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1. POLIOMYELITIS

Twenty eight (28) Acute Flaccid Paralysis cases were notified to the Epidemiology Unit during the 4th quarter 2006. In comparison during the 4th quarter of 2005 and 2004, 31 and 21 AFP cases were reported respectively. The reported number of cases at completion of the 4th quarter 2006 far exceeds the expected number of AFP cases to be reported at this point which is 80 according to WHO surveillance criteria. One hundred and six AFP cases are expected for a year, to make up a non-polio AFP rate of 2 per 100,000 under 15-year olds. At the completion of year 2006, 125 AFP cases were reported which yields a much higher rate than required.

Notification of AFP Cases from Hospitals

Lady Ridgeway Children's Hospital (LRH), Colombo has again reported the highest number of cases (8, i.e.28%) among the 55 sentinel sites in the country. LRH, the main sentinel site for AFP, is a tertiary care center which receives referrals from other hospitals in the country. Teaching Hospital Peradeniya reported 4 AFP cases for the quarter and accounted for another 14% of the caseload. Other hospitals that notified the AFP cases in the 4th quarter are as follows:

Hospital	No. of cases
GH Kalutara	3
NHSL	2
GH Badulla	2
TH Kandy	2
TH Batticaloa	2
TH Karapitiya	1
GH Ratnapura	1
GH Anuradhapura	1
BH Chilaw	1
BH Embilipitiya	1
Nawaloka Hospital	1

Distribution of AFP Cases by Provinces, Districts & MOH Areas

Kalutara district in the Western Province had reported the highest number of AFP cases 6 for the quarter. Ratnapura of Sabaragamuwa Province and Kandy of Central Province reported 3 cases each. From the Northern Province both Mullaitivu and Mannar districts reported AFP cases (1 and 2 cases respectively) within the quarter. However Vavuniya from the Northern and Trincomalee from the Eastern

Provinces failed to report AFP cases in the 4th quarter. Several other districts in the country also did not report AFP cases for the quarter. All heads of sentinel sites in these districts were requested to strengthen AFP surveillance activities. The complete list of distribution of AFP cases according to the province, district and MOH area is given below.

Table 1.

GEOGRAPHICAL DISTRIBUTION OF AFP CASES 4TH QUARTER 2006

Province	District	MOH Area	Number of AFP cases	
Western	Colombo	Kolonnawa	1	
		Hanwella	1	
	Gampaha	Minuwangoda	1	
		Kalutara	Panadura	2
	Mathugama		1	
	Beruwala		1	
			Bulathsinhala	1
Bandaragama			1	
Southern	Galle	Akmeemana	1	
Central	Kandy	Kadugannawa	1	
		Wattegama	1	
		Gampola	1	
		Nuwara Eliya	Walapane	1
Sabara gamuwa	Ratnapura	Kolonna	1	
		Embilipitiya	1	
		Balangoda	1	
		Kegalle	Warakapola	1
North Western	Puttalam	Karuwala-gaswewa	1	
		Arachchikattuwa	1	
Eastern	Batticaloa	Valachchenai	1	
		Kalavanchikudi	1	
North Central	Polonnaruwa	Dimbulagala	1	
Uva	Badulla	Ridimaliyadda	1	
		Passara	1	
Northern	Mannar	Mannar	2	
		Mulativu	Mullativu	1

Seasonal Distribution of AFP Cases

During the 4th quarter 2006, the highest number of AFP cases were reported in the month of October (13 cases i.e.46%). In comparison during October 2005 10 cases were reported. In November and December 2006, 6 cases (21%) and 9 cases (32%) each were reported respectively.

Distribution of AFP Cases by Age and Sex

Over 60% of AFP cases (17 i.e.61%) reported in the 4th quarter 2006 were older children between 10 - 15 years of age. In comparison only 38% of the AFP cases (13) reported in the 4th quarter 2005 were 5 - 10 years old. Eight (29%) children belonged to 5 - 9 year age group and there were no cases aged less than 1 year.

Over half (57%) of the AFP cases (16) in the 4th quarter 2006 were boys. This in contrast to the same quarter in 2005 where 53% of the cases reported were girls. In 2006 more boys were affected in all age groups. An opposite trend was observed in the corresponding quarter of 2005 where female cases were predominant in all age groups.

Table 2 shows the age and sex distribution in 4th quarter 2006.

Table 2.

DISTRIBUTION OF AFP CASES BY AGE AND SEX 4TH QUARTER 2006

Age Group	Sex		Total
	Male	Female	
<1 year old	0	0	0
1-4 year old	2	1	3
5-9 year old	5	3	8
10-15 year old	9	8	17
Total	16	12	28

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'.

Out of the 28 AFP cases reported in the 4th quarter 2006 only 21 cases (75%) had two timely stool samples sent to MRI for polio virology. However Medical Research Institute

received at least two stool samples from all 28 cases in this quarter regardless of the timeliness.

National Polio Expert Committee

The National Polio Expert Committee consists of experts from the fields of paediatrics, virology, epidemiology, neurology and neurophysiology. The expert committee meets once in every quarter of the year to discuss the AFP cases that could not be discarded on laboratory results. In the 4th quarter 2006 4 AFP cases, which had persistent residual paralysis with negative virology results from samples collected late, were forwarded to the Expert Committee. Three of these were discarded following further clarifications and the remaining case was left to be reviewed at the next meeting.

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiological Unit during the 4th quarter of 2006 or the corresponding quarter of 2005.

3. TETANUS

During the 4th quarter of 2006, 8 tetanus cases were notified to the Epidemiological Unit. This is in comparison to 8 cases reported during the previous quarter and 11 cases reported during the corresponding quarter of 2005.

All cases notified during the current quarter, were investigated and confirmed as tetanus (one case each from the districts of Kalutara, Mannar, Jaffna, Puttalam, Anuradhapura, Kegalle, Ratnapura and Badulla). Among the cases there was a 5 year old child from MOH area Mahiyanganaya, who had received all age appropriate immunizations but had developed tetanus following a snake bite and had been cured. The rest of the confirmed cases were adults above the age of 45 years.

A case of Neonatal tetanus was not notified but investigated and informed to the Epidemiology Unit by the General Hospital, Batticaloa (MOH area Valaichenai). Seven cases of tetanus including the above case of neonatal tetanus had been fatal.

