

Volume 49
October-December
2008



Epidemiological Bulletin

SRI LANKA

Fourth Quarter
2008

Epidemiology Unit
Ministry of Health

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

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1. POLIOMYELITIS

Twenty nine (29) Acute Flaccid cases were notified to the Epidemiology Unit during the 4th quarter 2008. This compares with the 23 and 29 AFP cases each reported during the 4th quarter 2007 and 2006 respectively. The total number of reported cases at completion of the 4th quarter 2008 exceeded the expected number of AFP cases for a quarter to make up a non-polio AFP rate of 2 per every 100,000 under 15-year olds according to WHO surveillance criteria. Twenty eight cases for a quarter or 112 AFP cases for a year are expected to achieve this rate. At completion of this year by the end of this quarter, 106 AFP cases have been reported which yielded a rate of 1.9.

Notification of AFP Cases from Hospitals

The main sentinel site for AFP, Lady Ridgeway Children's Hospital (LRH), Colombo which is a tertiary care center which receives referrals from other hospitals in the country has reported the highest number of cases (7 i.e.24%) for the quarter out of the 58 sentinel sites in the country. Teaching Hospital (TH) Karapitiya and Teaching Hospital Peradeniya had reported 3 cases (10%) each in this quarter. Teaching Hospital Jaffna from the Northern Province of the country reported 1 AFP cases for the quarter. Hospitals that notified the AFP cases in the 4th quarter are as follows:

Hospital	Number of Cases Reported
LRH	7
TH Karapitiya	3
TH Peradeniya	3
TH Jaffna	1
TH Anuradhapura	2
GH Badulla	2
TH Batticaloa	2
TH Colombo South	1
GH Kegalle	1
TH Kandy	1
TH Kurunegala	1
BH Diyatalawa	1
GH Sri Jayawardanapura	1
GH Matale	1
BH Wathupitiwala	1
National Hospital Sri Lanka	1
Total	29

Distribution of AFP Cases by Provinces, Districts & MOH Areas

Gampaha district in the Western Province, Badulla district of Uva Province, Kandy district of Central Province and Galle of Southern Province each had reported the highest number of AFP cases, 3 for the quarter. From the Eastern province except Ampara district, Trincomalee, Batticaloa and Kalmunai districts reported a single AFP case each in this quarter. However from the Northern Province, only Jaffna district

Table 1

GEOGRAPHICAL DISTRIBUTION OF AFP CASES 4TH QUARTER 2008

Province	District	MOH Area	Number of AFP cases	
Western	Colombo	Kaduwela	1	
		Kolonnawa	1	
	Gampaha	Gampaha	1	
		Wattala	1	
		Attanagalle	1	
		Kalutara	NIHS	1
Walallavita			1	
Southern	Galle	Baddegama	1	
		Elpitiya	1	
Central		Hikkaduwa	1	
		Thihagoda	1	
	Matarata	Kandy MC	1	
		Gangawata Korale	1	
		Matale	Kurunduwatta	1
			Galewela	1
Sbaragamuva	Ratnapura	Rattota	1	
		Nuwara Eliya	1	
		Walapane	1	
Northern	Kurunegala	Godakawela	1	
		Ruvanwella	1	
Western	Trincomalee	Galigamuwa	1	
		Panduwasnuwara	1	
Eastern	Batticaloa	Kantale	1	
		Kathankudi	1	
	Kalmunai	Karativu	1	
		Ipalogama	1	
Northern	Anuradhapura	Badulla	1	
		Badulla	1	
Central	Uva	Ella	1	
		Welimada	1	
Northern	Jaffna	Jaffna	1	
		Total	29	

reported an AFP case within the quarter. Puttalam and Mannar districts did not report any cases for the quarter and also for the whole year. All paediatricians and physicians based in the sentinel sites in all the districts were sent letters to strengthen AFP surveillance activities. 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

Four AFP cases each (14%) were reported in October and December. The number reported for the month of November was 3 (10%).

Almost half of all AFP cases (14 i.e.48%) reported in the 4th quarter this year were between 1 - 4 years of age. In comparison the majority (39%) of the AFP cases (9) reported in the 4th quarter 2007 were in the older 10 -15 year age group. In 2008 4th quarter, seven (24%) and 6 (20%) children belonged to 5 - 9 year and 10 -15 year age groups respectively and there were only 2 cases aged less than 1 year.

Around three fifth of all AFP cases (18 (62%)) reported in the 4th quarter 2008 were male. This compares similarly with the same quarter in 2007 where more males (52%) than females were reported.

Table 2 shows the age and sex distribution of cases in 4th quarter 2008.

Table 2

DISTRIBUTION OF AFP CASES BY AGE AND

Age Group	Sex		Total
	Male	Female	
<1 year old	1	1	2
1-4 year old	7	7	14
5-9 year old	5	2	7
10-15 year old	5	1	6
Total	18	11	29

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 be completed to make the samples of 'good condition'.

Twenty four cases out of the 29 AFP cases (83%) reported in the 4th quarter 2008 had two timely stool samples sent to MRI for polio virology. Only 3 cases reported had stool samples collected late from respective institutions. Two cases had only one sample of stools collected.

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 4th Quarter. The last case of cholera was reported in the country in January 2003.

3. TETANUS

During the 4th Quarter 2008, 9 tetanus cases were notified to the Epidemiology Unit. This is in comparison to 8 cases reported during the previous quarter and 12 cases in the corresponding quarter of 2007.

Seven cases were investigated and confirmed as tetanus during the current quarter (Table 3). Three deaths (>55 years) due to tetanus were reported during the quarter.

Table 3

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF TETANUS – 4TH QUARTER 2008

(N = 07)

Sex	Male	4
	Female	3
Age group	< 1	0
	1-5	0
	5-15	0
	>15	7*
District	Anuradhapura	2
	Jaffna	1
	Kandy	2
	Kurunegala	2
Immunization status	Immunized	0
	Non immunized	6
	Unknown	1

* Adults aged >55 years.

4. MEASLES

During the 4th Quarter 2008, 21 cases of measles were notified to the Epidemiology Unit compared to 26 cases notified during the previous quarter and 18 cases in the corresponding quarter of last year.

Two (2) cases were investigated and confirmed clinically as measles during the 4th Quarter 2008. Blood samples of these patients had not been sent for serological confirmation. Both cases were males from MOH area Navathispene in Nuwara Eliya district. One of them was a 10 months old child who was awaiting measles immunization. The second child was 3 years old who had received the measles vaccine at the age of 9 months. Both children had not developed any complications of measles.

5. LEPTOSPIROSIS

During the 4th Quarter 2008, 2046 cases were notified to the Epidemiological Unit compared to 2405 cases in the previous quarter and 1099 cases during 4th Quarter. A large number of cases were reported from Colombo (328 i.e. 11%), Kalutara (219 i.e. 11%), Gampaha (18 i.e. 16%) and Kegalle (200 i.e. 10%) districts.

The number of sentinel surveillance sites which were limited to 16 hospitals located in 9 districts was expanded to 56. These institutions reported 901 cases (44% of the notified cases) and 34 deaths during the current quarter. During the quarter 646 cases and 21 deaths have been

investigated and the data reveals that majority (47%) of the affected population is in the age group 35-54 years and the male: female ratio is 5:1.

