	3	6	4
Polonnaruwa	27	3	3	11	14
North Central	42	3	6	17	18
Kurunegala	27	3	0	21	10
Puttalam	8	0	2	5	3
North Western	35	3	2	26	13
Kegalla	2	0	0	1	1
Ratnapura	21	2	1	12	12
Sabaragamuwa	23	2	1	13	13
Badulla	1	0	0	0	1
Moneragala	4	0	0	2	1
Uva	5	0	0	2	2
Trincomalee	6	1	0	5	1
Batticaloa	33	2	3	13	17
Ampara	12	2	1	5	4
Kalmunai	15	1	2	5	8
Eastern	66	6	6	28	30
Jaffna	0	0	0	0	0
Vavuniya	1	1	0	1	1
Mannar	1	0	0	1	0
Mullativu	0	0	0	0	0
Kilinochchi	0	0	0	0	0
Northern	2	1	0	2	1
Sri Lanka	394	25	41	179	176

**17. ANTIBIOTIC SENSITIVITY PATTERN OF ENTERIC PATHOGENS ISOLATED IN MEDICAL RESEARCH INSTITUTE
1ST QUARTER 2009**

Table 11

Organism	No. of sam- ples exam- ined	Nu m b e r positive	Ampicillin		Chloram- phenicol		Ciprofloxacin		Cotrimoxazole		Ceftriaxone		Cefotaxime		Erythromy- cin		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	431	12	66			34	100									100							
EPEC	186	9	33	33		33		33	33	77	23		100			55	33	12		33	33	100	
Salmonella para- typhi A	463	25	96	4		76	24	4	96	100						92	8			4		96	96
Salmonella typhi	463	4	100			100		75	25	100										75		25	
Salmonella others	463	11	76	24				85	15	100		75	25	100		85	15			85		100	
Shigella sonnei	453	9	89					89	11	11	89							45	55	89		11	100
Shigella flexneri I	453	4	25	75				50	50		100					25	75			50		50	100

S - Sensitive I - Intermediate Sensitivity R - Resistance

18. SEXUALLY TRANSMITTED DISEASES

Table 12

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA* - 1ST 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 ¹	27	8	35	27	8	35	
AIDS	3	1	4	3	1	4	
Syphilis	Early Syphilis ²	17	14	31	17	14	31
	Late Syphilis ³	70	52	122	70	52	122
	Congenital Syphilis ⁴	1	0	1	1	0	1
Gonorrhoea ⁵	68	60	128	68	60	128	
Ophthalmia neonatorum ⁶	1	0	1	1	0	1	
Non specific cervicitis/urethritis	150	270	420	150	270	420	
Chlamydial Infection	0	2	2	0	2	2	
Genital Herpes	199	275	474	199	275	474	
Genital Warts	172	134	306	172	134	306	
Chancroid	1	1	2	1	1	2	
Trichomoniasis	3	26	29	3	26	29	
Candidiasis	189	314	503	189	314	503	
Bacterial Vaginosis		219	219		219	219	
Other sexually transmitted diseases ⁷	76	29	105	76	29	105	
Non-venerial ⁸	915	677	1592	915	677	1592	

* - 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.

19. SURVEILLANCE REPORT ON AEFI – UP TO 1ST QUARTER 2009

Surveillance of Adverse Events Following Immunization (AEFI) has effectively continued in the first quarter 2009. Despite the logistical constraints due to the conflict situation in the country completeness of reports has reached 91.7% while 46.5% reports were received in time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Almost 60% of the 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.

Even with the present disturbed situation Jaffna and Matale were able to send all the reports while Colombo (88.1%) and Gampha (90.5%) which are in the Western Province have sent fewer reports than the Sri Lanka figure (91.7%). However, there was only a marginal improvement in overall timeliness when compared to the corresponding quarter last year from 38.2% to 46.5%. Best timeliness of 75% has been reported from Badulla district even though the completeness was 88.9%.

