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1. POLIOMYELITIS

Twenty five (25) Acute Flaccid Paralysis cases were notified to the Epidemiology Unit during the 3rd quarter 2008. This is much higher than the number of cases (16) reported in the corresponding quarter in 2007 and is comparable to 26 AFP cases reported during the 3rd quarter 2006. This number does not reach the expected number of AFP cases per quarter which is 28 according to WHO surveillance criteria and a non - polio AFP rate of only 1.8 per 100,000 under 15 year old population has been achieved in this quarter.

Twenty eight cases for the quarter or 112 AFP cases per year (according to the latest population data) will make up a non-polio AFP rate of 2 per every 100,000 under 15 year olds which is a primary performance indicator for the programme.

Notification of AFP Cases from Hospitals

Majority of the cases (5 i.e.20%) 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 Karapitiya, TH Kurunegala and TH Peradeniya reported 3 cases each within the quarter. All the hospitals that notified AFP cases in the 3rd quarter are as follows:

Hospital	No. of cases
LRH	5
TH Karapitiya	3
TH Peradeniya	3
TH Kurunegala	3
TH Kandy	2
GH Kalutara	1
TH Anuradhapura	1
GH Badulla	1
TH Colombo South	1
TH Colombo North	1
GH Matara	1
TH Batticaloa	1
GH Gampaha	1
SBMCH *	1

* Sirimavo Bandaranaike Memorial Children's Hospital

Distribution of AFP Cases by Provinces, Districts & MOH Areas

Kurunegala district in North Western Province and Gampaha district in Western Province had the highest number of AFP cases (3 cases each) reported from a district in the 3rd quarter. Six districts namely Kalutara of Western Province, Galle and Matara of Southern Province, Kandy and Nuwara Eliya from Central Province and Ratnapura of Sabaragamuva Province reported 2 cases (8%) each. No cases were reported from the Northern Province in this quarter although Trincomalee and Batticaloa districts from the Eastern Province reported a single case each. The complete list of distribution of AFP cases according to the province, district MOH area is given in Table 1.

Table 1

GEOGRAPHICAL DISTRIBUTION OF AFP CASES 3RD QUARTER 2008

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Homagama	1
		Ja Ela	1
	Gampaha	Dompe	1
		Katana	1
		Kalutara	Horana
Southern	Galle	Hikkaduwa	1
		Baddegama	1
	Matara	Pasgoda	1
		Matara	1
Central	Kandy	Akurana	1
		KMC	1
	Matale	Ukuwela	1
	Nuwara Eliya	Nuwara Eliya	1
		Walapane	1
Sabaragamuva	Ratnapura	Ratnapura	1
		Kolonna	1
	Kegalle	Mawanella	1
North Western	Kurunegala	Mahawa	1
		Kuliyapitiya	1
		Narammala	1
Eastern	Trincomalee	Trincomalee	1
	Batticaloa	Batticaloa	1
North Central	Anuradhapura	Kebithigollewa	1
Uva	Badulla	Badulla	1

Seasonal Distribution of AFP Cases

During the 3rd quarter 2008, the highest number of AFP cases were reported in the month of July (13 cases i.e.52%). In August, 10 (40%) cases were reported. September had 7 cases of AFP.

Distribution of AFP Cases by Age and Sex

Majority of the AFP cases (10 i.e.40%) reported in the 3rd quarter 2008 were aged between 5-9 years. A similar observation could be made in the corresponding quarter 2007 where the majority of the AFP cases reported belonged to the same age group. In this quarter, eight (32%) children belonged to 10-14 year age group. Seven cases were aged between 1-4 years and no cases were reported from below 1 year of age.

Sixty percent of the AFP cases in the 3rd quarter 2008 (15) were males. This is in contrast to the

same quarter 2007 where the majority of the cases were females (52%). Table 2 shows the age and sex distribution in 3rd quarter 2008.

Table 2

DISTRIBUTION OF AFP CASES BY AGE AND SEX - 3RD QUARTER 2008

Age Group	Sex		Total
	Male	Female	
<1 year old	0	0	0
1-4 year old	4	3	7
5-9 year old	4	6	10
10-15 year old	7	1	8
Total	15	10	25

Laboratory Surveillance of AFP Cases

Two stool samples collected within 14 days of the onset of paralysis are required at the Medical Research Institute for polio virology. According to WHO criteria these samples should be of 'good condition' as well as timely, being of correct quantity (8-10g), being sent in a leak proof container with no evidence of spillage or leakage and presence of ice in the container on receipt are the criteria to make the samples of 'good condition'.

All 25 AFP cases 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 21 cases (84%) out of the 25 AFP cases reported in the quarter for polio virology. This is lower than the timely stool collection rate (100%) achieved out of 16 AFP cases recorded in the respective quarter 2007.

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 3rd quarter. Last case of cholera was reported in the country in January 2003.

3. TETANUS

During the 3rd quarter 2008, 08 tetanus cases were notified to the Epidemiology Unit. This is in comparison to 8 cases reported during the previous quarter and 8 cases in the corresponding quarter of 2007.

Three cases were investigated and confirmed

as tetanus during the current quarter (Table 3). No deaths due to tetanus were reported during the quarter.

Table 3

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF TETANUS – 3RD QUARTER 2008

(N = 03)

Sex	Male	3
	Female	0
Age group	< 1	0
	1-5	0
	5-15	0
	>15	3*
District	Anuradhapura	1
	Gampaha	1
	Kandy	1
Immunization status	Immunized	0
	Non immunized	0
	Unknown	3

* Adults aged 35-55 years.

4. MEASLES

During the 3rd quarter 2008, 26 cases of measles were notified to the Epidemiology Unit compared to 29 cases notified during the previous quarter and 22 cases in the corresponding quarter of last year.

Nine (9) cases were investigated and confirmed as measles during the 3rd quarter 2008 (Table 4).

Table 4

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF MEASLES – 3RD QUARTER 2008

(N = 9)

Sex	Male	8
	Female	1
Age group	< 1	3
	1-4	1
	5-15	2
	>15	3
District	Hambantota	4
	Badulla	1
	Moneragala	1
	Ampara	1
	Nuwara Eliya	2
Immunization status	Immunized	4
	Non immunized	3*
	unknown	2

* 3 children aged less than 9 months.

5. LEPTOSPIROSIS

During the 3rd quarter 2008, 2405 cases were notified to the Epidemiological Unit compared to 917 cases in the previous quarter and 349 cases during 2007 3rd quarter. 1348 cases were reported during September marking the peak of the epidemic of leptospirosis affecting the country during 2008. A large number of cases were reported from Colombo (526 i.e. 22%), Kurunegala (405 i.e. 17%), Gampaha (384 i.e. 16%) and Kegalle (206 i.e. 8%) districts.