4. MEASLES

During the 4th quarter of 2006, 9 cases of measles were notified to the Epidemiological Unit compared to 14 cases notified during the previous quarter and 11 cases in the corresponding quarter of last year.

All 9 cases notified during the 4th quarter 2006, were investigated and 08 were confirmed as measles (Table 3).

Table 3

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF MEASLES – 4TH QUARTER 2006. (N = 08)

Sex	Male	5
	Female	3
Age group	< 1 *	1
	1-5	2
	>5	5
District	Gampaha	1
	Kalutara	1
	Matara	1
	Kegalle	3
	Kurunegala	1
	Anuradhapura	1
Immunization status	Immunized**	4
	Non immunized	4

*an infant aged 11 /12

** an infant aged 11/12 and 3 children aged 1 year 5/12, 3 years 11/12 and 5 years 7/12.

5. LEPTOSPIROSIS

In the 4th quarter of 2006, 509 leptospirosis cases were notified to the Epidemiological Unit compared to 281 cases in the previous quarter (3rd quarter 2006) and 414 cases during the corresponding quarter of the previous year. Among the reported cases 136 were confirmed as leptospirosis.

Out of the total cases reported during this quarter, majority were from the districts of Gampaha (13%) , Kegalle (12%) Matara (12%) and Kalutara(11%). The MOH areas Mawanella and Warakapola in Kegalle district reported 14 and 10 cases of leptospirosis respectively .

6. HUMAN RABIES

Twenty six (26) cases of human rabies were notified to the Epidemiological Unit in the 4th quarter of 2006, compared to 14 cases in the previous quarter and 16 cases in the corresponding quarter of year 2005.

Highest number of rabies cases were reported from Galle district (05 cases i.e.24% of the case load).

Animal Rabies*

One hundred and eighty nine (189) dogs were reported positive for rabies compared to 175 positives in the previous quarter and 106 positives in the same period last year.

Rabies Control Activities*

Dog vaccination – A total of 236571 dogs were immunized during the 1st quarter 2006 under review when compared to 208377 in the previous quarter and 190765 in the corresponding quarter of last year.

Stray dog elimination – A total of 4039 dogs were destroyed during the 1st quarter 2006 under review when compared to 6786 in the previous quarter and 20814 in the corresponding quarter of last year.

*Source – Director/PHVS

7. MALARIA

Distribution of malaria cases by districts is shown in Table 4. During the 4th quarter of 2006, there was a significant reduction in the incidents of malaria in comparison with the same period of 2005 as seen in Table 5.

Table 4.

RESULTS OF BLOOD SMEAR EXAMINATION – 4TH QUARTER 2006

DPDHS Division	B.F.	Positives	P.v.	P.f./ Mixed
Colombo	16491	0	0	0
Gampaha	9321	1	1	0
Kalutara	3041	1	1	0
Kandy	7452	3	1	2
Matale	3767	0	0	0
Nuwara Eliya	63	0	0	0
Galle	159	0	0	0
Matara	5175	1	1	0
Hambantota	10754	5	5	0
Jaffna	32966	1	1	0
Kilinochchi	6226	1	1	0
Mannar	3197	0	0	0
Vavuniya	12260	52	51	1
Mullativu	6050	0	0	0
Batticaloa	26026	0	0	0
Ampara	7710	3	2	1
Trincomalee	18427	2	2	0
Kurunegala	32746	22	22	0
Puttalam	8234	1	0	1
Anuradhapura	30037	19	18	1
Polonnaruwa	18343	0	0	0
Badulla	5329	0	0	0
Moneragala	12451	0	0	0
Ratnapura	4596	0	0	0
Kegalle	1035	0	0	0
Kalmunai	11634	0	0	0
TOTAL	293490	112	106	6

BF– Blood Films

P.v.– *Plasmodium vivax*

P.f.- *Plasmodium falsiparum*

Table 5

**RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 4TH QUARTER
2005/2006**

	4 th Quarter 2005	4 th Quarter 2006
No. of blood smears identified	245620	293490
No. of positives	326	112
No. of <i>P. vivax</i>	309	106
No. of <i>P. falciparum</i>	4	4
No. of <i>P. ovale</i>	1	0
No. of mixed infections	12	2
No. of infant positives	5	2
Slide positivity rate (S.P.R.)	0.13%	0.04%
P.v. : P.f. ratio	77:1	26:1
Percentage of infant positives	1.53%	1.79%

8. JAPANESE ENCEPHALITIS (J.E.)

During the 4th quarter of 2006, 41 cases of Encephalitis were reported to the Epidemiological Unit.

Among the reported cases, 33 cases were investigated and 23 were found to be clinically confirmed as JE. One death was reported during the quarter.

This is in comparison to 8 cases and no deaths reported during the previous quarter and 6 cases and 2 deaths in the corresponding quarter of 2005.

Table 6

DISTRIBUTION OF JAPANESE ENCEPHALITIS CASES BY DPDHS DIVISION— 4TH QUARTER 2006

DPDHS Area	Cases	Deaths
Gampaha	2	0
Kalutara	1	0
Kandy	2	0
Matale	1	0
Galle	1	0
Matara	2	0
Hambantota	1	0
Vavuniya	1	0
Kurunegala	1	0
Anuradhapura	8	1
Polonnaruwa	1	0
Ratnapura	2	0
Total	23	1

9. ENTERIC FEVER

In the 4th quarter of 2006, a total of 453 cases of enteric fever were notified to the Epidemiological Unit, compared to 352 cases in the previous quarter and 506 cases in the corresponding quarter of 2005. The districts of Jaffna(79), Nuwara-Eliya (47) and Kalutara (29) recorded the highest number of cases (Table 28).

The MOH areas Manipay (29) and Walapone (25) notified a large number of cases during the quarter under review.

10. VIRAL HEPATITIS

In the 4th quarter of 2006, 635 cases of viral hepatitis were reported to the Epidemiological Unit, compared to 588 cases in the previous quarter and 691 cases in the corresponding quarter of 2005. Among the reported cases, 182 were investigated and confirmed as viral hepatitis. DPDHS area Nuwara Eliya notified the highest number of cases (187) accounting for 29% of the total case load and the MOH areas Walapone (89 cases), Kothmale (29 cases) and Rikillagaskada (25 cases) reported the highest number of cases.

11. DYSENTERY

In the 4th quarter of 2006, 2748 cases of dysentery was notified to the Epidemiological Unit, compared to 2143 cases in the previous quarter and 3064 cases in the corresponding quarter of 2005.