Districts in the North and East have sent maximum number of nil returns followed by the Nuwara Eliya district (65.8%) which is higher than the Sri Lanka figure (34.6%) indicating the need for more attention for surveillance. Highest number of "Nil" returns (81.8%) was received from the Vavuniya district and the lowest number of such returns (9.1%) was from the Kegalle district.

Highest rate (351.8 per 100,000 immunizations) of AEFI was reported from Mannar district with the number of 24 AEFI. This was a significant increase when compared to the corresponding figure (number 01 and rate 16.3 per 100,000 immunizations) for the Mannar district, during the same period last year. Highest number (117) was reported from the Colombo district with the rate of 76.8 per 100,000 immunizations which is marginally higher than the first quarter 2008 (109 AEFIs and rate 76.8 per 100,000 immunizations).

The highest number (1173) and rate of AEFI (357.3 per 100,000 immunizations) were reported against DPT vaccine. When compared with the 1st quarter 2008 for same, there was a considerable decrease in the rate of AEFI reported for DPT in 2009.

Two deaths had been reported following Rubella vaccine. Causality assessment is the most important task to determine the cause for these deaths. Probable cause for the 1st case, which was from Matara district, was anaphylaxis. The second case was from Ginigathena MOH area in the Nuwara Eliya district which took place three weeks following Rubella vaccination. There were many other social factors associated and the child was normal until symptoms had erupted on the day prior to the death. Cause of death is under investigation.

Immediate notification and proper history taking according to the death format and complete postmortem conducted by the consultant JMO are vital for death investigations.

Table 13.

NUMBER AND RATE OF SELECTED AEFI REPORTED BY VACCINE AND BY TYPE OF AEFI - UP TO 1ST QUARTER 2009

Vaccine	Seizure	Allergic Reactions	Abscess	Severe Local Reactions	High Fever	Lymphadenitis	Hypotonic Hyporesponsive Episodes*	Meningitis	Encephalitis	Encephalopathy	Nodule	Guillain - Barre Syndrome	Paralysis	Injection reaction	Arthralgia	Deaths	Anaphylactic Shock	Persistent Screaming	Others**	Total	Rate 100,000 doses
BCG	0	2	6	0	1	1	2	0	0	0	2	0	0	0	0	0	0	0	0	14	18.3
DPT	99	171	149	114	420	0	6	0	0	0	173	0	0	1	4	0	0	29	7	1173	357.3
OPV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	7	42	0	2	17	0	0	0	0	0	0	0	0	0	0	0	0	1	0	69	77.8
DT	1	18	0	9	13	0	0	0	0	0	10	0	0	0	0	0	0	1	0	52	65.2
TT	1	7	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	15.1
Rubella	0	60	3	2	3	5	0	0	0	0	0	0	0	18	0	2	0	0	2	95	120
JE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
aTd	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	6	9.1
MR	4	33	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	55.2
Hep	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1.6
Others	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Total	112	338	162	131	460	6	8	0	0	0	186	0	0	21	4	2	0	31	9	1470	96

*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.

Table 14.

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 1ST QUARTER 2009

RDHS Division	(% Complete-ness	(% Time-liness	(% "Nil" Re-returns	Reported AEFI	
				Number	Rate *
Colombo	88.1	40.5	21.6	117	76.8
Gampaha	90.5	44.7	23.7	88	58.7
Kalutara	94.4	32.4	32.4	100	112.6
Kandy	93.1	41.8	40.3	109	101.1
Matale	100.0	66.7	38.9	52	129.1
Nuwara Eliya	97.4	50.0	65.8	28	45.3
Galle	93.0	47.2	52.8	60	82.9
Hambantota	97.0	28.1	15.6	111	238
Matara	98.0	54.0	50.0	49	72.3
Jaffna	100.0	14.3	33.3	53	140.7
Kilinochchi	0	0	0	0	0
Mannar	41.7	40.0	20.0	24	351.8
Vavuniya	91.7	45.5	81.8	7	51.8
Mullativu	0	0	0	0	0
Batticaloa	97.0	43.8	43.8	90	178.5
Ampara	95.2	40.0	40.0	20	104
Trincomalee	93.3	39.3	75.0	8	20.8
Kurunegala	98.2	41.1	32.1	93	76.9
Puttalam	96.3	42.3	34.6	43	56.2
Anuradhapura	93.0	50.9	35.8	85	106.8
Polonnaruwa	95.2	60.0	40.0	36	110
Badulla	88.9	75.0	20.0	87	146.6
Moneragala	93.9	51.6	54.8	21	56.2
Ratnapura	96.3	48.1	44.2	76	122.4
Kegalle	100.0	69.7	9.1	96	147.5
Kalmunai	94.9	27.0	78.4	17	38.9
Sri Lanka	91.7	46.5	40.7	1470	96.0