The sentinel surveillance sites (16) located in 9 districts reported 1353 cases (56% of the notified cases) and 61 deaths during the current quarter. During the quarter 678 cases and 40 deaths have been investigated and the data reveals that majority (44%) of the affected population is in the age group 30-49 years and the male: female ratio is 3:1.

6. HUMAN RABIES

Thirteen (13) cases of human rabies were notified to the Epidemiology Unit in the 3rd quarter 2008, compared to 8 cases in the previous quarter and 15 cases in the corresponding quarter of year 2007. Higher incidence of Rabies were reported from Gampaha and Kalutara districts. Distribution of cases by district is given in Table 22.

Animal Rabies

During the quarter 165 dogs were reported positive for rabies compared to 158 in the previous quarter and 151 in the corresponding quarter of 2007. In addition the following animals were also reported positive;

Cats-11, Wild Animals-0, Domestic Ruminants-06

Rabies Control Activities*

Dog vaccination - A total of 274749 dogs were immunized during the 3rd quarter 2008 when compared to 261348 in the previous quarter and 267848 in the corresponding quarter of last year.

Stray Dog vaccination - A total of 30010 dogs were immunized during the 3rd quarter 2008 when compared to 36574 in the previous quarter and 37583 in the corresponding quarter of last year.

Animal Birth Control

Chemical - 19341 stray female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical - 33645 female dogs were subjected to birth control surgeries during the quarter under review.

*Source – Director/PHVS

7. ENTERIC FEVER

In the 3rd quarter 2008, a total of 377 cases of enteric fever were notified to the Epidemiology Unit, compared to 496 cases in the previous quarter and 339 cases in the corresponding quarter of 2007. The districts of Colombo (51), Nuwara Eliya (47), Badulla (41) and Mannar (40) reported the highest number of cases. (Table 22).

The MOH areas Murunkan (20), and Kalpitiya (19) notified a large number of cases during the quarter under review.

8. VIRAL HEPATITIS

In the 3rd quarter 2008, 413 cases of viral hepatitis were reported to the Epidemiology Unit, compared to 500 cases in the previous quarter and 2019 cases in the corresponding quarter of 2007.

Among the reported cases, 298 were investigated and confirmed as viral hepatitis. RDHS area Kegalle notified the highest number of cases (79) accounting for 19% of the total case load. The MOH areas Kelaniya (26 cases i.e. 6%) in the Gampaha district and Aranayaka (22 cases i.e. 5%) in the Kegalle district have reported the highest number of cases.

9. DYSENTERY

In the 3rd quarter 2008, 1577 cases of dysentery were notified to the Epidemiology Unit, compared to 1463 cases in the previous quarter and 1768 cases in the corresponding quarter of 2007.

The MOH areas Dehiattakandiya (66), Kolonnawa (32) and Elapatha (28) notified the highest number of cases.

10. JAPANESE ENCEPHALITIS (J.E.)

During the 3rd quarter 2008, 61 cases of Encephalitis were reported to the Epidemiology Unit. Among the reported cases, 31 (51%) were investigated and none were confirmed as JE. No deaths were reported during the quarter.

This is in comparison to 61 cases and 3 deaths reported during the previous quarter and 39 cases and one death reported in the corresponding quarter of 2007.

11. MALARIA

During the 3rd quarter 2008, there was an increase in the incidence of malaria in comparison to the same period of 2007 as seen in Table 5. Distribution of malaria cases by RMO division is shown in Table 6.

Source : Anti Malaria Campaign

Table 5

RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 3RD QUARTER 2007/2008

	3 rd Quarter 2007	3 rd Quarter 2008
No. of blood smears examined	246662	257,863
No. of positives	37	80
No. of <i>P. vivax</i>	35	69
No. of <i>P. falciparum</i>	2	6
No. of <i>P. malariae</i>	0	1
No. of mixed infections	0	4
No. of infant positives	0	1
Slide positivity rate (S.P.R.)	0.02%	0.03%
P.v. : P.f. ratio	17:1	11:1
Percentage of infant positives	0%	1.25%

Table 6

DISTRIBUTION OF MALARIA CASES BY RMO DIVISION - 3RD QUARTER 2008

RMO	Blood smears	Positives	P.v.	P.f./ Mixed	P.m
Colombo	14289	4	3	1	
Gampaha	11611	3	1	2	
Kalutara	3645	0	0	0	
Kandy	7764	1	1	0	
Matale	5405	1	1	0	
Nuwara Eliya	224	2	2	0	
Galle	4950	5	2	3	
Matara	5213	5	3	2	
Hambantota	8239	4	4	0	
Jaffna	13733	0	0	0	
Kilinochchi	11359	6	6	0	
Mannar	6528	2	1	1	
Vavuniya	13155	6	6	0	
Mullaitivu	3488	8	8	0	
Batticaloa	14266	0	0	0	
Ampara	5554	0	0	0	
Trincomalee	17266	5	5	0	
Kurunegala	18737	1	1	0	
Maho	6805	0	0	0	
Puttalam	12807	4	4	0	
Anuradhapura	25327	7	6	0	1
Polonnaruwa	12796	2	2	0	
Badulla	5333	0	0	0	
Moneragala	11142	6	6	0	
Ratnapura	5991	2	2	0	
Kegalle	1919	6	5	1	
Kalmunai	10317	0	0	0	
TOTAL	257863	80	69	10	1

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

Table 7

MORBIDITY AND MORTALITY DUE TO DF/DHF - 3RD QUARTER 2008

RDHS Division	Cases	Percentage	Deaths
Colombo	386	26.8	2
Gampaha	235	16.3	1
Kalutara	104	7.2	0
Kandy	90	6.3	0
Matale	56	3.9	0
Nuwara Eliya	9	0.6	0
Galle	25	1.7	0
Hambantota	31	2.2	0
Matara	117	8.1	0
Jaffna	1	0.1	0
Kilinochchi	0	0.0	0
Mannar	0	0.0	0
Vavuniya	1	0.1	0
Mullaitivu	0	0.0	0
Batticaloa	1	0.1	0
Ampara	10	0.7	0
Trincomalee	4	0.3	0
Kurunegala	67	4.7	0
Puttalam	21	1.5	0
Anuradhapura	7	0.5	0
Polonnaruwa	8	0.6	0
Badulla	31	2.2	0
Moneragala	11	0.8	0
Ratnapura	102	7.1	0
Kegalle	114	7.9	2
Kalmunai	7	0.5	0
TOTAL	1438	100.0	5

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

During the 3rd quarter 2008, 1438 cases of DF/DHF and 5 deaths were reported (CFR 0.35%) when compared to 1639 cases and 9 deaths (CFR 0.55%) reported during the previous quarter and 1953 cases and 8 deaths (CFR 0.4%) reported during the corresponding quarter of last year.

