

Volume 52
January - March
2011

EPIDEMIOLOGICAL BULLETIN

SRI LANKA

First Quarter
2011

EPIDEMIOLOGY UNIT

A publication of the Epidemiology Unit
Ministry Of Health
No. 231, De Saram Place,
Colombo.10
www.epid.gov.lk

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1. POLIOMYELITIS

AFP SURVEILLANCE : POLIOMYELITIS ERADICATION INITIATIVE 1st QUARTER 2011 SUMMARY

Twenty four (24) Acute Paralysis cases were notified to the Epidemiology Unit during the 1st quarter 2011. This contrasts with the 29 and 21 AFP cases each reported during the 1st quarter 2010 and 2009 respectively. This number comes close to the expected number of non-polio cases per quarter to meet the WHO surveillance criteria of 2:100,000 under 15 year population, which is 31 according to the current population estimates. The non-polio AFP rate for the first quarter of 2011 was 1.6 :100,000.

Notification of AFP Cases from Hospitals

The majority of the cases (50%) were notified from the main sentinel site hospitals for AFP, the Lady Ridgeway Children's Hospital (LRH), and T.H.Karapitiya which reported 6 patients from each hospital. Both hospitals are tertiary care centres receiving referrals from other hospitals in the country. Three (13%) and 2 (8%) cases were reported from G.H.Badulla and from Sirimavo Bandaranayake Memorial Children Hospital (SBMCH) and other sentinel site hospitals mentioned below in Table 1.

Table 1.

Hospital	Number reported
LRH	6
T.H.Karapitiya	6
G.H.Badulla	3
SBMCH	2
NCTH	1
NHSL	1
T.H.Peradeniya	1
T.H.Ratnapura	1
G.H.Hambantota	1
G.H.Polonnaruwa	1
T.H.Jaffna	1
Total	24

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

The highest number of cases reported from a single district this quarter was reported by Galle district of the southern province, which reported 4 cases. The complete list of distribution of AFP cases according to the province, district and MOH area given in table 2.

Table 2. Distribution of AFP cases by district & MOH area - 1st Quarter 2011

Province	District	MOH Area	Number of AFP cases		
Western	Kalutara	Palindanuwara	1		
		Walallawita	1		
		Beruwala	1		
	Gampaha	Divulapitiya	1		
		Ja-Ela	1		
		Southern	Galle	Balapitiya	1
				Ambalangoda	1
Hikkaduwa	1				
Habaraduwa	1				
Central	Hambantota	Hambantota	1		
		Matara	1		
	Kandy	Weligama	1		
		Pasgoda	1		
		Bambaradeniya	1		
	North Central	Matale	Dambulla	1	
			Yatawatte	1	
Wilgamuwa			1		
Sarabaramuwa	Ratnapura	Godakawela	2		
Uva	Badulla	Hali Ela,	1		
		Bandarawela	1		
		Badulla	1		
North Central	Polonnaruwa	Hingurakgoda	1		
North Western	Kurunegala	Udubaddawa	1		
North-ern	Jaffna	Jaffna	1		

Seasonal Distribution of AFP Cases

Majority of cases were reported during the month of January (8 cases, 33%) and February (9 cases, 38%). No significant seasonal variation observed during the period.

Age and Sex Distribution of AFP Cases

Equal number of cases were reported from both sexes during the 1st quarter 2011 with 50% from each sex. During the 1st quarter 2010 the trend was more or less similar in which 55% of reported cases were boys.

Majority of cases were almost equally distributed among ages above 1 year during the first quarter this year and the trend was different compared to the same quarter in the previous year which the majority (45%) were between 5-9 years of age.

The table below shows the age and sex distribution in 1st quarter 2011

Table 3. Distribution of AFP cases by Age & Sex, 1st Quarter 2011

Age Group	Sex		Total
	Male	Female	
<1 year old	1	1	2
1-4 year old	5	4	9
5-9 year old	3	3	6
10-15 year old	3	4	7
Total	12	12	24

Laboratory Surveillance of AFP Cases

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

All 24 AFP cases reported (100%) had at least one stool sample sent to MRI for polio virology. There were 1 case with late stools and one case with only one sample of stools collected. The overall timely stool collection rate for the quarter was 92%. This compares with the respective quarter 2010 where a timely collection rate of 79% was achieved out of 29 AFP cases reported.