* Rate Per 100,000 immunizations

20. SURVEILLANCE REPORT ON JAPANESE ENCEPHALITIS 2008

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 (Table 15), and the programme ultimately expanded to 18 districts.

In year 2008, there were 55 suspected cases of JE and out of these 31 were serologically confirmed and the case fatality rate was found to be 19.4%.

The districts of Ratnapura (4 i.e. 12.9%), Kalutara (4 i.e. 12.9%), Gampaha (2 i.e. 6.4%) and Galle (2 i.e. 6.4%) reported the highest number of confirmed JE cases and 6 deaths has occurred throughout the year due to JE (Table 16).

Confirmed cases of JE occurred throughout the year. However, 7 cases (22.6%) occurred in December 2007 but were confirmed and reported during the year 2008 (Table 17).

It should be noted that due to under reporting of laboratory confirmed cases through the routine disease surveillance system, epidemiological data are not available for 7 confirmed cases received from the MRI.

Table 15

CASES, DEATHS AND CASE FATALITY RATE (CFR) OF JAPANESE ENCEPHALITIS 1990-2008

Year	Cases		Deaths	
	Number	Rate	Number	CFR %
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

Table 16

DISTRIBUTION OF SUSPECTED JE CASES AND DEATHS BY DISTRICTS-2008

DISTRICT	SUSPECTED-CASES	CONFIRMED-CASES	DEATHS
Colombo	1	0	0
Gampaha	4	2	0
Kalutara	5	4	0
Kandy	3	0	1
Galle	5	2	1
Hambantota	4	1	0
Matara	1	0	0
Jaffna	0	0	0
Vavuniya	2	1	1
Kurunegala	2	1	0
Trincomalee	1	1	1
Anuradhapura	1	0	1
Polonnaruwa	1	1	0
Monaragala	1	0	0
Ratnapura	11	4	1
Kegalle	3	1	0
Badulla	2	0	0
Batticaloa	2	0	0
Kalmunei	2	0	0
Puttalam	4	1	0
Unknown	0	12	0
Total	55	31	6

Almost all age groups were affected by the disease. However 6 out of 31 confirmed cases (19.3%) were over 60 years of age followed by only 3 cases (9.7%) in the less than 10 year age group (Table 18)

Table 17

CASES , DEATHS AND CASE FATALITY RATE (CFR) OF JAPANESE ENCEPHALITIS 1990-2008

Month	Sus-pected cases	Confirmed cases	Deaths
January	21	13	2
February	3	1	1
March	3	0	0
April	2	1	1
May	4	0	0
June	4	0	0
July	0	0	0
August	2	0	0
September	3	0	0
October	3	5	1
November	0	0	0
December	1	4	0
Unknown	9	7	1
Total	55	31	6

Table 18

DISTRIBUTION OF SUSPECTED CASES AND DEATHS BY AGE GROUPS OF JE

Age group	Suspected cases	Confirmed cases	Deaths
<1	2	1	0
01-04	9	2	1
05-09	5	0	0
10-14	6	1	0
15-19	6	1	0
20-24	5	3	2
25-29	1	1	0
30-34	0	0	0
35-39	3	1	0
40-44	4	2	0
45-49	1	0	0
50-54	1	0	0
55-59	3	1	0
>60	9	6	3
Unknown	0	12	0
Total	55	31	6