6. HUMAN RABIES

Twelve (12) cases of human rabies were notified to the Epidemiology Unit in the 4th Quarter 2008, compared to 13 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 24.

Animal Rabies

During the quarter 210 dogs were reported positive for rabies compared to 165 in the previous quarter and 153 in the corresponding quarter of 2007. In addition the following animals were also reported positive;

Cats-23, Wild Animals-0, Domestic Ruminants-02

Rabies Control Activities*

Dog vaccination - A total of 316805 dogs were immunized during the 4th Quarter 2008 when compared to 274749 in the previous quarter and 215055 in the corresponding quarter of last year.

Animal Birth Control

Chemical - 12076 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical - 51234 female dogs were subjected to birth control surgeries during the quarter under review.

*Source – Director/PHVS

7. ENTERIC FEVER

In the 4th quarter 2008, a total of 401 cases of enteric fever were notified to the Epidemiology Unit, compared to 377 cases in the previous quarter and 506 cases in the corresponding quarter of 2007. The districts of Colombo (98), Jaffna(37), Nuwara Eliya (36) and kalutara(30) reported the highest number of cases. (Table 24).

The MOH areas Ragala (21) in the Nuwara Eliya district Colombo Municipality(19) and Dehiwala(18) in Colombo district notified a large number of cases during the quarter under review.

8. VIRAL HEPATITIS

In the 4th Quarter 2008, 381 cases of viral hepatitis were reported to the Epidemiology Unit, compared to 413 cases in the previous quarter and 868 cases in the corresponding quarter of 2007.

Among the reported cases, 140 were investigated and confirmed as viral hepatitis. RDHS area Badulla notified the highest number of cases (71) accounting for 18% of the total case load followed by Gampaha (62 cases i.e. 16%) and Kegalle (57 cases i.e. 15%). The MOH areas Kelaniya (25 cases i.e. 6%) in the Gampaha district and Badulla (17 cases i.e. 4%) and Bandarawela (13 cases i.e. 4%) in the Badulla district have reported the highest number of cases.

9. DYSENTERY

In the 4th quarter 2008, 1975 cases of dysentery were notified to the Epidemiology Unit, compared to 1577 cases in the previous quarter and 1905 cases in the corresponding quarter of 2007.

The MOH areas Kilinochchi (80), Vellavelly(55) and Imbulpe (28) notified the highest number of cases.

10. JAPANESE ENCEPHALITIS (J.E.)

During the 4thQuarter 2008, 55 cases of Encephalitis were reported to the Epidemiology Unit. Among the reported cases, 11 (20%) were investigated and 02 were confirmed as JE. 1 death was reported during the quarter.

This is in comparison to 61 cases reported during the previous quarter and 44 cases reported in the corresponding quarter of 2007.

The confirmed JE cases were from MOH area in Hambantota District Hambantota and in Seruwila in Trincomalee District. Among the confirmed patients there was a female aged 42 whose immunization status was unknown and a male child aged 1 year who succumbed to the infection in spite of receiving JE immunization. During the quarter 07 cases were serologically confirmed as JE at the Medical Research Institute.

11. MALARIA

The number of microscopically confirmed malaria cases detected during the 4th quarter of 2008 was higher than the number detected during the corresponding period of 2007 (Table 4). Both the number of *P.v.* infections and *P.f.* infections reported during the period under review have increased. All these cases were detected among personnel of the armed forces engaged in operation in the Northern province. Table 5 shows the distribution of malaria cases by RMO divisions.

Source : Anti Malaria Campaign

Table 4

RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 4TH QUARTER 2007/2008

	4 th Quarter 2007	4 th Quarter 2008
No. of blood smears examined	256990	264414
No. of positives	25	553
No. of <i>P. vivax</i>	23	533
No. of <i>P. falciparum</i>	1	20
No. of <i>P. malariae</i>	0	0
No. of mixed infections	1	0
No. of infant positives	0	1
Slide positivity rate (S.P.R.)	0.01%	0.21%
P.v. : P.f. ratio	23:1	27:1
Percentage of infant positives	0%	0.18%

Table 5

DISTRIBUTION OF MALARIA CASES BY RMO DIVISION - 4TH QUARTER 2008

RMO Region	Blood smears	Positives	P.v.	P.f.
Colombo	17061	1	0	1
Gampaha	13545	0	0	0
Kalutara	3738	0	0	0
Kandy	7371	0	0	0
Matale	5652	0	0	0
Nuwara Eliya	147	0	0	0
Galle	4225	0	0	0
Matara	5451	0	0	0
Hambantota	7780	2	1	1
Jaffna	15504	4	4	0
Kilinochchi	8305	414	405	9
Mannar	7828	45	41	4
Vavuniya	10370	44	41	3
Mullaitivu	13192	22	21	1
Batticaloa	14925	4	4	0
Ampara	4343	2	1	1
Trincomalee	14033	1	1	0
Kurunegala	21168	4	4	0
Maho	7083	0	0	0
Puttalam	10742	3	3	0
Anuradhapura	27067	3	3	0
Polonnaruwa	13640	1	1	0
Badulla	4319	0	0	0
Moneragala	9359	2	2	0
Ratnapura	5594	1	1	0
Kegalle	1600	0	0	0
Kalmunai	10372	0	0	0
TOTAL	264414	553	553	20

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

RMO—Regional Malaria Officer

Table 6

MORBIDITY AND MORTALITY DUE TO DF/DHF - 4TH QUARTER 2008

RDHS Division	Cases	Percentage	Deaths
Colombo	277	21.0	0
Gampaha	157	11.9	1
Kalutara	79	6.0	0
Kandy	148	11.2	0
Matale	91	6.9	0
Nuwara Eliya	6	0.5	0
Galle	17	1.3	0
Hambantota	51	3.9	0
Matara	134	10.2	0
Jaffna	7	0.5	0
Kilinochchi	1	0.1	0
Mannar	13	1.0	0
Vavuniya	1	0.1	0
Mullaitivu	0	0.0	0
Batticaloa	4	0.3	0
Ampara	3	0.2	0
Trincomalee	8	0.6	0
Kurunegala	69	5.2	0
Puttalam	15	1.1	0
Anuradhapura	6	0.5	1
Polonnaruwa	5	0.4	0
Badulla	28	2.1	0
Moneragala	12	0.9	0
Ratnapura	74	5.6	1
Kegalle	109	8.3	2
Kalmunai	2	0.2	0
TOTAL	1317	100.0	5

12. DENGUE FEVER (D.F.)/ DEN- GUE HAEMORRHAGIC FE- VER (D.H.F.)

During the 4th quarter 2008, 1317 cases of DF/DHF and 5 deaths were reported (CFR 0.38%) when compared to 1438 cases and 5 deaths (CFR 0.35%) reported during the previous quarter and 2974 cases and 6 deaths (CFR 0.2%) reported during the corresponding quarter of last year.

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

Special surveillance data on 935 confirmed cases were received and analysed for the fourth quarter 2008. Of the total cases reported, the majority (53%) were in December followed by November (27%) and then October (20%).

Fifty percent (50%) of the confirmed cases were from the Western Province with Colombo, Gampaha and Kalutara districts contributing to 29%, 14% and 07% respectively. All other districts contributed to less than 10% each, except for Matara & Kegalle contributing 15% & 12%.