2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 1st Quarter 2011. Last case of cholera was reported in the country in January 2003.

3. TETANUS

During the 1st Quarter 2011, 06 suspected Tetanus cases were notified to the Epidemiology Unit. This is in comparison to 07 cases reported during the previous quarter and 06 cases in the corresponding quarter of 2010.

The special surveillance forms were available for 04 cases and the characteristics are given in Table 4.

4. MEASLES

Twenty five cases of suspected measles were reported to Epidemiology Unit during the first quarter 2011. This number is almost similar to the number reported (28) during the first quarter 2010. Of the notified cases 18 were compatible with clinical measles surveillance case definition of "fever and maculopapular rash with one of the signs of cough, coryza and conjunctivitis", during the field investigations carried out by relevant public health inspectors of each Medical Officer of Health (MOH) area. Of the 18 investigated, and clinically confirmed cases, special investigations were carried out by relevant MOOH and 14 (78%) investigation reports were received by the Epidemiology Unit. Of these 14 investigated cases 10 were identified as compatible with clinical case definition but only 3 of the tested were serologically (IgM) positive for measles.

Laboratory investigations of fever and rash patients suspected of Measles/Rubella (23) were carried out in the WHO accredited Laboratory in Medical Research Institute (MRI) and identified only 3 were positive for Measles IgM antibodies. Two of these laboratory confirmed cases were females of above 25 year old and unvaccinated. Other one was 16 year old female who missed measles vaccination and reasons identified by MOH were changing of residential area for several times, and unavailability at home during midwife home visits.

Virus isolation was not carried out in two of these patients and specimen collection was done at Infectious Disease Hospital (IDH), Colombo. Outbreaks were not reported during the quarter.

Table 4

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF TETANUS – 1st QUARTER 2011

Sex	Male	3
	Female	1
Age group	0 - 5	0
	6 - 12	0
	12 <	4

Table 5

SELECTED CHARACTERISTICS OF CONFIRMED CASES (WITH SPECIAL INVESTIGATIONS) OF MEASLES – 1st QUARTER 2011

Sex	Male	6
	Female	4
Age Group	<1 year	0
	10-19 years	2
	20-29 years	5
	30-39 years	3
Immunization Status	Non - Immunized	3
	Unknown	7

5. LEPTOSPIROSIS

During the 1st Quarter 2011, 2436 cases and 48 deaths (CFR 1.97%) due to Leptospirosis were notified to the Epidemiology Unit compared to 1574 cases and 35 deaths in the previous quarter and 1081 cases and 21 deaths during corresponding quarter of 2010.

The special surveillance conducted regarding Leptospirosis reveal that majority 48% were in the 31-50 years age group and male female ratio is 5:2.

6. HUMAN RABIES

Seven cases of Human Rabies were notified to the Epidemiology unit in the 1st quarter 2011. Among the notified cases all the cases(7) were investigated and confirmed as Human Rabies. Out of the total of 7 Human Rabies cases, 5 (71%) were males and 2 (29%) were female cases. Gampaha district reported the highest number of cases(2) accounting for 29% of the total case load followed by Jaffna (1) 14.2%, Puttalam (1) 14.2%, Matara (1) 14.2% Batticaloa (1) 14.2%, and Colombo (1) 14.2%.

Animal Rabies

During the quarter 157 dogs were reported positive for rabies compared to 148 positive in the previous quarter and 188 positive in the corresponding quarter of 2010. In addition the following animals were also reported positive;

Cats-08, Domestic Ruminants-03,

Wild Animals – 03

Rabies Control Activities

Dog vaccination - A total of 241554 dogs were immunized during the 1st Quarter 2011 when compared to 170713 in the previous quarter and 238110 in the corresponding quarter of last year.

Animal Birth Control

Chemical - 9934 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical - 13559 female dogs were subjected to sterilization by surgical method during the quarter under review.