21. SURVEILLANCE REPORT ON LEPTOSPIROSIS - 2008

Leptospirosis has become endemic in the country over the past few decades with epidemics occurring frequently with increasing magnitude(Figure 1). The largest epidemic reported so far occurred in 2008 with a case load of 7421 (incidence rate 36.7/100000 population) and 207 deaths (CFR 2.8%) reported to the Epidemiology Unit. This was a 237% increase in the number of cases when compared to 2198 cases reported in 2007. Mortality also showed a significant increase when compared to the previous years (Table 19). The actual incidence of leptospirosis is likely to be more than the notified number since patients with mild form of the disease who do not need hospitalisation are not reported through the routine notification system. Furthermore the actual incidence rate could be much higher if the population at risk could be estimated for the denominator instead of using the total population in a district who are not exposed to the risk of infection.

Leptospirosis was reported through out the year with two peak transmission periods observed closely related to monsoon rains. (Figure 2). This could be due to paddy cultivation activities in most districts in relation to monsoon rains. During 2008 there was an increase in paddy cultivation activities in the country due to escalation of food prices and Government policy of encouraging paddy cultivation. This led to cultivation of previously abandoned paddy fields and as a result exposure of non immune population to the risk of infection as people engaged in other occupations took to farming. Futhermore, most of the affected districts received continuous rains during year which further favoured continuous transmission of the disease.

Distribution of leptospirosis cases and deaths by RDHS divisions is shown in Table 20. The highest number of cases was notified from Colombo district (1073 cases) accounting for 14.5% of the total case load with the incidence rate of 14.6/100,000 population. However, the highest incidence (i.e. 177/100,000) was reported from Matale district (855 cases i.e. 11.5%of the total case load). Districts of Gampaha (830), Kurunegala (696), Kalutara (692), Kegalle (594), Kandy (537), Matara (501) and Galle (447) also reported large number of cases. The highest number of deaths (39 i.e. 18.8% of all deaths) and high case fatality rate (4.7%) was reported from Gampaha District and Kandy district reported 28 deaths (13.5% of total deaths) and the highest CFR (5.2%). However no deaths were reported from Matale district which had the second highest number of cases and highest incidence rate in the country. This phenomenon has been observed even in the past few years.

Table 19

MORBIDITY AND MORTALITY DUE TO LEPTOSPIROSIS 2004 - 2008

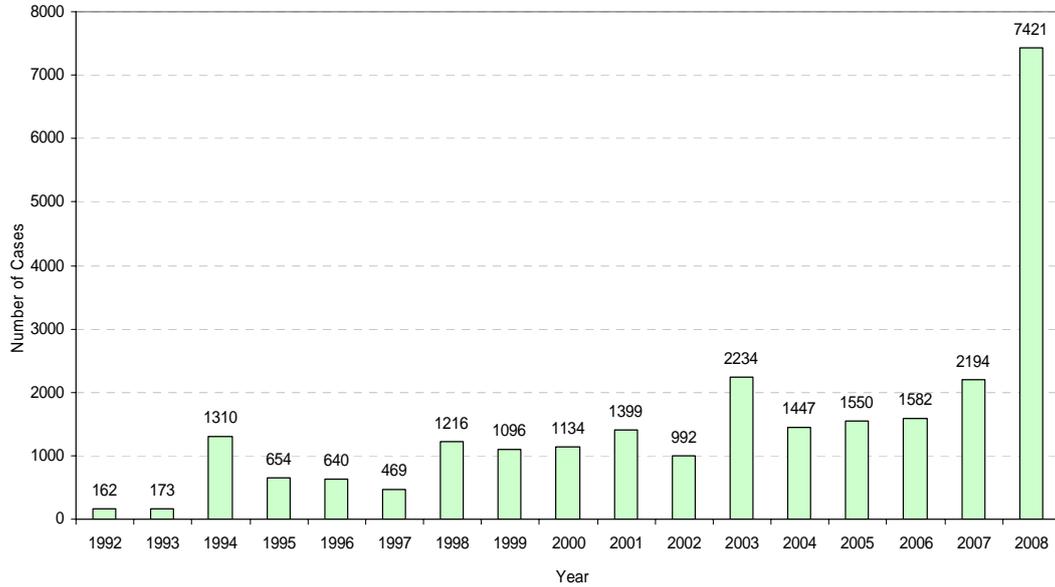
Year	Number of cases	Incidence Rate (Per 100000 population)	Number of deaths	CFR (%)
2004	2243	7.4	16	0.7
2005	1447	7.9	33	2.2
2006	1550	8.1	40	2.5
2007	2198	11.1	34	1.5
2008	7421	36.7	207	2.7