The following MOH areas notified a large number of cases.

MOH Area	No. of cases
Galenbindunuwewa	86
Nikeweratiya	77
Anamaduwa	63
Bingiriya	58
Opanayake	56

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

During the 4th quarter 2006, 3956 cases of DF/DHF and 15 deaths were reported (CFR 0.37%) when compared to 3104 cases and 12 deaths (CFR 0.58%) reported during the previous quarter and 1933 cases and 4 deaths (CFR 1.23%) reported during the corresponding quarter of last year.

Table 8 shows the distribution of DF/DHF cases and deaths in the DPDHS divisions during the 4th quarter 2006.

During the 4th quarter 2006, 27 blood samples were tested using Ig M capture ELISA test and Haemagglutination Inhibition test at the Department of Virology, MRI and 17 samples were confirmed as positive. (Table 7)

Table 7.

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI – 4TH QUARTER 2006

Month	Clinically Suspected	Serologically confirmed
October	4	3
November	9	4
December	14	10
Total	27	17

Table 8

MORBIDITY AND MORTALITY DUE TO DF/DHF – 4TH QUARTER 2006

DPDHS Division	Cases	Deaths
Colombo	1056	5
Gampaha	421	0
Kalutara	286	0
Kandy	809	2
Matale	199	1
Nuwara Eliya	20	0
Galle	77	1
Hambantota	44	0
Matara	162	0
Jaffna	13	0
Kilinochchi	1	0
Mannar	2	1
Vavuniya	11	0
Mullativu	0	0
Batticaloa	1	0
Ampara	9	0
Trincomalee	17	1
Kurunegala	252	0
Puttalam	225	1
Anuradhapura	28	0
Polonnaruwa	36	0
Badulla	43	0
Moneragala	11	0
Ratnapura	84	1
Kegalle	147	2
Kalmunai	2	0
TOTAL	3956	15

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, Gampaha and Kalutara districts, for the 4th quarter 2006 are given in Table 9.

Table 9

AEDES LARVAL DENSITIES (BRETEAU INDEX) IN COLOMBO, GAMPAHA AND KALUTARA DISTRICTS - 4TH QUARTER 2006

Area	October		November		December	
	A	B	A	B	A	B
Nugegoda	9.5	10.5	10.5	36.5	3.0	2.0
Maharagama	6.8	7.4	0.8	9.6	0.6	6.3
Moratuwa	8.0	11.5	10.9	11.0	11.0	13.0
Kaduwela	-	-	2.8	27.4	-	-
Piliyandala	-	-	2.4	19.2	1.0	17.0
Kelaniya	-	-	6.0	11.0	7.3	23.5
Ragama	-	-	20.0	24.0	0.3	14.2
Ja-Ela	-	-	5.2	8.6	9.0	24.7
Wattala	-	-	13.2	25.0	5.4	12.0
Mahara	-	-	14.0	9.0	0	8.0
	18.0	13.0	19.0	15.0	-	-
Gampaha	-	-	-	22.0	-	-

(A) = *Aedes aegypti*
(B) = *Aedes albopictus*

Number of premises examined per area = 300

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

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

13. LEPROSY**QUARTERLY RETURN OF LEPROSY STATISTICS - 4TH QUARTER 2006**

Table 10.

	At the end of the quarter			Cumulative for end of the quarter		
	4 th Quarter 2006	4 th Quarter 2005	Diff. (%)	2006	2005	Diff. (%)
New patients detected	454	411	10.4	1992	1935	2.94
Children	47	41	14.6	205	201	1.99
Grade 2 Deformities	21	22	-4.54	107	106	0.94
Multi-Bacillary	199	171	16.3	874	802	8.97
Females	200	181	10.4	885	812	8.99

1. National

District	New patients	Deformities	Child	MB	Females
Colombo	89	01	17	31	40
Gampaha	51	02	02	17	28
Kalutara	47	03	03	17	17
Western	187	06	22	65	85
Galle	23	01	01	10	13
Matara	21	0	01	08	9
Hambantota	17	0	01	10	5
Southern	61	01	03	28	27
Kandy	09	02	01	03	01
Matale	05	01	01	05	01
Nuwara Eliya	01	01	0	0	01
Central	15	04	02	08	03
Anuradhapura	17	01	04	09	09
Polonnaruwa	13	0	01	07	07
North Central	30	01	05	16	16
Kurunegala	30	02	0	17	14
Puttalam	25	04	02	14	11
North Western	55	06	02	31	25
Kegalla	09	02	01	05	03
Ratnapura	23	08	0	12	08
Sabaragamuwa	22	10	01	17	11
Badulla	05	0	01	03	01
Moneragala	02	0	0	01	01
Uva	07	0	01	04	02
Trincomalee	08	02	0	06	04
Bataloa	19	0	01	07	10
Ampara	19	0	06	06	09
Kalmunai	18	0	04	08	08
Eastern	64	02	11	27	31
Jaffna	0	0	0	0	0
Vavuniya	01	0	0	01	0
Mannar	01	0	0	01	0
Mulativu	01	0	0	01	0
Kilinochchi	0	0	0	0	0
Northern	03	0	0	03	0
Sri Lanka	454	21	61	199	200

Source: Leprosy Campaign

14. SURVEILLANCE AT SEA PORT

Surveillance activities carried out by the Port Health Office at Colombo Sea Port during the 1st quarter 2006 is given below.

1. Yellow Fever Vaccination

Total number vaccinated - 50

2. Granting Pratique to Vessels

Number issued - 1178

3. Deratting Certification

Number issued - 80

Details of the vaccinations carried out by the Assistant Port Health Office, Colombo 8, during the 4th quarter 2006 is given below.

	Total
a. Yellow fever	485
b. Meningococcal meningitis	1104

15. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 4th quarter 2006 is given below.

1. Granting Pratique to Aircrafts

a. Number issued - -

2. Airport Sanitation

a. No. of sanitary inspections carried out including food establishments - 20

b. No. of food samples taken under Food Act - 0

c. No. found defective - 0

d. No. of court cases/prosecuted - 0

3. Food Consignments

a. No. of food consignments inspected - 190

b. No. released - 190

c. No. rejected - 0

4. Release of human remains

No. of human remains released - 91

No. referred to JMO for post-mortem - 08

MEDICAL RESEARCH INSTITUTE

16. BACTERIOLOGY REPORT – 4TH QUARTER 2006

Table 11.