Age distribution of reported cases showed that 285 cases (30%) were below 15 years of age. Majority of the cases 446 (48%) were between 15-39 years of age and 172 (18%) were aged 40 years or above. Age was not available for 32 cases.

According to the clinical findings, majority of the reported cases (67%) were classified as Dengue Fever. Thirty one percent (31%) were classified as DHF with 18% and 11% falling into DHF1 and DHF II categories respectively. The deaths were reported from Anuradhapura (01), Gampaha (1), Kegalle (2) and Ratnapura (01) districts.

During the 4th quarter 2008, 734 blood samples were tested using Ig M capture ELISA test and Haemagglutination Inhibition test at the Department of Virology, MRI and 271 samples were confirmed as positive (Table 7).

Table 7.

DHF STATISTICS FROM DEPARTMENT OF VI- ROLOGY, MRI - 4TH QUARTER 2008

Month	Clinically Suspected	Serologically confirmed
October	187	85
November	162	51
December	385	135
Total	734	271

12.1 ENTOMOLOGICAL SURVEIL- LANCE OF DENGUE VEC- TORS

Results of the entomological surveillance carried out by the Medical Research Institute in selected MOH areas of Colombo and Gampaha districts, for the 4th Quarter 2008 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

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

Table 8.

AEDES LARVAL DENSITIES (BRETEAU INDEX) IN COLOMBO AND GAMPAHA DISTRICTS - 4TH QUARTER 2008

MOH Area	July		August		September	
	A	B	A	B	A	B
Nugegoda	7.3	11.3	4.6	5.3	5.3	11.3
Maharagama	7.0	7.0	2.0	17.0	5.0	10.0
Moratuwa	6.5	8.0	7.0	4.5	8.4	7.6
Kaduwela	8.0	12.0	0	28.0	8.0	17.0
Panadura	14.0	10.0	0.5	9.5	8.0	22.3
Piliyandala	0.5	9.5	0	12.5	0.5	22.5
Kelaniya	6.7	17.3	2.0	14.0	3.4	13.7
Ragama	1.5	6.6	0.35	11.5	0	7.4
Ja-Ela	4.6	17.1	4.0	15.4	4.0	19.0
Dompe	0	10.0	0	27.5	0	22
Mahara	0	20.0	3.0	21.0	2.0	17.0
Katana	11.3	12.3	2.0	11.2	Not done	

(A) = *Aedes aegypti*

(B) = *Aedes albopictus*

Number of premises examined per area = 300

13. TUBERCULOSIS

A total of 2765 tuberculosis patients were registered for 4th Quarter 2008 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 2078 suffered from pulmonary disease, and the balance, 687 patients from non-pulmonary disease. Of these patients 1488 were bacteriologically confirmed with a bacteriological confirmation rate of 71.61%. The distribution of tuberculosis patients by RDHS division is given in Table 9.

B.C.G. vaccination

A total of 94302 B.C.G. vaccinations were carried out during the quarter with 98.56% coverage.

Table 9.

TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 4TH QUARTER 2008

RDHS DIVISION	PTB	EPTB	Total	Pulmonary TB Direct Smear	
				No. +VE	%
Colombo	514	176	690	405	78.8
Gampaha	228	92	320	186	81.6
Kalutara	69	18	87	55	79.7
Kandy	187	63	250	98	52.4
Matale	63	19	82	47	74.6
Nuwara Eliya	58	14	72	36	62.1
Galle	119	44	163	77	64.7
Hambantota	45	12	57	36	80.0
Matara	49	17	66	25	51.0
Jaffna	64	11	75	30	46.9
Vavunia	28	03	31	21	75.0
Kilinochchi	00	02	02	00	0.0
Mannar	04	00	04	03	75.0
Mullativu	00	00	00	00	0.0
Ampara	18	06	24	39	216.0
Batticaloa	35	10	45	21	60.0
Trincomalee	39	04	43	13	33.3
Kurunegala	121	60	181	91	75.2
Puttalam	29	16	45	19	65.5
Anuradhapura	59	26	85	39	66.1
Polonnaruwa	32	05	37	25	78.1
Badulla	41	07	48	29	70.7
Monaragala	17	01	18	14	82.3
Kegalle	90	32	122	58	64.4
Ratnapura	119	46	165	94	79.0
Kalmunai	50	03	53	27	54.0
Total	2078	687	2765	1488	71.6

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 4th quarter 2008, is given below.

	Total
1. Yellow Fever Vaccination	
Total number vaccinated	- 12
2. Granting Pratique to Vessels	
Number issued	- 1096
3. Deratting Certification	
Number issued	- 40

ter 2008, is given below.

	Total
a. Yellow fever	803
b. Meningococcal meningitis	224
C. Polio vaccination	82

Details of the vaccinations carried out by the Assistant Port Health Office, Colombo 8, during

1. Yellow Fever Surveillance

a. No. with valid certificate	- 43
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	- 44
b. No. of food samples taken under Food Act	- 06
c. No. found defective	- 01
d. No. of court cases/prosecuted/warned	- 01
No. of water samples tested	- 09
No. reported contaminated	- 01

3. Release of human remains

a. No. of human remains released	- 104
b. No. referred to JMO for post-mortem	- 09
c. No. alleged suicide	- 04

4. Other Health Activities

a. Polio Vaccination No. of doses given	- 51
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16. LEPROSY

QUARTERLY RETURN OF LEPROSY STATISTICS - 4TH QUARTER 2008

Table 10.

1. National

	At the end of the quarter			Cumulative for end of the quarter		
	4 th Quarter 2008	4 th quarter 2007	Diff. (%)	2008	2007	Diff. (%)
New patients detected	535	490	9.18	1979	2044	-3.18
Children	51	55	-7.27	204	196	4.08
Grade 2 Deformities	44	28	57.14	152	118	28.8
Multi-Bacillary	295	212	39.15	886	916	-3.2
Females	230	208	10.57	822	898	-8.4

2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	87	06	16	32	42
Gampaha	56	05	03	25	20
Kalutara	34	02	02	13	23
Western	177	13	21	70	85
Galle	19	01	02	11	10
Matara	25	00	04	04	08
Hambantota	14	00	02	04	09
Southern	48	01	08	79	27
Kandy	23	00	01	03	04
Matale	11	03	00	06	05
Nuwara Eliya	01	00	00	01	00
Central	35	03	01	10	09
Anuradhapura	14	01	02	06	07
Polonnaruwa	26	03	01	13	06
North Central	40	04	03	19	13
Kurunegala	57	10	04	37	22
Puttalam	16	00	00	05	00
North Western	73	10	04	42	22
Kegalla	11	00	01	09	03
Ratnapura	19	00	00	09	07
Sabaragamuwa	30	00	01	18	10
Badulla	07	03	00	02	03
Moneragala	06	01	00	05	05
Uva	13	04	00	07	08
Trincomalee	02	01	01	00	00
Batticaloa	33	02	06	07	14
Ampara	35	04	03	20	16
Kalmunai	45	03	04	22	25
Eastern	115	09	13	49	55
Jaffna	01	00	00	00	00
Vavuniya	00	00	00	00	00
Mannar	03	00	00	01	01
Mullativu	00	00	00	00	00
Kilinochchi	00	00	00	00	00
Northern	04	00	00	01	01
Sri Lanka	535	44	51	295	230

Source : Anti Leprosy Campaign

the 4th Quarter 2008, is given below.