Table 20

DISTRIBUTION OF LEPTOSPIROSIS CASES AND DEATHS 2008

RDHS Division	Number of cases (% of Total)	Incidence (per 100000 population)	Deaths (% of total)	CFR (%)
Colombo	1073(14.5)	43.1	23(11.1)	2.1
Gampaha	830(11.2)	38.6	39(18.8)	4.7
Kalutara	692(9.3)	61.9	18(8.7)	2.6
Kandy	537(7.2)	38.5	28(13.5)	5.2
Matale	855(11.5)	177	4(1.9)	0.5
Nuwara Eliya	76(1.0)	10.1	3(1.4)	3.9
Galle	447(6.0)	42.1	16(7.7)	3.6
Hambantota	142(1.9)	25.5	3(1.4)	2.1
Matara	501(6.8)	60.9	12(5.8)	2.4
Jaffna	2(0.0)	0.3	0(0.0)	0
Kilinochchi	2(0.0)	1.3	0(0.0)	0
Mannar	0(0.0)	0	0(0.0)	0
Vavunia	6(0.1)	3.6	0(0.0)	0
Mullativu	0(0.0)	0	0(0.0)	0
Batticaloa	12(0.2)	2.3	0(0.0)	0
Ampara	27(0.4)	13.5	0(0.0)	0
Trincomalee	34(0.5)	9.4	0(0.0)	0
Kurunegala	696(9.4)	45.3	22(10.6)	3.2
Puttalam	69(0.9)	9.1	2(1.0)	2.9
Anuradhapura	270(3.6)	33.4	10(4.8)	3.7
Polonnaruwa	112(1.5)	28	0(0.0)	0
Badulla	74(1.0)	8.6	1(0.5)	1.4
Moneragala	104(1.4)	24.2	1(0.5)	1
Ratnapura	262(3.5)	23.8	5(2.4)	1.9
Kegalle	594(8.0)	73.6	20(9.7)	3.4
Kalmunai	4(0.1)	0.9	0(0.0)	0
Total	7421 (100.0)	36.7	207(100.0)	2.8

Figure 1
LEPTOSPIROSIS - NUMBER OF NOTIFIED CASES BY YEAR (1992 – 2008)