	Oc- tober	No- vemb er	De- cemb er
(A) CHOLERA			
No. of stool specimens examined	01	-	-
No. of El. tor cholera	-	-	-
Ogawa	-	-	-
Inaba	-	-	-
Cholera 0139	-	-	-
(B) SALMONELLA			
No. of Blood specimens examined	50	53	44
No. positive			
S. typhi	-	-	-
S. paratyphi	-	-	-
No. of stool specimens examined	124	96	87
No. positive			
S. typhi	-	-	-
S. paratyphi A	-	-	-
Others	01	02	-
(C) SHIGELLA			
No. of specimens examined	124	96	87
No. positive			
Sh. flexneri 1	01	01	0
Sh. flexneri 2	09	04	04
Sh. flexneri 3	-	-	-
Sh. flexneri 4	-	-	-
Sh. flexneri 5	-	-	-
Sh. flexneri 6	-	-	0
Sh. sonnei	17	14	05
Sh. others	-	-	-
(D) ENTEROPATHOGENIC E. COLI			
No. of specimens examined	50	40	52
No. positive			
Group A	03	01	05
(E) CAMPYLOBACTER SPECIES			
	05	02	01

17. SEXUALLY TRANSMITTED DISEASES

Table 12.

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA* - 4TH QUARTER 2006

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	14	09	23	55	40	95
AIDS	3	3	6	13	6	19
Early Syphilis ²	32	19	51	109	74	183
Syphilis Late Syphilis ³	78	66	144	298	292	590
Congenital Syphilis ⁴	1	5	6	5	11	16
Gonorrhoea ⁵	213	60	273	857	289	1146
Ophthalmia neonatorum ⁶	0	1	1	10	14	24
Non specific cervicitis/urethritis	122	200	322	528	890	1418
Chlamydial Infection	0	2	2	21	47	68
Genital Herpes	211	271	482	850	1002	1852
Genital Warts	149	125	274	586	401	987
Chancroid	0	1	1	0	1	1
Trichomoniasis	3	21	24	15	135	150
Candidiasis	218	335	553	898	1359	2257
Bacterial Vaginosis	0	196	196	0	843	843
Other sexually transmitted diseases ⁷	94	70	164	497	232	729
Non-venereal ⁸	978	640	1618	3387	2200	5587

* - Central STD clinic Colombo and peripheral STD clinics of National STD/AIDS Control Programme

** - 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.

18. TUBERCULOSIS

A total of 2207 tuberculosis patients were registered for the fourth quarter 2006 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 1670 suffered from pulmonary disease, while the balance, 537 patients from non-pulmonary disease. One thousand two hundred and twelve (1212) of these patients were bacteriologically confirmed with a bacteriological confirmation rate of 72.6%. One thousand one hundred and eighty four TB patients and 1292 other patients were hospitalized during the quarter. The distribution of tuberculosis patients by districts is given in Table 13.

B.C.G. vaccination

A total of 93852 B.C.G. vaccinations were carried out during the quarter with 102.16% coverage.

Table 13.

TUBERCULOSIS PATIENTS BY DPDHS DIVISIONS – 4TH QUARTER 2006

DPDHS DIVISION	PTB	OTB	Total	+ve	Pulmonary TB Direct SS +ve
Colombo	372	103	475	303	81.5
Gampaha	182	48	230	154	84.6
Kalutara	131	52	183	99	75.6
Kandy	194	88	282	99	51.0
Matale	51	16	67	35	68.6
Nuwara Eliya	67	15	82	40	59.7
Galle	74	20	94	59	79.7
Hambantota	28	9	37	23	82.1
Matara	54	17	71	41	75.9
Jaffna	46	15	61	22	47.8
Vavunia	24	2	26	15	62.5
Kilinochchi	4	0	4	1	25.0
Mannar	6	2	8	6	100.0
Mullativu	5	1	6	3	60.0
Ampara	20	8	28	15	75.0
Batticaloa	20	5	25	17	85.0
Trincomalee	30	3	33	10	33.3
Kurunegala	62	29	91	47	75.8
Puttalam	37	8	45	29	78.4
Anuradhapu-	32	15	47	23	71.9
Polonnaruwa	35	4	39	28	80.0
Badulla	43	36	79	32	74.4
Monaragala	31	9	40	22	71.0
Kegalle	72	25	97	56	77.8
Ratnapura	30	7	37	24	80.0
Kalmune	20	0	20	9	45.0
Total	1670	537	2207	1212	72.6

PTB-Pulmonary Tuberculosis OTB-Other Tuberculosis
Data from Central TB Register

19. SURVEILLANCE REPORT OF VIRAL HEPATITIS – 2005

Viral Hepatitis is an endemic disease in all parts of Sri Lanka particularly where the sanitation is poor and occurs throughout the year. The average annual admission rate to government hospitals in Sri Lanka for viral hepatitis declined from 57 per 100,000 in 1991 to 11.9 per 100,000 during 2005. The actual incidence of viral hepatitis is invariably more than the hospital admission figures, as a large number of patients do not seek treatment at all or are being treated by private practitioners and, practitioners of traditional medicine, and therefore, not reported to the Epidemiology unit. A large number of patients treated at the OPD are also not notified to the Epidemiology unit, as OPD reporting is poor.

Table 14:

REPORTED AND CONFIRMED VH CASES 1990-2005

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

Viral hepatitis is a notifiable disease in Sri Lanka. Outbreaks are usually experienced every 5-6 years, but with lesser magnitude. (Table 14)

In the year 2005, 2286 cases (11.6 per 100,000 population) of viral hepatitis were notified to the Epidemiology Unit. (Table 15) The highest number of 346 was reported from Kalmunai DPDHS division with an incidence of 90.5 per 100,000. The other DPDHS areas where high numbers of viral hepatitis cases reported were; Colombo (111), Gampaha (138), Kandy (103), Badulla (198), Batticaloa (315), Jaffna (105), Trincomalee (225), and Kegalle (102). Comparatively few cases were reported from, Killinochchi (07

cases), Vavunia (11 cases), Galle (12 cases), Matara (13 cases), Hambantota (15 cases), Matale (15 cases), Mannar (18 cases) and Mulativu (18 cases). The possibility of under reporting in some DPDHS divisions cannot be ruled out. It is important to note that the disease has been more prevalent in Trincomalee and Batticaloa during last two years. Matale and Nuwara Eliya, where the viral hepatitis was endemic in the past have reported a lesser number of cases. It is necessary to clarify whether this is a true decline or a case of under reporting.