Table 7 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the quarter.

Special surveillance data on 527 confirmed cases were received and analysed for the third quarter 2008. Of the total cases reported, the majority (43%) were in July followed by August (33%) and then September (23%).

Fifty nine percent (59%) of the cases were from the Western Province with Colombo, Gampaha and Kalutara districts contributing to 30%, 19% and 10% respectively. All other districts contributed to less than 10% each, except for Matara contributing 18%.

Age distribution of reported cases showed that 89 cases (17%) were below 15 years of age. Majority of the cases 285 (55%) were between 15-39 years of age and 143 (28%) were aged 40 years or above. Age was not available for 10 cases.

According to the clinical findings, majority of the reported cases (76%) were classified as Dengue Fever. Twenty two percent (22%) were classified as DHF with 9% and 11% falling into DHF1 and DHF II categories respectively. The deaths were reported from Colombo (2), Gampaha (1) and Kegalle (2) districts.

During the 3rd quarter 2008, 535 blood samples were tested using Ig M capture ELISA test and Haemagglutination Inhibition test at the Department of Virology, MRI and 314 samples were confirmed as positive (Table 8).

Table 8.

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 3RD QUARTER 2008

Month	Clinically Suspected	Serologically confirmed
July	163	111
August	209	151
September	163	52
Total	535	314

12.1 ENTOMOLOGICAL SURVEILLANCE OF DENGUE VECTORS

Results of the entomological surveillance carried out by the Medical Research Institute and Entomological Unit, Western Province, in selected MOH areas of Colombo and Gampaha districts, for the 3rd quarter 2008 are given in Table 9.

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

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

Table 9.

AEDES LARVAL DENSITIES (BRETEAU INDEX) IN COLOMBO AND GAMPAHA DISTRICTS - 3RD QUARTER 2008

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 2569 tuberculosis patients were registered for 3rd quarter 2008 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 1973 suffered from pulmonary disease, and the balance, 596 patients from non-pulmonary disease. Of these patients 1356 were bacteriologically confirmed with a bacteriological confirmation rate of 68.73%. The distribution of tuberculosis patients by RDHS division is given in Table 10.

B.C.G. vaccination

A total of 86654 B.C.G. vaccinations were carried out during the quarter with 90.57% coverage.

Table 10.

TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 3RD QUARTER 2008

RDHS DIVISION	PTB	EPT B	Total	Pulmonary TB Direct Smear	
				No. +VE	%
Colombo	465	160	625	365	78.49
Gampaha	155	55	210	128	82.58
Kalutara	156	44	200	124	79.49
Kandy	164	64	228	71	43.29
Matale	50	10	60	34	68.00
Nuwara Eliya	37	13	50	25	67.57
Galle	112	35	147	76	67.86
Hambantota	31	4	35	17	54.84
Matara	65	18	83	43	66.15
Jaffna	81	22	103	34	41.98
Vavunia	18	3	21	13	72.22
Kilinochchi	11	0	11	7	63.64
Mannar	1	0	1	1	100.0
Mullativu	1	1	2	1	100.0
Ampara	16	5	21	11	68.75
Batticaloa	28	13	40	21	75.00
Trincomalee	30	1	31	13	43.33
Kurunegala	89	24	113	56	62.92
Puttalam	19	2	21	17	89.47
Anuradhapura	44	13	57	28	63.64
Polonnaruwa	20	9	29	15	75.00
Badulla	47	19	66	31	65.96
Monaragala	29	6	35	21	72.41
Kegalle	79	30	109	59	74.68
Ratnapura	161	43	204	128	79.50
Kalmunai	64	3	67	17	26.56
Total	1973	596	2569	1356	68.73

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 3rd quarter 2008, is given below.

1. Yellow Fever Vaccination	Total
Total number vaccinated	- 24
2. Granting Pratique to Vessels	
Number issued	- 1108
3. Deratting Certification	
Number issued	- 21

Details of the vaccinations carried out by the Assistant Port Health Office, Colombo 8, during the 3rd quarter 2008, is given below.

	Total
a. Yellow fever	762
b. Meningococcal meningitis	39
C. Polio vaccination	100

15. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 3rd quarter 2008 is given below.

1. Yellow Fever Surveillance

a. No. with valid certificate	- 24
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	- 27
b. No. of food samples taken under Food Act	- 05
c. No. found defective	- 04
d. No. of court cases/prosecuted/warned	- 02
e. No. of water samples tested	- 06
f. No. reported contaminated	- 01

3. Release of human remains

a. No. of human remains released	- 71
b. No. referred to JMO for post-mortem	- 08
c. No. alleged suicide	- 02

4. Other Health Activities

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

QUARTERLY RETURN OF LEPROSY STATISTICS - 3RD QUARTER 2008

Table 11.

1. National

	At the end of the quarter			Cumulative for end of the quarter		
	3 rd quarter 2008	3 rd quarter 2007	Diff. (%)	3 rd quarter 2008	3 rd quarter 2007	Diff. (%)
New patients detected	506	504	0.4	1498	1360	10.2
Children	49	45	8.9	161	128	25.8
Grade 2 Deformities	34	28	21.4	116	79	46.8
Multi-Bacillary	248	226	9.7	676	612	10.5
Females	238	220	8.2	636	597	6.5

2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	125	8	21	48	60
Gampaha	65	0	5	38	33
Kalutara	51	1	6	21	28
Western	241	9	32	107	121
Galle	8	2	0	2	2
Matara	21	0	3	7	11
Hambantota	5	1	2	1	5
Southern	34	3	5	10	18
Kandy	9	0	0	4	4
Matale	4	0	0	4	3
Nuwara Eliya	1	1	0	1	0
Central	14	1	0	9	7
Anuradhapura	24	5	1	14	10
Polonnaruwa	23	0	1	9	10
North Central	47	5	2	23	20
Kurunegala	46	4	0	37	18
Puttalam	10	0	1	6	4
North Western	56	4	1	43	22
Kegalla	10	4	1	5	4
Ratnapura	27	3	3	16	11
Sabaragamuwa	37	7	4	21	15
Badulla	7	1	0	3	2
Moneragala	4	1	1	2	2
Uva	11	2	1	5	4
Trincomalee	9	0	0	3	7
Batticaloa	37	1	3	17	12
Ampara	9	0	1	5	4
Kalmunai	7	1	0	4	5
Eastern	62	2	4	29	28
Jaffna	0	0	0	0	0
Vavuniya	2	1	0	1	1
Mannar	0	0	0	0	0
Mullativu	2	0	0	0	2
Kilinochchi	0	0	0	0	0
Northern	4	1	0	2	3
Sri Lanka	506	34	49	248	238

Source : Anti Leprosy Campaign

**17. ANTIBIOTIC SENSITIVITY PATTERN OF ENTERIC PATHOGENS ISOLATED IN MEDICAL RESEARCH INSTITUTE -
3 QUARTER 2008**

Table 12.