Source: Weekly Return of Communicable Diseases

Figure 2
NOTIFICATION OF LEPTOSPIROSIS BY WEEK 2008

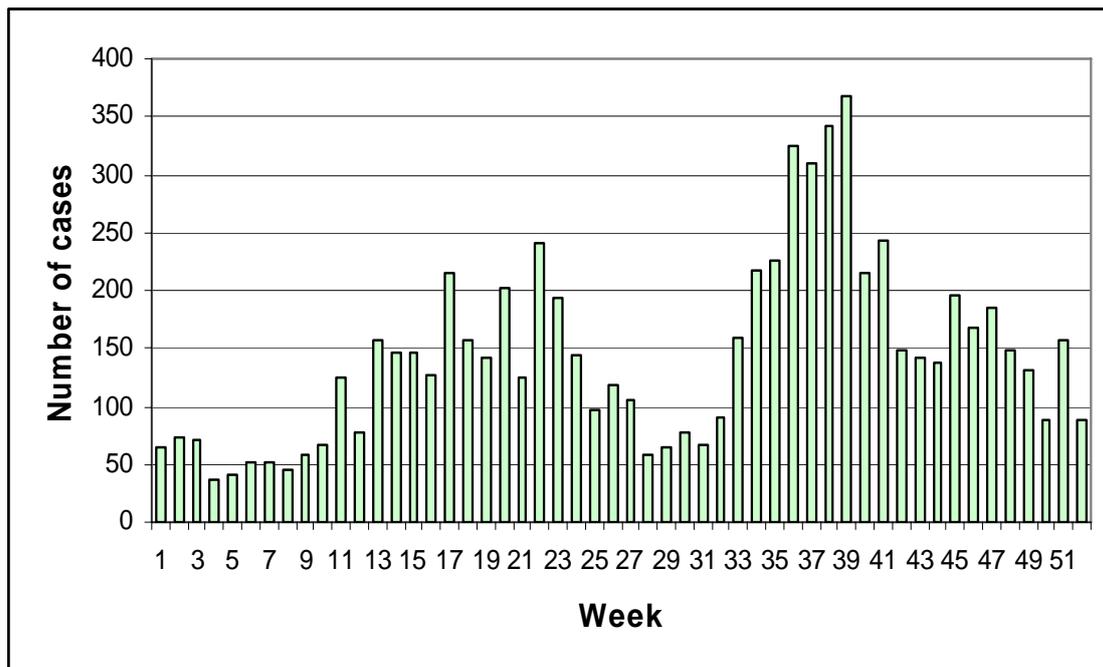


Figure 3.
AGE DISTRIBUTION OF LEPTOSPIROSIS CASES 2008

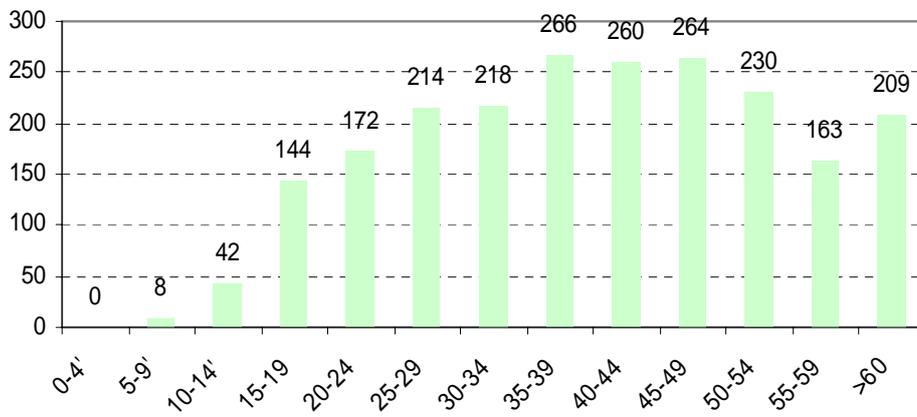


Figure 4.
DISTRIBUTION OF LEPTOSPIROSIS CASES BY OCCUPATION

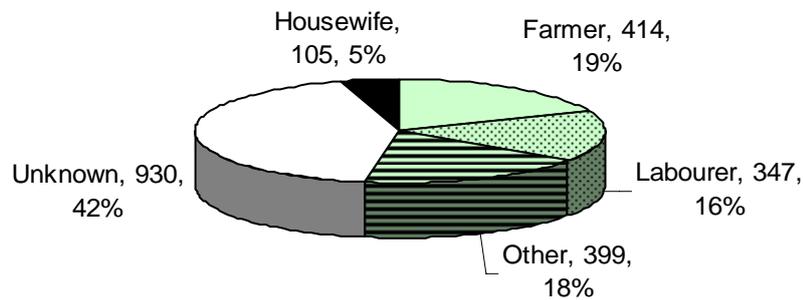
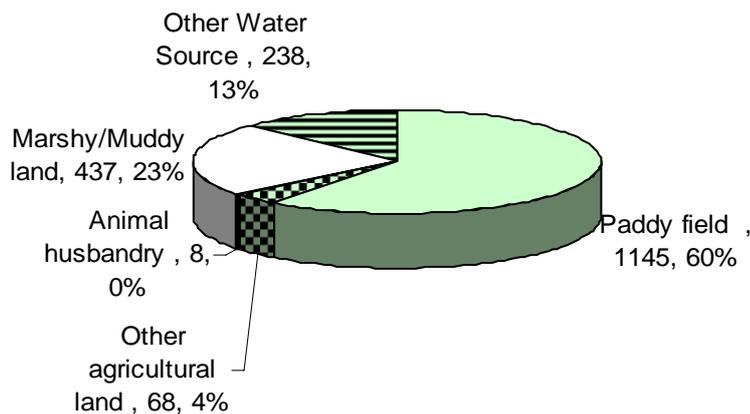