The reported outbreak of viral hepatitis in Kalmunai during the year 2005 was confirmed as Hepatitis A. The outbreak had spread among Tsunami affected population residing in temporary shelters and all children under 15 years were vaccinated with 2 doses of Hepatitis A vaccine. The districts of Batticaloa and Trincomalee have been reporting a large number of cases since 2003, indicating the lack of prevention and control activities in the districts.

Table 15:

DISTRIBUTION OF NOTIFIED VIRAL HEPATITIS CASES BY DPDHS DIVISIONS- 2005

DPDHS	Number Notified	Percentage	Rate / 100,000
Colombo	111	4.9	4.8
Gampaha	138	6.0	6.4
Kaluthara	39	1.7	3.6
Kandy	103	4.5	7.9
Matale	15	0.7	3.3
Nuwara Eliya	35	1.5	4.9
Galle	12	0.5	1.2
Hambantota	15	0.7	2.8
Matara	13	0.6	1.7
Jaffna	105	4.6	17.8
Kilinochchi	7	0.3	4.7
Mannar	18	0.8	18.2
Vavuniya	11	0.5	7.4
Mulativu	18	0.8	12.6
Batticaloa	315	13.8	59.5
Ampara	54	2.4	18.9
Trincomalee	225	9.8	62.0
Kurunegala	73	3.2	4.9
Puttalama	57	2.5	7.8
Anuradhapura	52	2.3	6.8
Polonnaruwa	26	1.1	7.0
Badulla	113	8.7	25.1
Moneragala	99	4.3	24.1
Ratnapura	99	4.3	9.6
Kegalle	102	4.5	12.9
Kalmunai	346	15.1	90.5
SRI LANKA	2286	100	11.9

Confirmed cases

Out of the 2286 cases of viral hepatitis reported from the Government health institutions in 2005, only 921 cases were confirmed by field investigations. Some cases were not investigated and some were unable to be traced due to incorrect or incomplete addresses. Table 16 gives the details of the confirmed cases of viral hepatitis received by the Epidemiology Unit from DPDHS divisions from 2001 -2005. The highest number of 202 (21.9%) confirmed cases was reported from DPDHS Kalmunai.

Seasonal Distribution

The distribution of Viral Hepatitis cases in 2004 and 2005 by months is given in Figure 1 and there is no marked seasonality observed.

Age and Sex Distribution

The age distribution of investigated / confirmed cases of viral Hepatitis for the years 2001 - 2005 is given in table 20. The highest percentage of around 58% occurred in the age group 1- 14 years in 2005. It was observed that the same age group had the highest percentages in the past also. This is an important epidemiological finding that viral hepatitis is a problem among the age group of 1- 14 years and the incidence is declining with advancing age.. Therefore priority regarding the prevention and control activities should be given to this age group.

The reported cases of viral hepatitis in 2005 gives a male to female sex ratio of 5 : 4 (513 males and 408 females).

Control and prevention

Other than the routine investigation, it is a practice to carry out special investigation for each suspected or confirmed case of viral hepatitis reported from the MOOH and medical institutions. The objective of the special investigation form is to obtain necessary epidemiological information to facilitate early prevention and control activities, particularly at the district and divisional levels.

Following the review of benefits and constraints of the special investigation, it has been decided to carry out this only in selected DPDHS divisions, where the incidence is high; DPDHS Colombo, Gampaha, Kalutara, Kandy, Matale, Nuwara-eliya, Ratnapura, Kegalle, Kurunegala, Badulla, Trincomalee, Batticaloa and Jaffna.

However, in other DPDHS divisions also, if there is any clustering (3 or more cases per week or 10 or more cases per month) of viral hepatitis reported from a DDHS/MOH division, special investigation should be carried out by the respective DDHS/MOH.

Table 16:

DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS BY DISTRICT 2001-2005

District	2001		2002		2003		2004		2005	
	No.	%	No.	%	No	%	No	%	No	%
Colombo	7	8.3	49	4.7	55	4.6	38	4.9	41	4.5
Gampaha	17	20.2	116	11.1	180	15.1	104	13.6	70	7.6
Kalutara	2	2.4	12	1.1	64	5.4	31	4.1	19	2.1
Kandy	19	22.6	113	10.8	160	13.4	69	9.0	53	5.8
Matale	0	0.0	45	4.3	157	13.1	20	2.6	7	0.8
Nuwara-Eliya	0	0.0	99	9.4	26	2.2	9	1.2	6	0.7
Galle	3	3.6	12	1.1	21	1.8	3	0.4	5	0.5
Hambantota	1	1.2	8	0.8	10	0.8	3	0.4	8	0.9
Matara	2	2.4	8	0.8	5	0.4	6	0.8	3	0.3
Jaffna	3	3.6	14	1.3	18	1.5	31	4.1	22	2.4
Vavuniya	2	2.4	0	0	0	0	2	0.3	1	0.1
Ampara	0	0.0	6	0.6	7	0.6	4	0.5	10	1.1
Batticaloa	0	0.0	37	3.5	77	6.5	55	7.2	104	11.3
Trincomalee	0	0.0	36	3.4	38	3.2	190	24.8	157	17.0
Kurunegala	5	6.0	21	2.0	38	3.2	18	2.4	23	2.5
Puttalam	5	6.0	16	1.5	11	0.9	11	1.4	13	1.4
Anuradhapura	0	0.0	35	3.3	29	2.4	14	1.8	23	2.5
Polonnaruwa	1	1.2	23	2.2	25	2.1	8	1.0	18	2.0
Badulla	0	0.0	39	3.7	36	3.0	20	2.6	9	1
Monaragala	0	0.0	1	0.1	23	1.9	28	3.7	19	2.1
Kegalle	12	14.3	330	31.5	229	19.2	71	9.3	76	8.3
Ratnapura	5	6.0	24	2.3	12	1.0	9	1.2	29	3.1
Kilinochchi	0	0.0	0	0	0	0	0	0	0	0
Mullativu							1	0.1	0	0
Mannar							17	2.2	3	0.3
Kalmunai							3	0.4	202	21.9
Total	84	100	1048	100	1194	100	756	100	921	100

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 DDHS/MOH offices all the time. This will minimize the delay in investigation and avoid duplication of field work for routine (H 399, H411 & H411a) and special investigations.