*Source – Director/PHVS

7. ENTERIC FEVER

In the 1st Quarter 2011, a total of 352 cases of enteric fever were notified to the Epidemiology Unit, compared to 530 cases in the previous quarter and 543 cases in the corresponding quarter of 2010. The district which reported high number of cases in 1st quarter 2011 were Jaffna(88), Colombo (49) and Kurunegala (37).

8. VIRAL HEPATITIS

In the 1st quarter 2011, 199 cases of Viral Hepatitis were notified to the Epidemiology Unit. This was in comparison to the 353 cases in the previous quarter and 384 cases in the corresponding quarter of 2010. Gampaha & Kegalle Districts reported the highest number of cases (24 each), while Moneragala (22) also reported high number of cases.

9. DYSENTERY

In the 1st Quarter 2011, 1311 cases of Dysentery were notified to the Epidemiology Unit, in comparison to 1421 cases in the previous quarter and 1018 cases in the corresponding quarter of 2010.

10. MALARIA

The number of microscopically confirmed malaria cases detected during the 1st quarter of 2011 show a significant reduction of all indices in comparison to the same period of year 2010 as seen in Table 7.

11. JAPANESE ENCEPHALITIS (JE)

During the 1st quarter of 2011, 54 cases of Encephalitis were reported to the Epidemiology Unit. Among the reported cases 18 (32.1%) were subject to special surveillance by the MOH. JE laboratory surveillance net work at MRI has reported 12 lab confirmed cases of JE. Among them two (16.6%) were under 10 years of age. The highest number of confirmed JE cases were (3) reported from Matale and Kegalle districts. In the majority of confirmed JE cases (12), immunization status was unknown. Two deaths (16.6%) were reported due to JE during the quarter. In the corresponding quarter of 2010, there were 43 cases of Encephalitis, 10 cases of confirmed JE and two deaths.

Table 6.

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE -1st QUARTER 2011

Sex	Male	7 (58.3%)
	Female	5 (41.6%)
Age group	<10Y	2 (16.6%)
	11-20Y	2 (16.6%)
	21-30Y	1 (8.3%)
	31-40Y	1 (8.3%)
	41-50Y	1 (8.3%)
	51-60Y	2 (16.6%)
	61-70Y	2 (16.6%)
	71-80Y	1 (16.6%)

Continuation of Table 6

District	Kurunegala	1 (8.3%)	
	Matale	3 (25%)	
	Kegalle	3 (25%)	
	Hambantota	1 (8.3%)	
	Killinochchi	1 (8.3%)	
	Kandy	1 (8.3%)	
	Gampaha	1 (8.3%)	
	Unknown	1 (8.3%)	
	MOH Areas	Pannala	1 (8.3%)
		Ruwanwella	1 (8.3%)
		Galewela	1 (8.3%)
		Dambulla	1 (8.3%)
		Tissamaharamaya	1 (8.3%)
Kilinochchi		1 (8.3%)	
Kadugannawa		1 (8.3%)	
Yatawatta		1 (8.3%)	
Ruwanwella		1 (8.3%)	
Kegalle		1 (8.3%)	
Meerigama	1 (8.3%)		
	Unknown	1 (8.3%)	
Immunization	Immunized	0 (00%)	
	Non immunized	3 (25%)	
	Unknown	9 (75%)	

Table 7

RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 1ST QUARTER 2011

	1st Quarter 2010	1st Quarter 2011
No. of blood smears examined	239,251	247,376
No. of positives	232	80
No. of <i>P. vivax</i>	224	78
No. of <i>P. falciparum</i>	2	2
No. of mixed infections	6	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.1%	0.03%
P.v. : P.f. ratio	112:1	39:1
Percentage of infant positives	0%	0%