17. ANTIBIOTIC SENSITIVITY PATTERN OF ENTERIC PATHOGENS ISOLATED IN MEDICAL RESEARCH INSTITUTE - 4TH QUARTER 2008

Table 11.

Organism	Number of samples examined	Number Positive	Ampicillin		Chloramphenicol		Ciprofloxacin		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
Compylobacter jejuni	269	9	88	12	100	100	12	88	100	12	88	100	88	100	12	88	100	100	100	100	100	100
Compylobacter species	-	-																				
EPEC	32	01	100			100	100		100			100			100			100				100
Salmonella group D	270	-																				
Salmonella group E	270	-																				
Salmonella paratyphi A	200	30	76	24	100	100	100	33	67	100	100	100			100			100				
Salmonella typhi	200	6	100			100	66	34		100							66					
Salmonella others	200	07	76	24			15	85	100	25	100				85	15	85	15			100	
Shigella sonnei I	270	04	50	50			100			25	100				75	25	100				100	
Shigella flexneri II	270	06	50	50				100		50	100				33	33	34				100	100
Shigella flexneri VI	270	-																				
Shigella sonnei	270	-																				

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* - 4TH 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	12	30	63	39	102
AIDS	8	0	8	19	4	23
Early Syphilis ²	28	11	39	83	45	128
Syphilis	80	58	138	316	261	577
Late Syphilis ³						
Congenital Syphilis ⁴	0	0	0	4	3	7
Gonorrhoea ⁵	86	44	130	350	174	524
Ophthalmia neonatorum ⁶	0	0	0	2	3	5
Non specific cervicitis/urethritis	134	243	377	571	996	1567
Chlamydial Infection	2	1	3	37	45	82
Genital Herpes	180	274	454	798	1100	1898
Genital Warts	169	118	287	677	460	1137
Chancroid	0	0	0	0	0	0
Trichomoniasis	1	19	20	14	124	138
Candidiasis	230	350	580	984	1432	2416
Bacterial Vaginosis		251	251		925	925
Other sexually transmitted diseases ⁷	84	34	118	352	141	493
Non-venerial ⁸	1018	789	1807	3856	2980	6836

* - 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.

15. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 4th Quarter 2008, is given below.

19. SURVEILLANCE REPORT ON AEFI – UP TO 4TH QUARTER 2008

Data presented in Table 13 and Table 14 provide an analysis of selected adverse events reported up to the end of 4th quarter 2008 inclusive of 1st, 2nd and 3rd quarter data as reported in the 2008 3rd Quarter Bulletin and selected indicators of reporting quality. There was no significant change in the data when compared to the first three quarters of 2008 except for the added numbers of AEFI reported during 4th quarter 2008.

There was no major shift in indicators of overall completeness, timelines and percentage of “Nil” returns received. During 4th quarter, reports of additional 1605 cases of AEFI have been received giving a total of 6575 AEFI cases reported at the end of year 2008.

At National level, overall AEFI rate has decreased marginally from 98.4 per 100,000 immu-

Table 13.

NUMBER AND RATE OF SELECTED AEFI REPORTED BY VACCINE AND BY TYPE OF AEFI - UP TO 4TH QUARTER 2008

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	4	30	6	4	13	0	0	0	0	1	0	0	0	0	0	0	0	3	61	16.6
Penta	21	81	21	25	196	0	24	1	0	0	23	0	0	0	9	5	0	45	6	457	241.4
DPT	319	654	641	496	1944	0	16	6	1	1	630	1	0	4	29	13	3	144	12	4914	403.8
OPV	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0.1
Measles	16	136	6	6	55	0	0	0	0	0	4	0	0	0	0	0	0	1	1	225	61.2
DT	16	49	14	27	44	0	1	0	0	0	14	0	0	1	1	0	1	0	2	170	47.5
TT	0	35	2	19	1	0	0	0	0	0	4	0	0	0	1	0	1	0	0	63	18.5
Rubella	0	180	0	6	3	0	0	0	0	0	0	0	0	12	0	0	0	0	0	201	66
JE	10	70	1	3	45	0	1	0	0	0	0	1	0	0	1	0	0	2	2	136	37.4
aTd	2	12	1	2	1	0	0	0	0	0	1	0	0	14	0	0	0	0	0	33	12.5
Hep	0	6	12	4	4	0	2	0	0	0	2	0	0	0	0	0	0	1	0	31	3.6
MR	6	197	2	10	34	0	0	0	0	0	1	0	0	0	0	1	0	1	1	253	74.8
Others	1	3	6	3	5	0	0	0	0	0	9	0	0	0	0	2	0	0	0	29	
Total	391	1427	736	607	2336	13	44	7	1	1	689	3	0	31	41	21	5	194	27	6575	97.7

nizations at the end of the 3rd quarter to 97.7 at the end of 4th quarter. There was a marginal reduction in reported AEFI rate in 17 RDHS divisions and marginal increase in 09 RDHS divisions (Table 14). Completeness of reporting has been marginally increased from 97.9 % at the end of 3rd quarter to 98% at the end of 4th quarter 2008. Similarly timeliness has been marginally decreased from 41.1 % to 40.8%. Number of “Nil” returns received was also marginally reduced from 37.3% to 37 % as end of 4th quarter.

Another four deaths temporally related to immunization have been reported during the quarter under review, giving a total of 21 deaths temporally associated to immunization at the end of 4th quarter. Out of these four deaths two were following DPT/HBV/OPV 1st dose, one death was following Infantrix Hexa vaccine at the private sector.

Table 14.

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - UP TO 4TH QUARTER 2008

RDHS Division	(% Complete-ness	(% Time-liness	(% "Nil" Re-returns	Reported AEFI	
				Number	Rate *
Colombo	100.0	31.5	13.7	468	73.0
Gampaha	97.0	44.2	9.8	444	68.5
Kalutara	97.9	35.5	30.5	357	90.8
Kandy	99.3	42.0	15.7	671	150.9
Matale	100.0	20.8	49.3	194	111.1
Nuwara Eliya	100.0	46.2	38.5	186	78.0
Galle	99.5	33.0	56.7	137	40.6
Hambantota	99.2	32.8	6.9	591	281.3
Matara	98.0	56.5	53.5	162	61.3
Jaffna	100.0	17.9	64.3	101	63.2
Kilinochchi	86.1	0.0	83.9	8	13.8
Mannar	72.9	14.3	88.6	5	19.4
Vavuniya	97.9	40.4	76.6	27	51.9
Mullativu	75.0	4.4	62.2	6	13.9
Batticaloa	100.0	37.9	34.8	283	125.0
Ampara	100.0	10.7	35.7	124	125.2
Trincomalee	99.2	44.5	72.3	75	47.2
Kurunegala	95.6	36.7	24.3	532	90.9
Puttalam	100.0	43.5	29.6	152	52.9
Anuradhapura	99.6	46.3	38.8	378	114.5
Polonnaruwa	100.0	63.1	42.9	137	96.4
Badulla	99.4	72.6	25.7	531	192.5
Moneragala	100.0	50.8	38.6	206	134.3
Ratnapura	94.9	35.1	42.9	260	73.6
Kegalle	100.0	70.5	14.4	438	169.5
Kalmunai	99.4	34.8	63.2	102	60.7
Sri Lanka	98.0	40.8	37.0	6575	97.7

* Rate Per 100,000 immunizations

20. SURVEILLANCE REPORT ON VIRAL HEPATITIS - 2007

Viral Hepatitis is endemic in Sri Lanka, particularly in areas where sanitation is poor and access to safe water is an issue. Infrequent outbreaks have occurred in the past and they have mostly been confined to limited geographical areas.