Organism	Number of sam- ples exam- ined	Number Positive	Ampicillin		Chlorampheni- col		Ciprofloxacin		Cortrimoka-Ceftriaxone zole		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
Compylobacter jejuni	378	19	68	16	100	100	37	63	32	32	16	100	100	79	5	37	63	16	5		
Compylobacter species		01	100		100			100	100								100				
EPEC	24	0																			
Salmonella group D	-																				
Salmonella group E	-																				
Salmonella paratyphi A	176	23	100		100			100									100				
Salmonella typhi																					
Salmonella others	176	04	50				75	25	100		100		50	50	75	25	100				
Shigella sonnei I	143	01					100							100	100		100				
Shigella flexneri II	143	02		50										100			100				
Shigella flexneri VI	143	02	100				100				50						100				
Shigella sonnei	143	01																			

S - Sensitive I - Intermediate Sensitivity R - Resistance

18. SEXUALLY TRANSMITTED DISEASES

Table 13.

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA* - 3RD QUARTER 2008

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	15	33	45	27	72
AIDS	6	1	7	11	4	15
Early Syphilis ²	26	18	44	55	34	89
Syphilis	105	86	191	236	203	439
Congenital Syphilis ⁴	3	2	5	4	3	7
Gonorrhoea ⁵	88	43	131	259	130	389
Ophthalmia neonatorum ⁶	0	1	1	2	3	5
Non specific cervicitis/urethritis	165	236	401	437	753	1190
Chlamydial Infection	8	14	22	35	44	79
Genital Herpes	223	287	510	612	826	1438
Genital Warts	183	113	296	508	342	850
Chancroid	0	0	0	0	0	0
Trichomoniasis	3	34	37	13	105	118
Candidiasis	297	397	694	753	1082	1835
Bacterial Vaginosis		240	240		674	674
Other sexually transmitted diseases ⁷	92	50	142	268	107	375
Non-venerial ⁸	1075	779	1854	2824	2176	5000

* - 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 inguinale, 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 3RD QUARTER 2008

Data presented in Table 14 and Table 15 provide an analysis of selected adverse events reported up to the end of 3rd quarter 2008 inclusive of 1st and 2nd quarter data as reported in the 2008 2nd Quarter Bulletin and selected indicators of reporting quality. There was no significant change in the data when compared to the first two quarters of 2008 except for the added numbers of AEFI reported during 3rd quarter 2008.

There was no major shift in indicators of overall completeness, timelines and percentage of “Nil” returns received. During 3rd quarter, reports of additional 1874 cases of AEFI have been received giving a total of 3195 AEFI cases reported at the end of 3rd quarter 2008.

At national level overall AEFI rate has increased marginally from 93.3 per 100,000 immunizations at the end of the 2nd quarter to 98.4 at the end

Table 14.

NUMBER AND RATE OF SELECTED AEFI REPORTED BY VACCINE AND BY TYPE OF AEFI - UP TO 3RD QUARTER 2008

Vaccine	Seizure	Allergic Reactions	Abscess	Severe Local Reactions	High Fever	Lymphadenitis	Hypotonic Hyporesponsive Episodes	Meningitis	Encephalitis	Encephalopathy	Nodule	Guillain - Barre Syndrome	Paralytic	Arthralgia	Death	Anaphylactic Shock	Persistent Screaming	Others	Total	Rate 100,000 doses
BCG	0	3	19	5	2	9	0	0	0	0	1	0	0	0	0	0	0	2	41	15.7
Penta	21	80	20	25	196	0	24	1	0	0	23	0	0	9	5	0	45	6	455	240.6
DPT	236	460	526	338	1464	0	11	6	1	1	427	1	0	24	10	2	112	5	3624	417.4
OPV	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0.2
Measles	14	93	6	4	38	0	0	0	0	0	2	0	0	0	0	0	1	1	159	56.9
DT	15	33	11	16	31	0	0	0	0	0	5	0	0	1	0	0	0	2	114	41.8
TT	0	27	2	13	0	0	0	0	0	0	3	0	0	1	0	1	0	0	47	18.1
Rubella	0	144	0	4	2	0	0	0	0	0	0	0	0	0	0	1	0	0	151	64.4
JE	9	64	1	2	40	0	0	0	0	0	0	1	0	1	0	0	2	2	122	38.3
aTd	2	11	1	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	18	9.0
Hep	0	3	8	2	4	0	0	0	0	0	2	0	0	0	0	0	1	0	20	3.3
MR	3	149	1	6	28	0	0	0	0	0	1	0	0	0	1	0	1	0	190	76.4
Others	1	2	6	3	5	0	0	0	0	0	9	0	0	0	1	0	0	0	27	-
Total	301	1070	601	420	1811	9	35	7	1	1	474	2	1	36	17	4	162	18	4970	98.4

of 3 quarter. There was a marginal reduction in reported AEFI rate in 13 RDHS divisions and marginal increase in 12 RDHS divisions. Completeness of reporting has been marginally dropped from 98.7 % at the end of 2nd quarter to 97.9 at the end of 3rd quarter. Similarly timeliness has been marginally increased from 38.2 % to 41.1%. Number of “Nil” returns received also marginally reduced from 38.2% to 37.3 % as end of 3rd quarter.

Another four deaths temporally related to immunization have been reported during the quarter under review, giving total of 17 deaths temporally associated to immunization at the end of 3rd quarter. Out of these four deaths two were following DPT/HBV/OPV 1st dose, one death was following MR vaccine at 3 years and other was following Tritanris HB & Hibrix at the private sector. At the postmortem of the death following MR vaccine, it was clearly revealed that the cause of death was due to haemorrhagic tumor of the cerebellum. In other cases the causes of death are under investigation.

Table 15.