DDHS / MOH are advised to send the completed special investigation forms to the Regional Epidemiologist, and not to the Epidemiology Unit directly. The purpose of sending special investigation 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. (Table 22)

In Sri Lanka, prevalence of hepatitis B and C ranges from 0.27% to 2.5% and 0.56% to 0.97% respectively. There was no large-scale hepatitis B vaccination programmes in Sri Lanka until year 2003 and only people at the higher risk were immunized against hepatitis B. The Ministry of Health introduced routine infant hepatitis B vaccination into the EPI from year 2003 in a phased manner with the assistance from the Global Alliance for Vaccine and Immunization (GAVI). The reported coverage of Hepatitis B in 2005 is over 95%.

Table 17:

DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS BY AGE GROUP 2001-2005

Age Group	2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%
<1 yrs	1	0.1	0	0	3	0.25	0	0	3	0.3
1 – 14 yrs	281	45.9	442	42.3	474	39.7	383	50.7	528	57.4
15-24 yrs	153	25.1	348	33.3	388	32.5	190	25.1	207	22.5
25-44 yrs	123	20.1	191	18.3	269	22.5	135	17.9	149	16.1
45-64 yrs	34	5.6	47	4.5	55	4.6	36	4.8	27	2.9
> 65 yrs	19	3.1	18	1.7	5	0.4	12	1.5	7	0.8
Total	611	100	1046	100	1194	100	765	100	921	100

Table 18:

DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS BY SEX 2001-2005

Year	2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%
Male	352	57.6	620	59.3	892	74.7	439	57.4	513	55.7
Female	259	42.4	429	40.7	302	25.3	326	42.6	408	44.3
Total	611	100	1046	100	1194	100	765	100	921	100

Figure 1:

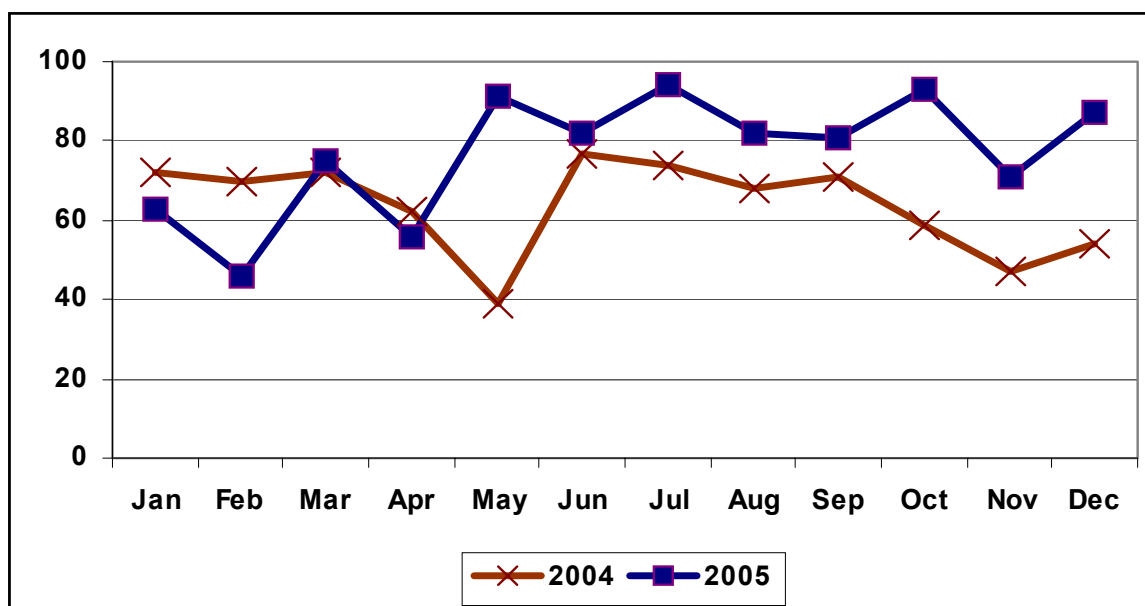
DISTRIBUTION OF CONFIRMED CASES OF VIRAL HEPATITIS CASES BY MONTHS 2004-2005

Table 19:

REGIONAL EPIDEMIOLOGISTS' MONTHLY REPORTING OF VIRAL HEPATITIS - 2005

Regional Epidemiologist	Total number of cases reported by RE	% of cases reported by RE as from total notified	Total number of cases investigated (As reported by RE)	% of Monthly Report sent by RE (n=12)	Timeliness* of monthly reporting %
Colombo	70	74.5	22	100%	81.8%
CMC	13	-	13	33.3%	66.6%
Gampaha	133	119.8	97	100%	91.6%
Kalutara	34	113.3	0	100%	83.3%
NIHS	01	-	0	58.3%	85.7%
Kandy	22	25.6	5	33.3%	75%
Matale	16	123.1	7	100%	83.3%
Nuwaraeliya	11	35.5	7	16.6%	100%
Jaffna	07	9.9	01	8.3%	0%
Batticaloa	255	122.0	92	83.3%	63.6%
Trincomalee	269	179.3	200	100%	50%
Kurunegala	70	132.1	48	100%	100%
Badulla	-	-	-	-	-
Ratnapura	-	-	-	-	-
Kegalle	95	117.3	58	91.6%	100%

* Timeliness considered as the monthly report received before 25th of the following month

20. SURVEILLANCE REPORT OF INFLUENZA – 2006

A network for influenza surveillance has been established as per the recommendation of the National Technical Committee for Avian Influenza Pandemic Preparedness. This would act as an early warning system for a possible avian influenza outbreak in the country. Human influenza surveillance would be initiated in the 20 hospitals identified as sentinel surveillance sites for Avian Influenza. These institutions are expected to send specimens from patients suspected of influenza like illness or any other respiratory viral infection from OPD and wards to the Medical Research Institution or the Molecular Medicine Unit, Faculty of Medicine, University of Kelaniya. This will enable the reference laboratories to identify the current influenza virus strains in the country.

At least 30 samples should be collected from each sentinel site for a month. Patients with at least 6 of the following criteria should be included in the surveillance in a non-epidemic period. Those with at least 4 criteria should be included during an influenza epidemic.