Table 8

**DISTRIBUTION OF MALARIA CASES BY RMO
DIVISION - 1ST QUARTER 2011**

RMO	Blood smears	Positives	P.v.	P.f./ Mixed
Colombo	16485	0	0	0
Gampaha	10126	0	0	0
Kalutara	2076	0	0	0
Kandy	8950	0	0	0
Matale	5338	0	0	0
Nuwara Eliya	263	0	0	0
Galle	3893	0	0	0
Matara	4004	0	0	0
Hambantota	6049	7	6	1
Jaffna	17438	2	2	0
Kilinochchi	9316	6	6	0
Vavuniya	18908	16	16	0
Mannar	6006	20	20	0
Mullaitivu	7408	26	26	0
Batticaloa	22775	0	0	0
Ampara	5776	0	0	0
Trincomalee	16487	1	1	0
Kurunegala	13209	0	0	0
Maho	4231	0	0	0
Puttalam	6306	0	0	0
Anuradhapura	20571	0	0	0
Polonnaruwa	16070	2	1	1
Badulla	4054	0	0	0
Moneragala	5850	0	0	0
Ratnapura	4685	0	0	0
Kegalle	1737	0	0	0
Kalmunai	9365	0	0	0
TOTAL	247376	80	78	2

P.v.- Plasmodium vivax

P.f.- Plasmodium falciparum

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

During the 1st Quarter 2011, 3088 cases of DF/DHF and 33 deaths were reported (CFR 1.07%) when compared to 2552 cases and 13 deaths (CFR 0.50%) reported during the previous quarter. Proportion of cases notified in January, February and March were 29.7%, 34.1% and 36.2% respectively.

Table 9 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 1st quarter 2011.

Table 9

**MORBIDITY AND MORTALITY DUE TO DF/DHF
- 1ST QUARTER 2011**

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	1041	33.71	13
Gampaha	380	12.31	2
Kalutara	157	5.08	1
Kandy	86	2.78	1
Matale	44	1.42	0
Nuwara Eliya	20	0.65	0
Galle	56	1.81	0
Hambantota	51	1.65	0
Matara	67	2.17	1
Jaffna	116	3.76	2
Kilinochchi	16	0.52	0
Mannar	17	0.55	0
Vavuniya	31	1.00	1
Mullaitivu	5	0.16	0
Batticaloa	176	5.70	2
Ampara	19	0.62	0
Trincomalee	49	1.59	1
Kurunegala	140	4.53	1
Puttalam	185	5.99	4
Anuradhapura	53	1.72	1
Polonnaruwa	63	2.04	0
Badulla	58	1.88	0
Moneragala	56	1.81	0
Ratnapura	125	4.05	2
Kegalle	67	2.17	1
Kalmunai	10	0.32	0
TOTAL	3088	100	33

Results of entomological surveillance carried out in the Western Province by the Department of Entomology, MRI during the current quarter is given in Table 10.

During the 1st Quarter 2011, 677 blood samples were tested using IgM capture ELISA test and Haem Agglutination Inhibition test (HAI) at the Department of Virology, MRI and 309 samples were confirmed as positive. (Table 11).

Table 10

**RESULTS OF LARVAL SURVEY CARRIED OUT BY DEPARTMENT OF ENTOMOLOGY,
MRI 1ST QUARTER 2011**

Area	January 2011		February 2011		March 2011	
	Breteau Index		Breteau Index		Breteau Index	
	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus	Ae. aegypti	Ae. albopictus
Colombo						
Nugegoda	1.3	2.0	1.14	4.0	2.5	1.5
Maharagama	2.5	8.1	00	1.6	2.28	5.1
Kaduwela	00	6.0	00	12.8	00	11
Moratuwa	1.6	0.8	00	0.57	3.9	3.6
Piliyandala	-	-	00	9.2	1.9	5.8
Gampaha						
Ragama	1.5	1.9	00	3.1	00	00
Wattala	0.48	7.21	0.55	5.5	5.4	3.2
Minuwangoda	00	10.78	00	0.51	00	8.3
Seeduwa	-	-	00	7.22	0.64	3.2
Mahara	00	2.05	1.74	1.74	00	0.86
Ja Ela	1.0	7.0	2.85	6.3	3.0	7.5
Kelaniya	1.3	1.7	00	5.0	00	1.6

Table 11

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI 1ST QUARTER 2011

Month	Clinically Suspected cases of DF	Serologically confirmed Cases of DF
January	188	109
February	191	84
March	298	116
Total	677	309

13 Rubella/Congenital Rubella Syndrome (CRS) :1st Quarter 2011

During the whole quarter only 2 suspected cases of Rubella were reported and 1 of them was compatible with surveillance case definition during field investigations. Zero reporting of Rubella cases was identified for the compatible period of 2010.