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - UP TO 3RD QUARTER 2008

RDHS Division	(% Complete-ness	(% Time-liness	(% "Nil" Re-returns	Reported AEFI	
				Number	Rate *
Colombo	93.7	35.6	11.9	317	66.8
Gampaha	99.2	40.7	8.9	371	75.8
Kalutara	97.2	35.6	28.8	237	79.7
Kandy	99.1	41.0	12.9	546	166.1
Matale	100.0	20.6	53.3	137	105.6
Nuwara Eliya	96.6	46.9	39.8	142	77.7
Galle	98.7	32.0	58.7	99	39.6
Hambantota	100.0	34.3	7.1	464	298.3
Matara	97.4	60.8	51.4	116	59.2
Jaffna	100.0	22.2	61.9	88	68.9
Kilinochchi	96.3	0.0	80.8	8	13.8
Mannar	80.6	17.2	89.7	3	15.3
Vavuniya	97.2	37.1	77.1	23	58.7
Mullativu	91.1	5.0	67.5	5	12.1
Batticaloa	98.0	35.4	36.5	225	124.7
Ampara	100.0	9.5	34.9	94	131.7
Trincomalee	98.9	47.7	71.6	66	54.8
Kurunegala	100.0	39.1	23.6	420	94.8
Puttalam	100.0	45.0	31.3	119	55.8
Anuradhapura	97.1	45.2	38.6	259	104.6
Polonnaruwa	100.0	63.5	46.0	89	84.1
Badulla	100.0	73.1	29.1	407	200.2
Moneragala	99.0	49.5	34.0	169	146.5
Ratnapura	92.6	35.2	46.2	186	77.3
Kegalle	100.0	67.7	15.2	298	155.6
Kalmunai	99.1	37.4	62.6	81	64.9
Sri Lanka	97.9	41.1	37.3	4969	98.4

* Rate Per 100,000 immunizations

20. SURVEILLANCE REPORT ON LEPTOSPIROSIS - 2007

The number of leptospirosis cases notified to the Epidemiology Unit in 2007 was 2198 (11.0/100,000 population). This was almost 40% increase compared to 1582 cases notified in 2006. Out of the notified 2198 cases, only 1443 (65.7%) were confirmed by the MOOH. Over the years, there has been an increase in the number of leptospirosis cases reported in the country (Figure 1). Absolute increase in the number of leptospirosis cases and to some extent improvement in the surveillance activities have contributed to this trend. However, it is very difficult to say whether the number of notified cases really reflect the actual incidence of leptospirosis. Patients with the mild form of disease do not seek treatment at all or they are treated at the OPD. In addition, a large number of patients seek treatment at the private hospitals. Generally these cases are not notified to the Epidemiology Unit. Same time most of the notified cases were not confirmed by laboratory investigations and for a considerable number of patients for whom laboratory investigations had been done, results were not confirmatory.

The highest number of cases (i.e. 311) was notified from Gampaha district (14.6/100,000 population). However, the highest incidence (i.e.

37.8/100,000) was reported from Matale (178 cases). The other districts reported large number of leptospirosis cases in 2007 were Matara (289 cases, 35.9/100,000), Kegalle (246 cases, 30.9/100,000), Kalutara (221 cases, 20.1/100,000), Galle (169 cases, 16.3/100,000), Colombo (163 cases, 6.7/100,000), Kandy (151 cases, 11.1/100,000) and Kurunegala (87 cases, 5.8/100,000). The possibility of under reporting of cases from some districts cannot be ruled out.

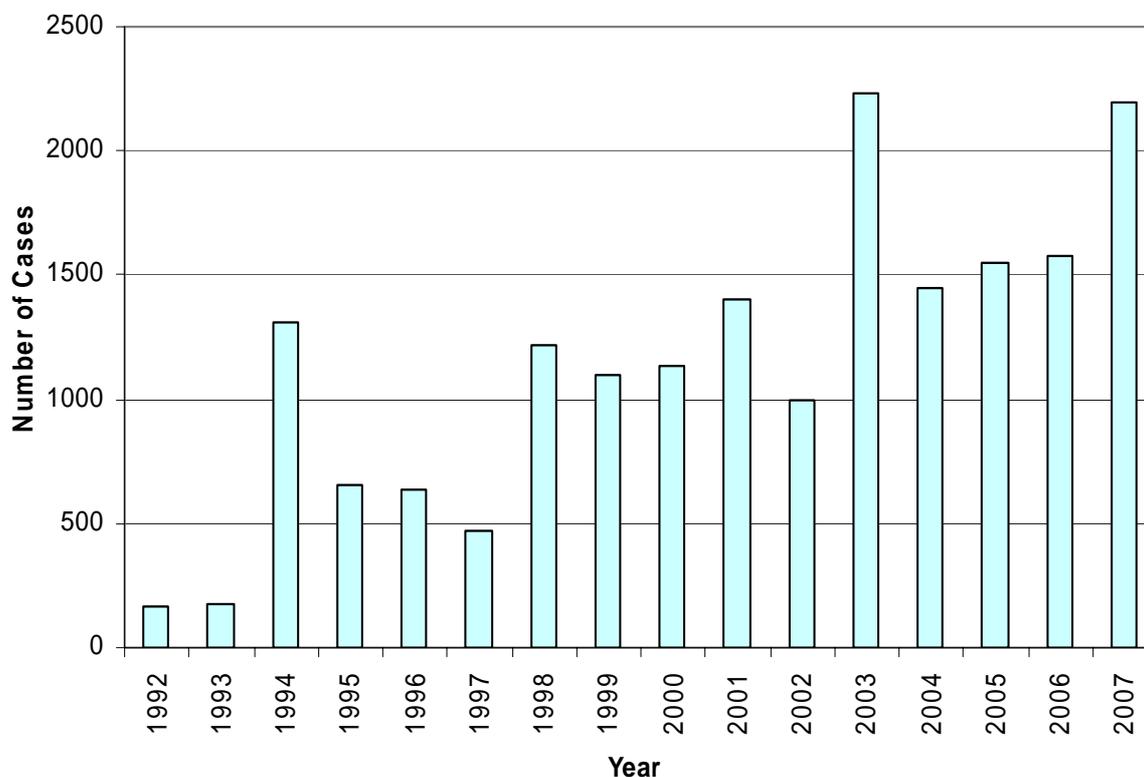
The highest number of cases was notified during the last quarter of the year (Figure 2). Unlike in previous years, the first peak of high incidence, which is generally observed in the 2nd quarter of the year, was not very marked in 2007. Paddy cultivation takes place in most of the high risk areas and the peak incidence is observed during paddy sowing and harvesting seasons. Increase in the rodent population in and around paddy fields during these periods contributing to this. This seasonal trend is important to be highlighted as it helps in planning prevention activities including provision of chemoprophylaxis to high risk groups.