It is a notifiable disease in Sri Lanka. In the year 2007, 5885 cases (29 cases per 100,000 population) of viral hepatitis were notified to the Epidemiology Unit, out of which 1709 were confirmed cases (Table 15). The actual incidence of viral hepatitis is likely to be much more than the reported figures, as a large number of patients do not seek treatment at all or are being treated by private practitioners, out patient departments and practitioners of traditional medicine, and therefore, not reported via the routine health information system. In addition, a significant proportion of viral hepatitis cases are known to be asymptomatic. The highest number (1976) was reported from Kandy RDHS division (Table 16). The other RDHS areas where high numbers of viral hepatitis cases were reported were; Batticaloa (1176), Nuwara Eliya (564), Badulla (402), Kegalle (273), Gampaha (213), Colombo (155), Matale (141), Kalmunai (135), Trincomalee (121), Kurunegala (109) and Ratnapura (106). The lowest numbers were reported from Kili-nochchi (04 cases), Vavunia (14 cases) and Mullativu (17 cases) though under reporting of cases is one of the reasons for the low figures seen in some of these RDHS divisions.

The highest incidence of viral hepatitis calcu-

Table 15

REPORTED AND CONFIRMED CASES OF VIRAL HEPATITIS, 1990-2007

Year	Cases Reported	Cases Confirmed
1990	2768	805
1991	3949	1333
1992	6895	2216
1993	1153	1283
1994	2926	1012
1995	3385	954
1996	3690	1458
1997	3830	1394
1998	2814	426
1999	1617	596
2000	1486	373
2001	2034	611
2002	2931	1049
2003	2984	1194
2004	2237	765
2005	2286	921
2006	2765	1153
2007	5885	1709

lated as cases per 100,000 population was 154.1 reported from Batticaloa RDHS division and was closely followed by Kandy (146.7 cases). The incidence rates reported by these two districts were nearly 5 times more than corresponding national figure (Table 16). This was as a result of the outbreaks of hepatitis A occurring in these two districts. The outbreak reported in Kandy district mainly affected Gampola Medical Officer of Health (MOH) area, which subse-

Table 16

DISTRIBUTION OF NOTIFIED AND CONFIRMED CASES OF VIRAL HEPATITIS BY RDHS DIVISION, 2007

DPDHS	Notified cases		
	No.	%	Rate*
Colombo	155	2.6	6.4
Gampaha	213	3.6	9.2
Kaluthara	64	1.1	5.6
Kandy	1976	33.6	146.7
Matale	141	2.4	29.9
Nuwara Eliya	564	9.6	77.1
Galle	24	0.4	2.3
Hambantota	29	0.5	5.2
Matara	35	0.6	4.4
Jaffna	32	0.5	8.6
Kilinochchi	4	0.1	2.5
Mannar	26	0.4	29.0
Vavuniya	14	0.2	7.7
Mulativu	17	0.3	9.2
Batticaloa	1176	20.0	154.1
Ampara	37	0.6	13.1
Trincomalee	121	2.1	30.6
Kurunegala	109	1.9	7.1
Puttalam	85	1.4	10.8
Anuradhapura	48	0.8	6.0
Polonnaruwa	52	0.9	13.2
Badulla	402	6.8	49.1
Moneragala	47	0.8	10.6
Ratnapura	106	1.8	9.8
Kegalle	273	4.6	33.7
Kalmunai	135	2.3	39.2
SRI LANKA	5885	100.0	29.0

quently spread to the adjacent MOH areas.

* Rate per 100,000 population

Table 17 presents the confirmed cases of viral hepatitis from 2005 to 2007 received by the Epidemiology Unit. Not all notified cases have been subjected to a field investigation, following which only confirmation is possible, due to the inability to trace, mostly as a result of incorrect or incom-

Table 17

DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS BY RDHS DIVISION, 2005-2007 hepatitis for

District	2005		2006		2007	
	No	%	No	%	No	%
Colombo	41	4.5	15	1.3	46	2.7
Gampaha	70	7.6	68	5.9	95	5.6
Kalutara	19	2.1	28	2.4	48	2.8
Kandy	53	5.8	55	4.8	234	13.7
Matale	7	0.8	13	1.1	70	4.1
Nuwara-Eliya	6	0.7	111	9.6	101	5.9
Galle	5	0.5	4	0.3	7	0.4
Hambantota	8	0.9	33	2.9	7	0.4
Matara	3	0.3	1	0.1	5	0.3
Jaffna	22	2.4	22	1.9	18	1.1
Vavuniya	1	0.1	0	0.0	0	0.0
Ampara	10	1.1	3	0.3	0	0.0
Batticaloa	104	11.3	79	6.9	593	34.7
Trincomalee	157	17.0	116	10.1	26	1.5
Kurunegala	23	2.5	27	2.3	31	1.8
Puttalam	13	1.4	7	0.6	7	0.4
Anuradhapura	23	2.5	33	2.9	11	0.6
Polonnaruwa	18	2.0	11	1.0	24	1.4
Badulla	9	1.0	28	2.4	56	3.3
Monaragala	19	2.1	36	3.1	36	2.1
Kegalle	76	8.3	296	25.7	184	10.8
Ratnapura	29	3.1	97	8.4	50	2.9
Kilinochchi	0	0.0	0	0.0	0	0.0
Mullativu	0	0.0	0	0.0	0	0.0
Mannar	3	0.3	2	0.2	3	0.2
Kalmunai	202	21.9	68	5.9	57	3.3
Total	921	100	1153	100	1709	100.0

plete address.

the years 2005 - 2007 is given in table 18.

No specific seasonal pattern can be identified in the distribution of confirmed cases for years 2005 to 2007, presented in Figure 1. The hepatitis A outbreak in Gampola in Kandy district is the main reason for the high numbers reported from June to October 2007. (Figure 1)

The age distribution of confirmed cases of viral

Age group 1- 14 years is the most affected in 2007 too, similar to the previous years. A subsequent decline is observed with advancing age. This indicates that Sri Lankan population is exposed to viral hepatitis in early life, a finding observed in other less developed countries as well.