Acute onset (at least within 4 days)

Cough

Fever

Rigors or chills

Myalgia

Prostration/ weakness

Redness of throat

Similar illness among close contacts

Type of specimens to be collected

Naso-Pharyngeal aspirate (collected with a mucus extractor)

Nasal wash

Nasal and throat swabs

Post mortem specimens from lungs (Tru cut needle biopsy)

Transport of Specimens

Specimens should be packed in ice and transported to the laboratory in virus transport medium (available on request from MRI and the Molecular Medicine Unit, Faculty of Medicine, University of Kelaniya). The report received from MRI on Avian Influenza Surveillance is given in Table 23.

Table 20 :

INFLUENZA SURVEILLANCE - 2006

Month	Number tested	Number Positive				
		Adenovi-rus	Influenza A	Influenza B	Para Influenza	RSV
January	40	0	0	0	0	0
February	15	0	0	0	0	0
March	44	0	5	1	0	1
April	61	1	16	1	0	0
May	11	0	1	2	0	0
June	62	2	4	0	0	9
July	51	1	3	0	3	5
August	71	0	2	4	3	3
September	52	0	6	0	0	2
October	73	0	1	2	2	1
November	36	0	3	0	1	1
December	23	0	0	0	1	1
Total	539	4	41	10	10	23

21. HUMAN RABIES SURVEILLANCE REPORT – 2005

The lowest ever reported number of 55 cases (0.3/100,000) of human rabies was reported in 2005. (Table 21) The distribution of notification of human rabies cases by DPDHS divisions is given in Table 22. In 2005, the highest number of 08 cases was notified from the DPDHS division Anuradhapura. The DPDHS divisions Kurunegala (05), Jaffna (05), Gampaha (04), Badulla (04) and Trincomalee (04) also notified higher number of cases. The highest rate of 1.4/100,000 population was reported from Vavuniya.

Age and Sex Distribution

The age distribution of investigated / confirmed cases of rabies for the year 2005 is given in

Table 23. The highest percentage of cases (54.5%) reported in the age group 20-59 years. The next highest percentage of 20% was among the age group 5-19 years followed by the elderly population (>60yrs) with 16.3%. Zero cases were reported in children less than 1 year of age. Similar pattern of age distribution was observed during 2000 – 2004, where the age group 20-59 years was the most affected, but it was noted that the elderly age group (>60 years) has emerged as a vulnerable age category since 2004. Reported male: female ratio of 4:1 highlights the increased susceptibility of males. (Table 24)

Exposure Information

Around 43.6% (24 cases) of human rabies cases were due to stray dogs. The dog (76.4%) is the main reservoir as well as the transmitter of rabies in the country. (Table 25 & 26)

Since the commencement of the National Rabies Control Programme (NRCP) in 1975, animal vaccination and elimination activities have been strengthened to a greater extent; dog vaccination has increased significantly from 1975 to 2004, but in 2005 there was a slight drop (Table 27). Though the public support for dog vaccination is remarkable, there is a growing public resistance for dog elimination, particularly from the animal lovers. Similar to the dog vaccination, stray dog elimination has also increased steadily from 1975 to 2001. But during 2002-2005, some local government authorities have completely stopped the dog elimination activities and as a result there was a decline to around 50% in 2005 compared to that of year 2001 (Table 27). As a result of this decision, the stray dog population may have increased in these areas posing an increased risk of exposure to the public. It is equally important to maintain the dog vaccination strategy as a control measure.

At least around one third of human rabies cases were due to household / neighbour animals, which show high susceptibility and poor vaccination practices among household animals and the lack of responsibility by the dog owners. Routine dog vaccination is essential. It not only protects the animal, but also makes the public less susceptible. It also helps to arrest the transmission of virus among animals. However, partial and ad

hoc dog vaccination practices may lead to an increase in the risk of rabies, particularly due to the false trust on the safety of the animal. Epidemiological investigation has revealed that in some cases post exposure treatment (PET) was not taken or not given assuming that the animal was immunized, but actually the animal has not been vaccinated completely and thereby not protected.

Rabies Control Programme

Human rabies is a notifiable disease in Sri Lanka. The number of human rabies deaths declined from 377 in 1975 to 55 in 2004. (Table 26). The main objective of the NRCP is to control and prevent human and animal rabies in the country. The Epidemiology Unit is the national centre for disease surveillance and carries out all surveillance activities related to human rabies in the country through its wide network at the regional and divisional levels. Strategies of rabies control in Sri Lanka are; surveillance of rabies, promotion of responsible dog ownership, immunization of domestic, community and stray dogs against rabies, birth control for dogs, destruction of stray dogs suspected of incubating the rabies virus, post-exposure treatment, training and health education, enforcement of rabies control legislation and promotion of multi-sectoral co-operation and community participation.

Ministry of Health has appointed a National Task Force for rabies elimination in 2004. This Task Force will develop a national action plan for the elimination of rabies and at present sub committees are developing and piloting the prevention and control strategies. The Task Force is focusing on the implementation of most of these activities through the local government authorities with the cooperation of the MOOH. The necessary legislations have been developed.

Most of the lives would have been saved, if they had received the PET as recommended. Public awareness on PET should be strengthened. Also the rational post exposure treatment practices at hospitals should be reviewed regularly as a part of the clinical audit for PET. This is the most expensive single item among the drug allocations of the Ministry. Exposure opportunities are to be minimized by integrated activities of control of dog population and vaccination. Periodical review of the efficacy of dog vaccination is another aspect for future research. Strengthening present regulations and creating community responsibility, particularly in dog ownership are equally important in rabies control activities in the country.

Table 21:

MORTALITY AND NOTIFICATION OF HUMAN RABIES CASES – 1991- 2005

Year	Cases Confirmed		No. of suspected cases notified [□]
	*Number	**Rate	
1991	136	0.79	133
1992	112	0.64	112
1993	98	0.55	104
1994	105	0.58	122
1995	124	0.68	178
1996	110	0.59	195
1997	135	0.72	150
1998	111	0.59	123
1999	110	0.58	194
2000	109	0.56	132
2001	83	0.43	105
2002	64	0.33	78
2003	76	0.39	86
2004	98	0.5	97
2005	55	0.3	55

Source - * Rabies Control Programme

** Rate per 100,000 population

□ Epidemiology unit (H399 & H411)

Table 22.