Sentinel Surveillance

In addition to routine surveillance activities, hospital-based sentinel surveillance was started in 2004 in order to obtain more information on the

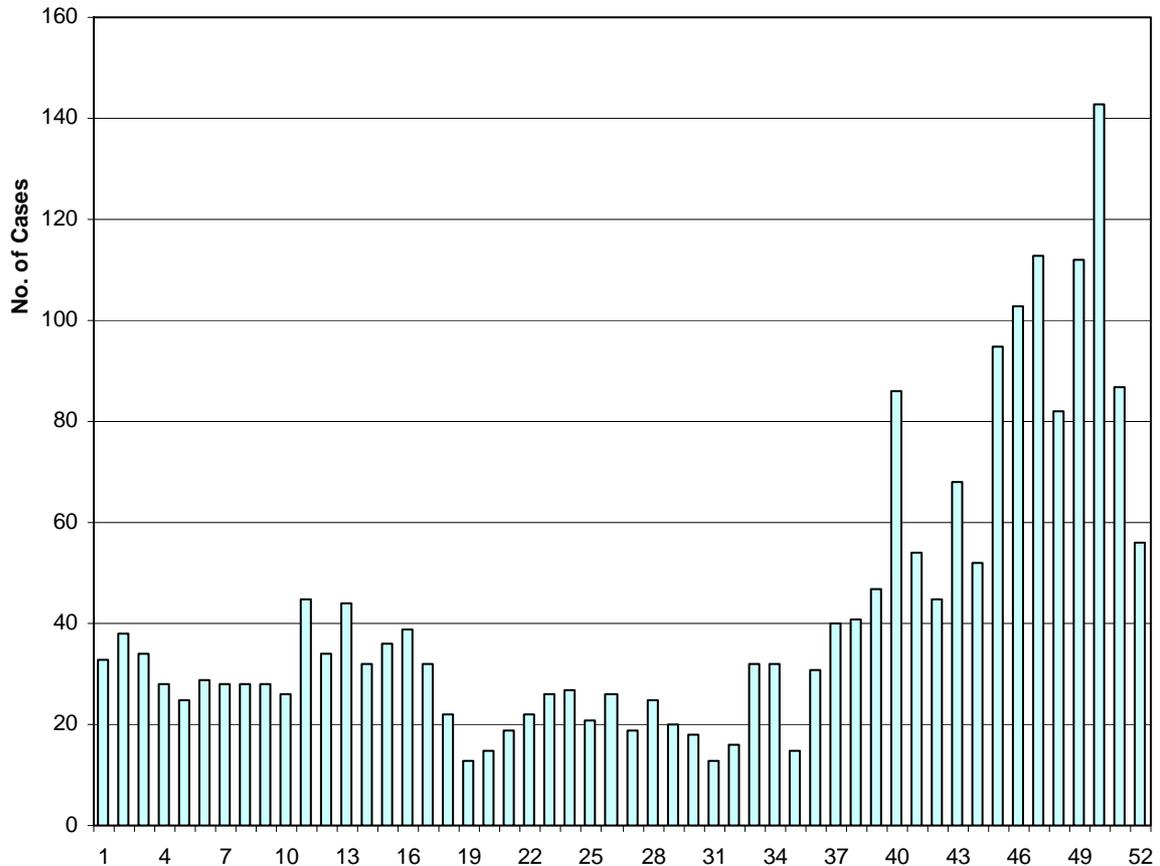
Figure 1

LEPTOSPIROSIS - NUMBER OF NOTIFIED CASES BY YEAR (1992 – 2007)



Source: Weekly Return of Communicable Diseases

Figure 2

LEPTOSPIROSIS - NUMBER OF CASES NOTIFIED BY WEEK IN 2007

Source: Weekly Return of Communicable Diseases

Week 2007

epidemiology, exposure history, clinical presentation, laboratory investigation and prophylactic treatment. This information is to facilitate/ revise prevention and control strategies. With the addition of District General Hospital, Matale in 2007, there are now 16 sentinel hospitals. It should be always remembered that the sentinel surveillance activity is not a substitute for the routine notification process.

These sentinel hospitals reported 1152 cases of leptospirosis, showing 52.4% coverage of the total reported cases in the country (Table 16). This indicates the appropriate selection of sentinel sites and their representative nature to facilitate prevention and control strategies. The case investigation rate at sentinel sites was 84.7%. TH Ragama, GH Kegalle, BH Panadura and BH Mawanella had shown 100% investigation rate.

Analysis of data available from sentinel hospitals revealed a male to female sex ratio of 8: 1 confirming the vulnerability among males. This further confirms the occupation related nature of the disease. As in the previous years, increased risk was observed in the productive age groups. Most of the affected cases were in the age group of 25-44 years (47.9%). Also a substantial number was reported from the age group of 45-64 years (37.7%). (Figure 3)

Further, analysis of exposure history of patients revealed that majority (46%) worked in the paddy fields before the onset of illness, indicating occupational exposure among farmers. Another 37% came with the history of exposure in muddy or marshy lands confirming the vulnerability of some other occupational groups such as gem miners. (Figure 4)

Analysis of responses given to the query on chemoprophylaxis revealed that 1.3% of patients developed disease despite taking doxycycline. The remaining patients were not given prophylaxis. While 38% of patients reported presence of skin lesions/ injuries, almost the same number did not report such lesions. It should be noted that for 24% of patients this data was not available. Analysis of clinical features revealed that the commonest symptom was acute fever. Almost all the patients presented with fever. The other common symptoms were headache (94%), myalgia (93%), conjunctival suffusion (60%), reduced urine output (50%) and jaundice (30%).

To confirm the diagnosis of leptospirosis, clinical observations should be adequately supported by epidemiological and laboratory evidence. The confirmatory laboratory test available in the government sector (i.e. MAT test) had been done only for less than 40% of patients. According to

the available data, for 89.7% of patients, at least one investigation had been done and for those to whom urine analysis was done, 75.9% had proteinuria. There is an urgent need to improve the diagnostic facilities for leptospirosis in the country.

Out of 34 deaths reported from sentinel sites, 10 were from GH Matara (case fatality rate 3.9%) and 06 were from BH Horana (case fatality rate 6.3%). Though only 4 deaths were reported from the TH Peradeniya, it recorded the highest case fatality rate of 8.2% (Table 16). Sixteen of those dead were in the age group of 25-44 years (47%) and another 12 were in the age group of 45-64 years (35%). Increasing number of deaths due to leptospirosis indicates the importance of early care seeking by the patients and early diagnosis and appropriate management by the

healthcare providers. The need for an audit of these deaths was recognized and mortality reviews have been conducted in some hospitals.

There is no ongoing national prevention and control programme for leptospirosis and ad-hoc programmes were carried out by some interested MOOH at the divisional level in the past. The Epidemiology Unit has instructed Regional Epidemiologists of high risk districts to develop districts plans for year 2007-2008. These action plans are expected to focus more on environmental measures, improved disease surveillance, public awareness, intersectoral coordination, improved clinical management including laboratory surveillance, and chemoprophylaxis.

Table 16.