Table 18

DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS BY AGE GROUP, 2005-2007

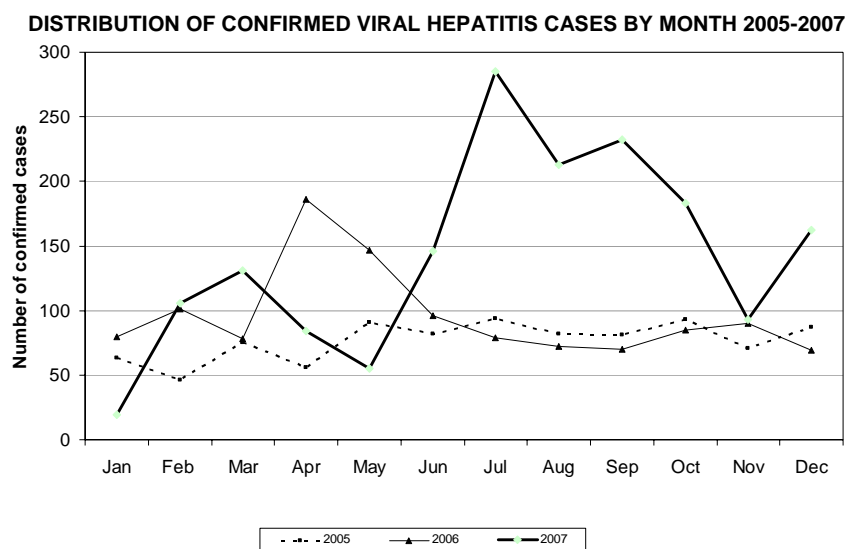
Age Group	2005		2006		2007	
	No	%	No	%	No	%
<1 yrs	3	0.3	1	0.1	0	0.0
1-14 yrs	528	57.3	504	43.7	823	48.1
15-24 yrs	207	22.5	354	30.7	475	27.8
25-44 yrs	149	16.2	239	20.7	345	20.2
45-64 yrs	27	2.9	37	3.2	53	3.1
> 65 yrs	7	0.8	10	0.9	13	0.8
Unknown			8	0.7		
Total	921	100.0	1153	100.0	1709	100.0

Table 19

DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS BY SEX, 2005-2007

Year	2005		2006		2007	
	No.	%	No.	%	No.	%
Male	513	55.7	707	61.3	1006	58.9
Female	408	44.3	445	38.6	703	41.1
Unknown			1	0.1		
Total	921	100.0	1153	100.0	1709	100.0

Figure 1



Male to female sex ratio of those affected in 2007 is 1.4:1 (Table 19).

Prevention and Control

The primary health care team is responsible for carrying out prevention and control activities related to viral hepatitis in their respective areas. They are expected to identify high risk areas based on disease incidence and existence of other risk factors and target these areas for their interventions.

Apart from the routine investigation to be carried out, a special investigation for each suspected or confirmed case of viral hepatitis needs to be carried out. The objective of introduction of special investigation form was to obtain necessary epidemiological information to carry out early prevention and control activities, particularly at the district and divisional levels.

It is the responsibility of the Regional Epidemiologists to monitor and evaluate this activity at the divisional and district levels. It is also the responsibility of the Regional Epidemiologists to ensure that special investigation forms are available at all the MOH offices all the time. This will minimize delay in investigation and avoid duplication of field work for routine investigation (H 399, H411 & H411a) and special investigations.

MOOH are advised to send these investigated special investigation forms to the Regional Epi-

demologist, not to the Epidemiology Unit direct. The purpose of sending special investigation reports of viral hepatitis to the Regional Epidemiologist is to provide an opportunity to use this information for the disease surveillance at the district level. The Regional Epidemiologists should send these special investigation forms to the Epidemiology Unit monthly with a consolidated report.

As the commonest type of viral hepatitis affecting Sri Lanka is hepatitis A, ensuring provision of safe water and proper sanitary facilities should be identified as priorities for preventive and control strategies at the field level.

In Sri Lanka, prevalence of hepatitis B and C has been low, different studies reporting rates ranging from 0.27% - 2.5% for the former and from 0.56% to 0.97% for the latter.

Vaccination against hepatitis B, among other interventions, has been used as a major prevention strategy.

Currently all infants in the country are targeted for vaccination under the Expanded Programme on Immunization. In addition, the vaccine is provided for those who are at a higher risk of contracting the disease.

21. SURVEILLANCE OF INVASIVE BACTERIAL INFECTION- 2008

Pneumococcal surveillance was carried out by the Epidemiology Unit and LRH admitted to LRH for invasive bacterial infection among children aged 2-59 months of age. During the year 2008 out of the 1101 blood cultures studied number of *S. pneumoniae* isolates was 09. The isolation rate was 0.8%. This figure was similar to the rates of the year 2007 (0.9%). Only two *Haemophilus influenzae* isolates were found while there were no *Haemophilus influenzae* type b isolates. The number of CSF cultured was 179 out of which there were 3 *S. pneumoniae* isolates

influenzae (test positivity rate was 5.6%). The test positivity rate was higher than isolation rates from both blood and CSF as anticipated. During the year 2008, there were 15 patients confirmed as invasive pneumococcal disease and 8 patients with *H. influenzae*. Thus during the period of 2005-2008, there were 5298 blood cultures with 37 *S. pneumoniae* isolates in the age group of 2-59 months(0.7%), 50 *H. influenzae* (0.94%) and 30 *H. influenzae* type b (0.56%). However , there were 07 other *S. pneumoniae* isolates obtained beyond these age groups. So the total number of isolates of *S. pneumoniae* so far obtained is 44 from 6463 blood cultures (0.68%). Total number of *S. pneumoniae* isolates from

Table 20

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 b</i>	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 b</i>	Positive for <i>S. Pneumoniae</i>	Positive for <i>Haemophilus influenzae</i>	Positive for <i>Haemophilus influenzae B</i>
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															
Jan	47	2	0	0	10	3	0	0	8	3	0	0	5	0	0
Feb	35	0	1	0	9	0	0	0	7	1	1	0	1	2	0
Mar	24	1	0	0	7	0	0	0	7	1	0	0	2	0	0
Apr	22	0	0	0	5	0	0	0	3	0	0	0	0	0	0
May	22	0	0	0	3	0	0	0	0	0	0	0	0	0	0
June	20	0	1	0	1	0	0	0	0	0	0	0	1	2	0
July	57	3	0	0	4	0	0	0	3	0	0	0	3	0	0
Aug	149	2	0	0	10	0	0	0	6	0	0	0	2	0	0
Sep	191	1	0	0	21	0	0	0	10	0	1	0	1	1	0
Oct	172	0	0	0	35	0	0	0	15	0	1	0	0	1	0
Nov	180	0	0	0	37	0	0	0	15	0	1	0	0	1	0
Dec	182	0	0	0	37	0	0	0	15	0	1	0	0	1	0
2008	1101	9	2	0	179	3	0	0	89	5	5	0	15	8	0
Total	5298	37	50	30	1227	9	21	0	975	21	60	40	68	99	62

(isolation rate was 1.7%).This was higher than what was reported in previous years (Table 20).

No *H. influenzae* or its type b was detected during the year in CSF cultures. It is apparent that isolation of bacterial pathogens are under estimates due to prior use of antibiotics. Latex antigen test results are sensitive even if prior antibiotics are used. Of 89 Latex antigen tests done, 5 were positive for both *S. pneumoniae* and *H.*

CSF was 09 (0.7%). When other age groups were concerned, there was a total of 14 *S. pneumoniae* isolates obtained from 2158 CSF cultures(0.6%). Total Latex positivity rate for 2005-2008 was 2.2% for *S. pneumoniae*, 6.2% for *H.influenzae* and 4.1% for *H. influenzae* type b. There was a total of 68 *S. pneumoniae* . 99 *H. influenzae* and 62 *H. influenzae* type b patients during the 4 year period of surveillance.