Figure 5.
DISTRIBUTION OF CASES BY TYPE OF EXPOSURE



Sentinel Surveillance

The number of sentinel surveillance sites was increased to 52 during 2008 with a view to improving the epidemiological data. Furthermore, a field format for case investigation was introduced to obtain information from MOOH regarding control activities. A total of 2195 cases were confirmed by the special surveillance mechanism, which amounts to 30% of the notified cases.

According to the special surveillance data 80% of the cases were males. Majority of the cases (56%) were in the economically productive age group of 30-55 years (Figure 3).

Analysis of the data by occupation revealed that 19% of the cases were farmers and 16% were labourers which further reveals the occupational nature of the disease (Figure 4). However in 42% of the cases of the occupation is unknown which indicates the need for improvement of the quality of data.

Further, analysis of exposure history of patients revealed that majority (60%) had worked in the paddy fields before the onset of illness, indicating occupational exposure among farmers. Another 23% came with the history of exposure in muddy or marshy lands confirming the vulnerability of some other occupational groups such as gem miners and 13% had the exposure in other water sources (Figure 5). Approximately 31% of the cases had a skin lesion which could have predisposed them to the infection. Chemoprophylaxis has been obtained by 1.4% of the cases while in 47% of the case load had not obtained it. None of the patients who died had obtained chemoprophylaxis.

Analysis of clinical features revealed that the commonest symptom was acute fever. Almost all the patients had presented with fever. The other common symptoms were headache (91%), myalgia (91%), conjunctival suffusion (70%), reduced urine output (32%) and jaundice (25%).

Laboratory Surveillance

Microscopic Agglutination Test (MAT) was carried out on 4509 blood samples by the Department of Bacteriology of the Medical Research Institute, Colombo during 2008. The Results are given in Table 21.

Table 21.

RESULTS OF MAT TEST CARRIED OUT AT DEPARTMENT OF BACTERIOLOGY, MRI – 2008

Results	Number	%
Positive	1423	31.5
Negative	1889	42.0
Equivocal	1197	26.5
Total	4509	100.0

Two consecutive samples are required to demonstrate a significant rise in antibody titre for accurate diagnosis of Leptospirosis with the MAT test. However only one sample of blood was received from the majority of the patients. Only 31.5% of the samples obtained from clinically suspected Leptospirosis cases were positive with 26.5% of the samples yielding equivocal results. The high percentage of negative results (42%) could be due to samples being drawn from patients fairly early in the course of the disease since this test would be positive after 5-7 days of the onset of symptoms.

Prevention & Control

The main control activity adopted to control this epidemic was creating awareness among the public regarding the disease prevention and seeking early treatment to prevent complications and deaths. The Epidemiology Unit in collaboration with the Health Education Bureau organized public education programmes through mass media in addition to development and distribution of posters and leaflets on disease prevention. Prophylactic antibiotic (Doxycycline) was distributed among the high risk population groups as a supplementary measure.

With a view to reduce case fatality, clinical management guidelines were prepared and circulated among the clinicians. Mortality reviews were introduced to identify any correctable factors to minimise mortality due to Leptospirosis.

Epidemiology Unit carried out surveillance reviews in some main high risk districts; Gamapha, Colombo, Kalutara, Kegalle and Kurunegala with the objective of strengthening control activities.

Since the support of other relevant Government Departments is essential to implement an effective control programme, Epidemiology Unit held a Consultative Meeting of technical experts from Departments of Agriculture, Agrarian Services, Education, Irrigation and Provincial Councils & Local Government in November 2008. A National Coordinating Committee was formed as per the recommendations made at this meeting and the role of each sector was emphasized. Following this meeting the Agriculture Department has contributed to the efforts to control Leptospirosis by development of IEC material (leaflets, posters and television spot) to educate the public on rodent control.