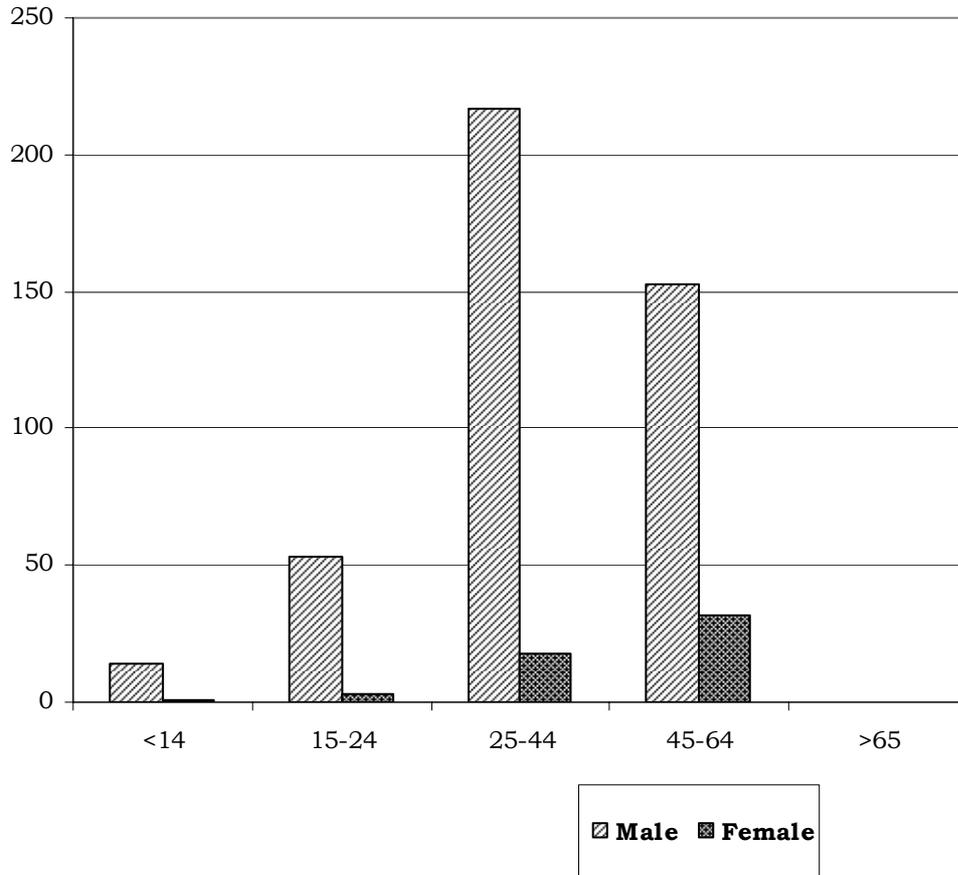
LEPTOSPIROSIS SENTINEL SITE SURVEILLANCE 2007

Sentinel Hospital	No. of reports received (N=24)	No. of nil reports	No. of cases admitted	No. of cases investigated	No. of deaths & CFR
BH Avissawella	19 (79%)	3 (16%)	74	67 (91%)	4 (5.4%)
BH Homagama	20 (83%)	4 (17%)	27	0 (0%)	0 (0%)
GH Ragama	24 (100%)	2 (8%)	102	102 (100%)	1 (1.0%)
BH Watupitiwala	24 (100%)	5 (21%)	183	182 (99%)	2 (1.1%)
GH Kalutara	15 (63%)	6 (40%)	49	35 (71%)	2 (4.1%)
BH Panadura	22 (92%)	14 (64%)	21	21 (100%)	1 (4.8)
BH Horana	23 (96%)	4 (17%)	96	94 (98%)	6 (6.3%)
TH Kandy	13 (54%)	10 (77%)	37	0 (0%)	1 (2.7%)
TH Peradeniya	15 (63%)	5 (33%)	49	35 (71%)	4 (8.2%)
TH Karapitiya	19 (79%)	3 (16%)	67	45 (67%)	1 (1.5%)
GH Matara	22 (92%)	0 (0%)	257	255 (99%)	10 (3.9%)
TH Kurunegala	21 (88%)	11 (52%)	55	6 (11%)	1 (1.8%)
GH Kegalle	23 (96%)	1 (4%)	110	110 (100%)	1 (0.9%)
BH Mawanella	24 (100%)	13 (54%)	25	25 (100%)	0 (0%)

Source: Returns from sentinel hospitals

Figure 3

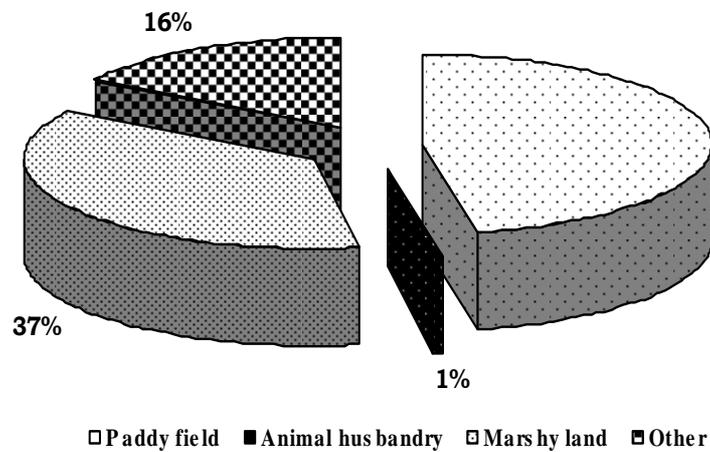
DISTRIBUTION OF PATIENTS BY AGE AND SEX



Source: Special Investigation Forms

Figure 4

DISTRIBUTION OF PATIENTS BY EXPOSURE HISTORY



Source: Special Investigation Forms

21. SURVEILLANCE REPORT ON JAPANESE ENCEPHALITIS - 2007

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. The isolation was done 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 17), and the programme was ultimately expanded to 18 districts.

In year 2007, there were 48 suspected cases of JE without deaths. The case fatality rate was 0%. Out of 48 suspected cases 39 were serologically confirmed. The districts of Colombo (10 i.e 20.8%), Ratnapura (6 i.e. 12.5%) and Kalutara (4 i.e. 8.3%) reported the highest number of cases (Table 18).

Confirmed cases of JE occurred throughout the year but thirty six percent of the case load (14) occurred in December (Table 19). Please note that there is a discrepancy in number confirmed at MRI in December (14) and the number of probable JE cases received through the surveillance system. This discrepancy is due to under reporting of laboratory confirmed cases through the routine disease surveillance system. Almost all age groups were affected by the disease. However 56% of the confirmed cases (22) were over 30 years of age followed by 4 cases (15%) in the less than 10 year age group (Table 20).

There were 24 males (62%) and 15 females (38%) among the confirmed cases.

JE Immunization Programme

Immunization programme was carried out in 18 districts (Table 21). JE immunization programme was conducted in the last few months of 2007 and therefore there were more than one birth cohort to be immunized in some of the districts. Therefore the coverage was more than 100% in certain districts.