Table 21

RESULTS OF SURVEILLANCE OF INVASIVE BACTERIAL INFECTIONS AT OTHER SENTINEL SITES

Sentinel Sites	No. of Tests done	No. of Tests positive			
		<i>S.pneumoniae</i>	<i>H.influenzae</i>	<i>H.influenzae type b</i>	<i>N. meningitidis</i>
TH North Colombo	131	1	0	3	0
TH Colombo South	27	3	1	0	0
TH Karapitiya	84	1	0	0	0
National Institute of Health Sciences	46	0	0	0	0
Total	288	5(1.7%)	1(0.3%)	3(1.0%)	0

In 2008, Surveillance of invasive bacterial infections was initiated at 4 sentinel sites outside the Lady Ridgeway Hospital. Latex antigen test kits were used to identify aetiology of meningitis on CSF specimens. Surveillance results are given in Table 21.

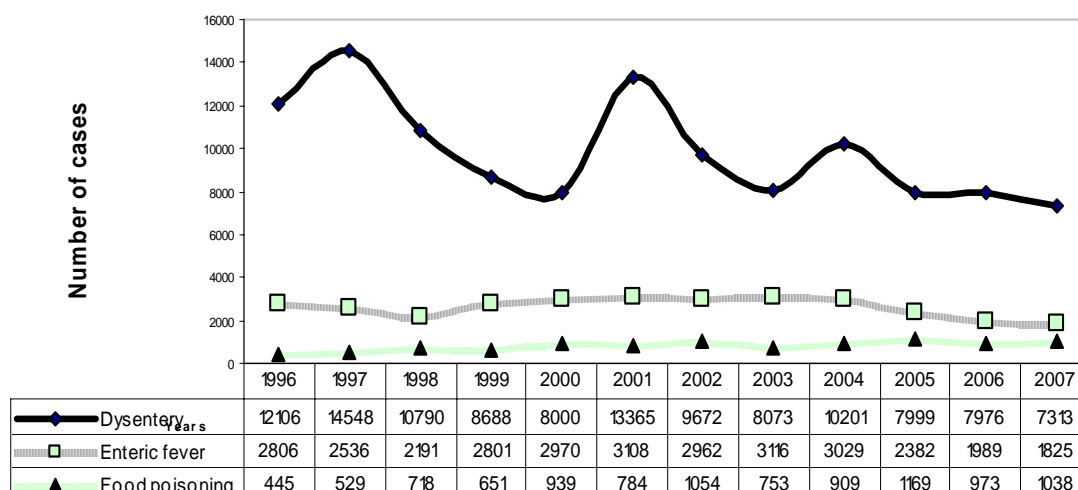
During the year 288 latex tests were done. Test positivity rate for *S.pneumoniae* was 1.7%. The same for Hi and Hi type b was 0.3% & 1% respectively. Not a single test was positive for *N. meningitidis*.

22. CDD SURVEILLANCE REPORT 2007

Dysentery, Enteric fever and food poisoning are the main diarrhoeal diseases under the surveillance of the Epidemiology unit. Information is gathered through the forms H399 and 411a, sent by MOOH. Information on the notified cases as well as confirmed cases of these diseases is used for the analysis. The trends of the diarrhoeal diseases in Sri Lanka from 1996 – 2007 is presented in figure 2, based on the notified cases of Bacillary dysentery, Enteric fever and Food poisoning (H399). In general, reported cases of Bacillary dysentery shows a reduction during last decade, but peaks have been reported in 2001 and 2004. Though such significant peaks are not reported, same trend is followed by the Enteric fever too. The trend of food poisoning is apparently static from 1996- 2007.

Figure 2

NUMBER OF DYSENTERY, ENTERIC FEVER AND FOOD POISONING CASES REPORTED FROM 1996—2007



Diarrhoeal diseases are associated with the water availability and the hygienic practices in the community. The ecological evidence regarding this is presented in the Figure 2. High rainfall has been reported in May, November and December in 2007 for the entire country. The total monthly notified cases of Bacillary dysentery shows a specific association with the rainfall as high number of cases was reported in May, June and November after the peak of the rainfalls. Even though, the number of cases are small, two peaks of Bacillary dysentery have occurred in January and August with the lowest rainfalls. This gives evidence for the occurrence of outbreaks of Bacillary dysentery during the dry season too. This ecological association is same for enteric fever too. A similar association has been observed in Sri Lanka in several years .

A total of 7313 cases of bacillary dysentery, were notified to the Epidemiology Unit in 2007. The confirmed Bacillary dysentery cases (based on 411a) and the incidence of the disease is presented by districts in Table.22. Kalutara (334), Monaragala (271), Batticaloa (232) and Badulla (239) districts reported highest number of cases in 2007. But the highest incidence rate per 100,000 population were reported from Monaragala (61.32), Trincomalee (37.33), Batticaloa (33.02), Kalutara (29.28), Badulla (29.18) and Kalmunai (27.6).

During 2007 a total of 1825 cases of enteric fever were notified of which 751 were confirmed following field investigation. The distribution of confirmed Enteric fever cases and incidence are presented by districts in Table 22. The highest number of confirmed cases were reported from Jaffna (200), Mannar (79), Kalutara (51), Colombo (46) and Monaragala (44) districts. But the highest incidence rate (per 100000 population) for confirmed cases are reported from Mannar (88.25), Jaffna (53.55), Monaragala (9.96), and Trincomalee (5.57) districts.

During 2007, 1038 cases of food poisoning were reported.

Table 22

DISTRIBUTION OF CONFIRMED CASES OF BACILLARY DYSENTERY AND ENTERIC FEVER AND INCIDENCE BY DISTRICT –2007

District	Bacillary Dysentery		Enteric Fever	
	No.	Incidence Rate*	No.	Incidence Rate*
Colombo	151	6.2	46	1.9
Gampaha	119	5.1	28	1.2
Kalutara	334	29.3	51	4.5
Kandy	55	4.1	23	1.7
Matale	16	3.4	8	1.7
Nuwara Eliya	63	8.6	34	4.6
Galle	37	3.5	16	1.5
Hambantota	69	12.3	15	2.7
Matara	37	4.6	18	2.3
Jaffna	99	26.5	200	53.6
Kilinochchi	0	0.0	0	0.0
Mannar	25	27.9	79	88.3
Vavniya	0	0.0	0	0.0
Mullativu	0	0.0	0	0.0
Batticaloa	252	33.0	13	1.7
Ampara	2	0.7	0	0.0
Trincomalee	149	37.7	22	5.6
Kurunegala	213	13.9	32	2.1
Puttalam	94	12.0	16	2.0
Anuradhapura	47	5.9	0	0.0
Polonnaruwa	97	24.6	9	2.3
Badulla	239	29.2	23	2.8
Monaragala	271	61.3	44	10.0
Rathnapura	156	14.4	24	2.2
Kegalle	213	26.3	42	5.2
Kalmunai	95	27.6	8	2.3
Total	2833	14.0	751	3.7

* Incidence rate per 100000 population

23. MEASLES SURVEILLANCE REPORT 2007

Immunization programme is considered as one of the most effective of protecting the health of the public. The highly effective immunization programme in Sri Lanka has resulted in the control and near elimination of some of the life threatening diseases. Maintaining a strong routine immunization programme and a proper surveillance system is vital in order to achieve the goals of the EPI programme.