NUMBER OF NOTIFICATIONS OF HUMAN RABIES CASES BY DPDHS DIVISIONS– 2005

DPDHS DIVISION	Number of Cases Reported	% of Cases Reported	Rate / 100,000
Colombo	2	3.6	0.1
Gampaha	4	7.3	0.2
Kalutara	2	3.6	0.2
Kandy	1	1.8	0.1
Matale	1	1.8	0.2
N'Eliya	0	0.0	0.0
Galle	1	1.8	0.1
Hambantota	1	1.8	0.2
Matara	0	0.0	0.0
Jaffna	5	9.1	0.8
Vavunia	2	3.6	1.4
Ampara	0	0.0	0.0
B'caloa	0	0.0	0.0
T'malee	4	7.3	1.1
K'gala	5	9.1	0.3
Puttalam	2	3.6	0.3
A'pura	8	14.5	1.0
PLN	0	0.0	0.0
Badulla	4	7.3	0.5
Monaragala	2	3.6	0.5
Kegalle	3	5.5	0.4
Ratnapura	1	1.8	0.1
Kilinochchi	1	1.8	0.6
Mannar	1	1.8	1.0
Mullativu	0	0.0	0.0
SRI LANKA	55	100.0	0.3

Table 23.

AGE DISTRIBUTION OF CONFIRMED HUMAN RABIES CASES, 2000-2005

Age Group	2000	2001	2002	2003	2004	2005
<1 year	0	0	0	0	0	0
1 - 4 years	3	8	2	6	3	0
5 - 19 years	30	17	15	19	17	11
20 - 59 years	39	31	29	48	46	30
60 & Over	23	10	10	3	16	9

Source – Epidemiology Unit (EPID/HR/2002)

Table 24:

SEX DISTRIBUTION OF CONFIRMED HUMAN RABIES CASES, 2000-2005

Sex	2000	2001	2002	2003	2004	2005
Male	70	51	38	58	59	38
Female	25	15	18	18	22	12

Table 25:

DISTRIBUTION OF HUMAN RABIES CASES BY OWNERSHIP OF BITING ANIMAL, 2000 – 2005

Type of animal	2000	2001	2002	2003	2004	2005
Household Pet	23	34	29	18	13	11
Neighbour Pet	9	6	4	9	7	8
Stray	41	16	18	35	36	24
Unknown	22	10	5	14	24	7

Source – Epidemiology Unit (EPID/HR/2002)

Table 26:

DISTRIBUTION OF HUMAN RABIES CASES BY TYPE OF BITING ANIMAL, 2000 – 2005

Animal	2000	2001	2002	2003	2004	2005
Dog	67	49	36	63	69	42
Cat	8	5	5	4	2	1
Other	6	3	15	4	2	0
unknown	14	9	6	5	7	7

Source – Epidemiology Unit (EPID/HR/2002)

Table 27

RABIES CONTROL ACTIVITIES AND NUMBER OF HUMAN DEATHS FROM RABIES, 1975 - 2005

Year	Vaccination of dogs	Elimination of dogs	Heads examined at MRI		Human rabies deaths	
			Number	% Positive	Number	Rate
1975	42,252	1,610	456	64.7	377	2.7
1980	120,143	36,845	420	52.5	209	0.7
1985	268,561	58,238	344	55.5	113	0.9
1990	412,586	63,233	963	70.2	154	0.9
1995	452,828	106,862	1,217	69.7	124	0.9
2000	657,597	117,790	559	88.5	109	0.6
2001	770,375	119,761	NA	NA	83	0.4
2002	797,565	117,790	NA	NA	64	0.3
2003	664,493	84,350	NA	NA	76	0.4
2004	844,123	89,530	NA	NA	98	0.5
2005	818,162	62,693	NA	NA	55	0.3

Table 28

22. SUMMARY OF NOTIFIABLE DISEASES –4TH QUARTER

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	90	1056	1	18	4	1	37	0	11	0	0	10
Gampaha	0	1	101	421	0	13	0	2	66	1	2	0	4	47
Kalutara	0	6	138	286	3	29	31	0	60	2	2	1	0	18
Kandy	0	3	90	809	5	23	9	0	44	0	16	0	25	41
Matale	0	0	118	199	2	7	3	0	13	0	1	0	0	17
Nuwara Eliya	0	1	74	20	0	47	3	1	5	0	1	0	15	187
Galle	0	1	52	77	1	2	0	5	39	0	1	0	10	0
Hambantota	0	0	29	44	4	5	3	0	14	0	3	0	22	21
Matara	0	0	67	162	3	26	5	3	63	1	4	0	90	6
Jaffna	0	0	52	13	1	79	1	1	0	0	14	1	32	4
Kilinochchi	0	0	1	1	0	1	0	1	0	0	0	0	0	4
Mannar	0	2	22	2	0	8	0	0	0	0	0	1	0	0
Vavuniya	0	0	65	11	1	19	28	0	0	0	0	0	0	1
Mullativu	0	1	5	0	0	3	0	1	0	0	0	0	0	2
Batticaloa	0	20	77	1	0	9	1	0	0	0	0	0	0	53
Ampara	0	0	108	9	0	0	4	1	5	0	0	0	1	3
Trincomalee	0	0	82	17	0	12	23	1	1	0	0	0	0	19
Kurunegala	0	0	311	252	2	28	12	2	39	1	3	0	13	11
Puttalam	0	2	151	225	2	28	3	3	11	0	0	1	0	21
Anuradhapura	0	0	327	28	9	17	2	1	8	1	0	1	6	5
Polonnaruwa	0	1	78	36	1	3	1	0	4	0	0	0	4	5
Badulla	0	2	174	43	0	10	7	3	9	0	0	1	41	47
Moneragala	0	0	103	11	0	28	1	0	8	0	0	0	14	11
Ratnapura	0	3	242	84	5	14	6	0	17	0	2	1	6	36
Kegalle	0	1	97	147	1	20	4	0	64	3	3	1	13	21
Kalmunai	0	0	94	2	0	4	12	0	2	0	2	0	0	45
TOTAL	0	28	2748	3956	41	453	163	26	509	9	65	8	296	635

No polio cases. (from AFP surveillance system).

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

Telephone : 2695112, FAX No : 2696583, E-mail: chepid@sltnet.lk

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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:

The Editor

Quarterly Epidemiological Bulletin

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

ON STATE SERVICE

Dr. M. R. N. ABEYSINGHE
EPIDEMIOLOGIST
EPIDEMIOLOGICAL UNIT
231, DE SARAM PLACE
COLOMBO 10