Table 17

CASES, DEATHS AND CASE FATALITY RATE (CFR) OF JAPANESE ENCEPHALITIS 1990 – 2007

Year	Japanese Encephalitis			
	Cases		Deaths	CFR
	No.	Rate*		
1990	387	2.3	43	11.1
1991	325	1.9	25	7.7
1992	291	1.7	27	9.3
1993	289	1.6	52	18.0
1994	230	1.3	41	17.6
1995	173	1.0	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	15.0
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	0.0

*Rate per 100,000 population

Table 18

DISTRIBUTION OF SUSPECTED JE CASES AND DEATHS BY DISTRICTS - 2007

District	Suspected cases	Confirmed cases	Deaths
Colombo	10	12	0
Gampaha	00	1	0
Kalutara	04	3	0
Kandy	01	0	0
Matale	01	0	0
Galle	03	0	0
Hambantota	01	0	0
Matara	03	0	0
Jaffna	00	1	0
Vavuniya	02	0	0
Kurunegala	02	1	0
Trincomalee	01	0	0
Anuradhapura	03	5	0
Polonnaruwa	01	0	0
Monaragala	00	0	0
Ratnapura	06	3	0
Kegalle	03	0	0
Badulla	00	0	0
Mullaitivu	03	0	0
Batticaloa	04	0	0
Unknown	0	13	0
Total	48	39	0

Table 19.

DISTRIBUTION OF SUSPECTED JE CASES AND DEATHS BY MONTHS

Months	Suspected cases	Confirmed cases	Deaths
January	11	08	00
February	05	03	00
March	03	00	00
April	04	03	00
May	05	00	00
June	06	04	00
July	04	03	00
August	04	01	00
September	01	01	00
October	01	01	00
November	01	01	00
December	03	14	00
Total	48	39	00

Table 20.

DISTRIBUTION OF SUSPECTED JE CASES AND DEATHS BY AGE GROUPS

Age group	Suspected cases	Confirmed cases	Deaths
<1	03	01	00
1-4	04	03	00
5-9	08	02	00
10-14	08	03	00
15-19	03	01	00
20-24	05	03	00
25-29	02	00	00
30-34	03	06	00
35-39	02	02	00
40-44	00	01	00
45-49	01	02	00
50-54	03	05	00
55-59	01	01	00
>60	05	05	00
Unknown	00	04	00
Total	48	39	00

Table 21.

JE IMMUNIZATION COVERAGE IN 1-3 YEAR OLD CHILDREN—2007

RDHS Division	No. of doses						Immunization Coverage %			
	1st Dose	2nd Dose	3rd Dose	4th Dose	Total	DPT	1st%	2nd%	3rd%	4th%
Colombo	17372	16611	18280	11114	63377	21952	79.1	75.7	83.3	50.6
Gampaha	28532	26662	29981	19358	104533	34153	104.8	78.1	83.5	56.7
Kalutara	5970	4604	202	139	10915	14221	42.0	32.4	1.4	1.0
Matale	14663	12866	26229		53758	8365	175.3	153.8	313.6	
Galle	13069	12458	14274	6648	46449	17040	76.7	73.1	83.8	39.0
Hambantota	7350	7697	7623	2621	25291	10546	29.1	73.0	72.3	24.8
Matara	6264	5810	166	633	12873	13552	46.2	42.9	1.2	4.7
Jaffna	9292	11739	24685		45716	8711	106.7	134.8	283.4	
Batticaloa	3255	3011	711	2307	9284	11952	27.2	25.2	6.0	19.3
Vavuniya	2788	1780	4		4572	2368	117.7	38.9	0.2	
Ampara	65	50	1	0	116	5192	1.3	1.0	0.0	
Trincomalee	9225	7764	3548	1669	22206	8193	112.6	69.0	0.4	20.4
Kurunegala	13751	13391	20495	13756	60803	54734	25.1	24.5	37.4	25.1
Puttalam	17992	16540	9565	7258	51355	13444	133.8	123.0	71.2	54.0
Anuradhapura	9400	7806	917	2198	20321	15622	60.2	50.0	5.8	14.1
Polonnaruwa	7698	7264	5558	4189	24709	6571	117.2	110.6	84.6	63.7
Ratnapura	17905	17176	78267	91	113439	18475	96.9	93.0	423.6	0.5
Kalmunai	4648	3122	3497	2804	14071	6982	66.6	44.7	50.1	40.2
Sri Lanka	189239	176351	244003	74785	683788	272073	69.6	64.8	89.7	27.5

*For calculation of coverage number of DPT 1st doses given in each district in 2007 was taken as the denominator.

Table 22.

22. SUMMARY OF NOTIFIABLE DISEASES – 3RD QUARTER 2008

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	1	119	386	7	51	26	0	526	1	8	0	0	24
Gampaha	0	3	72	235	5	14	32	2	384	0	3	2	3	61
Kalutara	0	2	59	104	3	15	4	2	195	0	1	1	1	14
Kandy	0	2	106	90	2	17	49	1	113	1	2	2	30	22
Matale	0	1	38	56	2	10	6	0	101	0	1	2	1	5
Nuwara Eliya	0	2	79	9	1	47	56	0	15	3	2	0	2	17
Galle	0	2	51	25	4	5	0	1	105	0	0	0	3	2
Hambantota	0	0	35	31	2	1	5	1	19	4	3	0	22	9
Matara	0	2	56	117	8	13	4	0	175	0	4	0	77	6
Jaffna	0	0	45	1	2	22	7	0	0	2	0	0	4	11
Kilinochchi	0	0	21	0	0	1	4	0	0	0	0	0	0	0
Mannar	0	0	9	0	0	40	0	0	0	0	0	0	0	3
Vavuniya	0	0	21	1	0	9	6	0	0	2	0	0	0	1
Mullaitivu	0	0	10	0	0	6	1	1	0	2	5	0	0	3
Batticaloa	0	1	62	1	3	4	7	1	5	0	1	0	0	11
Ampara	0	0	101	10	0	2	283	0	6	0	0	0	0	5
Trincomalee	0	1	34	4	1	2	2	0	6	4	0	0	1	1
Kurunegala	0	3	47	67	3	17	10	1	405	1	6	0	12	31
Puttalam	0	0	37	21	0	24	5	1	34	0	2	0	5	4
Anuradhapura	0	1	43	7	3	4	4	1	21	0	1	1	1	3
Polonnaruwa	0	0	40	8	0	0	15	0	6	1	0	0	0	3
Badulla	0	1	145	31	1	41	82	0	26	1	1	0	34	64
Moneragala	0	0	71	11	1	8	6	0	8	2	1	0	27	23
Ratnapura	0	2	153	102	8	5	21	0	47	0	16	0	5	7
Kegalle	0	1	58	114	5	19	9	1	206	2	1	0	14	79
Kalmunai	0	0	65	7	0	0	6	0	2	0	0	0	1	4
TOTAL	0	25	1577	1438	61	377	650	13	2405	26	58	8	243	413

No polio cases. (from AFP surveillance system).

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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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