According to the EPI schedule, 2 doses of measles vaccine is given in the form of monovalent vaccine at 9 months of age and as MR at 3 years of age. The routinely reported data and findings of the immunization coverage surveys show a very good coverage for these vaccines. This has resulted in near elimination level of measles (Figure 3). Surveillance data could be used to further explore the effectiveness of the measles vaccination programme.

Suspected measles cases are reported to the Epidemiology Unit through the routine notification system based on clinical presentation. According to the case definition of measles, any person presenting with fever and maculopapular (i.e. not vesicular) rash (>3days) and at least one of the symptoms such as cough, coryza (i.e. runny nose) and conjunctivitis (i.e. red eyes) is considered as a suspected case of measles. However, fever and rash could be the main symptoms and signs in many other diseases including rubella. Therefore, only laboratory confirmed cases of measles should be considered in arriving at a correct diagnosis of measles as there cannot be any measles transmission in the country according to the epidemiological analysis. Only the lab confirmed measles data could be used to monitor the measles immunization programme and the outcome.

Correct data on measles incidence could be collected only if blood samples are sent from each case of suspected measles for lab confirmation. This would help to monitor the measles incidence and trends in the country.

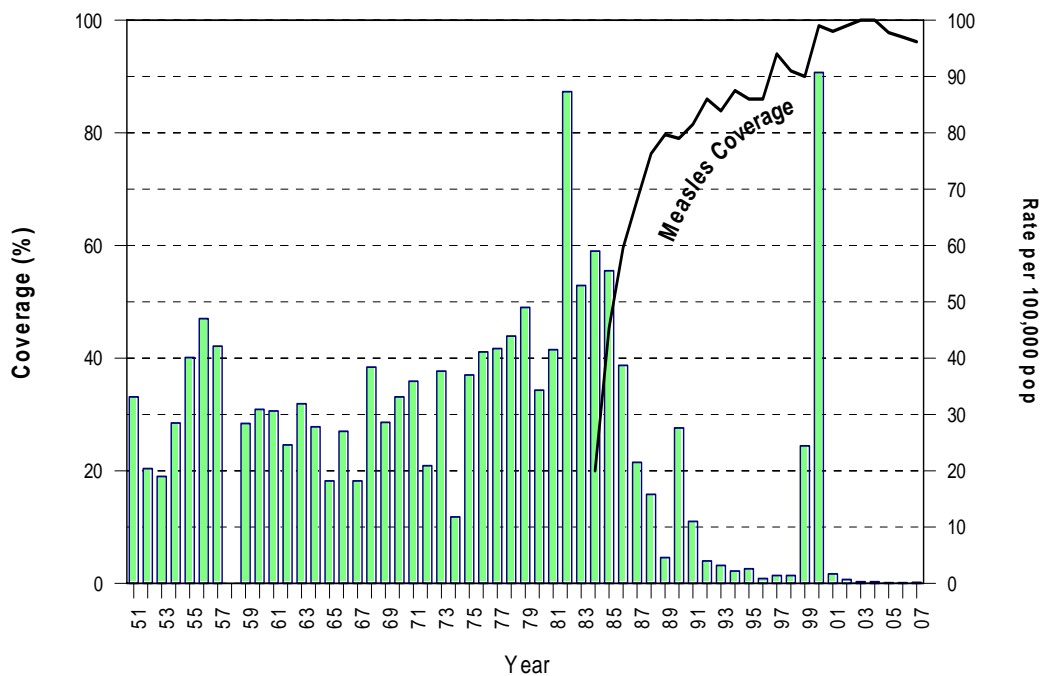
During 2007, eighty one (81) cases of measles were notified to the Epidemiology Unit through the routine reporting system. Of them 38 cases were found to be in conformity with the clinical case definition of measles. Approximately half the cases were below 9 years of age (Table 23). No major complications were reported among the cases investigated.

However, during 2007, Medical Research Institute had tested 79 blood samples received from hospitals for measles antibodies of which only three samples had been positive indicating the low measles incidence in Sri Lanka.

Table 23
**AGE AND SEX DISTRIBUTION OF SUSPECTED
 CASES OF MEASLES—2007**

Age (Years)	Sex		Total
	Male	Female	
<1	4	0	4
1-4	3	3	6
5-9	6	3	9
10-19	5	2	7
20-29	1	4	5
30-39	2	3	5
>40	0	2	2
Total	21	17	38

Figure 3.
INCIDENCE OF MEASLES & IMMUNIZATION COVERAGE - SRI LANKA - 1951-2007



Source: Epidemiological unit

Table 24.

24. SUMMARY OF NOTIFIABLE DISEASES – 4TH 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	2	92	277	1	98	56	0	328	1	7	0	6	25
Gampaha	0	3	74	157	2	19	21	2	218	4	5	2	3	62
Kalutara	0	2	111	79	3	30	24	0	219	1	1	1	1	9
Kandy	0	3	75	148	5	18	13	0	167	0	1	1	21	26
Matale	0	2	66	91	2	16	7	0	187	2	0	0	0	6
Nuwara Eliya	0	1	104	6	3	36	3	0	29	1	11	0	9	10
Galle	0	3	72	17	8	2	7	1	135	0	1	0	3	0
Hambantota	0	0	57	51	3	1	10	0	57	2	0	2	27	3
Matara	0	1	78	134	1	3	9	0	118	0	5	0	49	1
Jaffna	0	1	35	7	0	37	5	0	2	1	0	1	32	11
Kilinochchi	0	0	88	1	0	0	0	0	0	0	0	0	0	1
Mannar	0	0	9	13	0	10	0	1	0	0	0	0	0	3
Vavuniya	0	0	22	1	1	3	6	0	1	0	0	0	0	0
Mullaitivu	0	0	41	0	0	3	0	0	0	1	0	0	0	1
Batticaloa	0	1	164	4	3	10	4	1	4	0	1	0	0	7
Ampara	0	0	27	3	1	2	65	0	5	0	2	1	0	6
Trincomalee	0	1	35	8	2	0	0	0	4	2	1	0	1	2
Kurunegala	0	1	88	69	4	6	11	4	135	0	8	1	17	25
Puttalam	0	0	122	15	5	18	16	1	15	0	1	0	1	5
Anuradhapura	0	1	92	6	1	0	47	0	35	1	2	0	3	3
Polonnaruwa	0	0	35	5	0	8	4	0	53	2	5	0	0	4
Badulla	0	3	116	28	3	14	18	0	18	0	0	0	29	71
Moneragala	0	0	67	12	1	22	12	2	14	1	1	0	19	19
Ratnapura	0	1	138	74	3	10	17	0	100	2	26	0	4	17
Kegalle	0	2	58	109	3	27	17	0	200	0	0	0	14	57
Kalmunai	0	1	109	2	0	8	2	0	2	0	0	0	0	7
TOTAL	0	29	1975	1317	55	401	374	12	2046	21	78	9	239	381

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

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This document is available on the internet 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:

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