22. SURVEILLANCE REPORT ON INVASIVE BACTERIAL DISEASES -2009

Invasive bacterial disease surveillance was carried out among children aged 2-59 months of age 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).

During the 1st quarter of 2009, 211 blood cultures were studied. Number of *S. pneumoniae* isolates was only 01. The isolation rate was 0.4%. Only four (1.9%) *Haemophilus influenzae* isolates were found while there were no type b isolates.

The number of CSF cultured was 50. There was no *S. pneumoniae* isolates detected among them. One *H. influenzae* (2%) was isolated while there was no type b detected.

Latex antigen test results are sensitive even if prior antibiotics are used. Of 17 Latex antigen tests done, 1 (5.9%) was found to be positive for *S. pneumoniae* whereas two (11.8%) 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 under estimates due to prior use of antibiotics. There were 4 (1.8%) patients confirmed as invasive pneumococcal disease and 6 (2.7%) patients with *H. influenzae*.

Table 22

INVASIVE BACTERIAL DISEASES SURVEILLANCE—1ST QUARTER 2009

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
2005	1398	8	15	14	430	1	5	0	312	7	25	25	18	36	35
2006	1686	10	18	16	361	4	11	0	338	3	16	15	16	29	27
2007	1113	10	15	0	257	1	5	0	236	6	14	0	19	26	0
2008	5298	37	50	30	1227	9	21	0	975	21	60	40	68	99	62
2009															
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
MARCH	105	0	3	0	27	0	0	0	11	0	2	0	0	4	0
Total	211	1	4	0	50	0	1	0	17	1	2	0	4	6	0

Table 23.

23. SUMMARY OF NOTIFIABLE DISEASES – 1ST 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	03	49	569	05	65	12	02	123	01	05	00	02	21
Gampaha	0	04	39	286	05	19	09	01	77	01	01	00	03	27
Kalutara	0	02	86	155	03	23	06	01	52	00	00	01	00	04
Kandy	0	02	99	522	01	09	52	00	65	02	00	00	34	13
Matale	0	00	27	177	00	14	05	01	137	03	00	00	02	02
Nuwara Eliya	0	00	110	20	00	57	20	00	16	05	04	00	17	20
Galle	0	01	55	33	06	00	05	03	51	0	02	00	02	06
Hambantota	0	00	26	42	06	02	05	00	15	01	20	00	28	07
Matara	0	00	92	171	02	04	04	00	55	01	06	00	53	05
Jaffna	0	00	33	08	03	72	20	02	0	04	02	00	84	09
Kilinochchi	0	00	00	00	00	00	00	00	0	00	00	00	00	00
Mannar	0	00	11	03	00	56	04	00	0	00	00	00	00	14
Vavuniya	0	00	36	04	01	02	02	00	02	03	03	00	00	00
Mullaitivu	0	00	02	00	00	01	00	00	00	01	00	00	00	00
Batticaloa	0	00	38	194	09	05	05	01	02	01	02	00	00	02
Ampara	0	00	10	24	00	05	00	00	06	00	01	00	00	04
Trincomalee	0	00	27	59	01	00	00	00	01	01	01	00	04	03
Kurunegala	0	00	48	217	03	16	01	02	33	00	12	02	41	20
Puttalam	0	00	41	48	05	36	00	01	36	01	06	00	20	03
Anuradhapura	0	02	25	99	03	03	02	00	61	03	01	01	21	04
Polonnaruwa	0	00	10	20	01	10	06	00	35	04	01	00	00	03
Badulla	0	03	72	23	02	16	13	00	32	00	09	00	21	78
Moneragala	0	00	15	10	00	07	02	00	05	01	04	01	28	13
Ratnapura	0	01	186	74	13	22	02	01	28	02	32	02	11	06
Kegalle	0	01	34	267	03	12	01	01	32	01	03	00	09	47
Kalmunai	0	02	46	70	01	05	01	00	02	00	03	00	01	03
TOTAL	0	21	1217	3095	73	461	177	16	866	36	118	07	381	314

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

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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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