Out of the 23 suspected Measles/ Rubella specimens received at the Medical Research Laboratory (MRI), 3 specimens were positive for Rubella IgM and of them Rubella virus isolation was not done. All 3 laboratory confirmed cases were above 20 year males, including 2 of them from University of Peradeniya and one from Infection Disease Hospital (IDH).

Three cases of Rubella IgM positive neonates were reported from MRI and serology specimens received from Lady Ridgeway Hospital, B.H.Kamburupitiya and T.H.Jaffna. Of these, the one reported from B.H.Kamburupitiya was without congenital abnormalities during Paediatrician follow ups and remaining two had Congenital Rubella Syndrome.

14. TUBERCULOSIS

A total of 2700 Tuberculosis patients were notified for 1st Quarter 2011 by the National Programme for Tuberculosis Control and Chest Diseases. Out of them 2481 were new TB patients. Of this total 1840 patients had pulmonary TB and 641 patients were with extra pulmonary TB. Of these patients, 1231 were sputum smear positive. The distribution of tuberculosis patients by RDHS division is given in Table 12.

B.C.G. Vaccination

A total of 91,700 B.C.G. vaccinations were carried out during the quarter with 93.17% coverage.

Table 12.

TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 1st Quarter 2011

RDHS DIVISION	New				Retreat-ment & other	Total
	PTB sp+ve	PTB sp -ve	EPTB	Total		
Colombo	266	52	139	457	90	547
Gampaha	178	56	90	324	28	352
Kalutara	101	26	51	178	12	190
Kandy	83	81	49	213	18	231
Matale	18	17	11	46	1	47
Nuwara Eliya	21	11	14	46	4	50
Galle	75	28	37	140	9	149
Matara	48	9	13	70	3	73
Hambantota	18	2	9	29	0	29
Jaffna	23	63	25	111	6	117
Vavuniya	18	3	2	23	0	23
Batticaloa	22	3	22	47	4	51
Ampara	12	11	0	23	0	23
Kalmunai	13	20	4	37	1	38
Trincomalee	12	70	17	99	0	99
Kurunegala	57	38	42	137	9	146
Puttalam	28	8	17	53	5	58
Anuradhapura	43	7	14	64	6	70
Polonnaruwa	18	13	9	40	2	42
Badulla	37	12	10	59	8	67
Moneragala	15	19	4	38	0	38
Ratnapura	71	23	35	129	8	137
Kegalle	43	22	24	89	5	94
Mannar	5	1	2	8	0	8
Mullativu	0	0	0	0	0	0
Kilinochchi	6	14	1	21	0	21
Total	1231	609	641	2481	219	2700

PTB-Pulmonary Tuberculosis

EPTB- Extra Pulmonary Tuberculosis

SP + ve - Sputum Positive

SP - ve - Sputum Negative

Data from Central TB Register

Source - National TB Register

15. SURVEILLANCE AT SEA PORT

Details of the vaccinations carried out by the Assistant Port Health Office during the 1st quarter 2011, is as follows;

	Total
a. Yellow fever	817
b. Meningococcal meningitis	46
C. Polio vaccination	00

16. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 1st Quarter 2011 is given below.

1. Yellow Fever Surveillance

a. No. with valid certificate	-	07
b. No. without valid certificate & Deported	-	00
c. No. without valid certificate & Isolated	-	00

2. Airport Sanitation

a. No. of sanitary inspections carried out including food establishments	-	32
b. No. of food samples taken under Food Act	-	02
c. No. found defective	-	00
d. No. of court cases/prosecuted/warned	-	00
e. No. of water samples tested	-	00
f. No. reported contaminated	-	00

3. Release of Human Remains

a. No. of Human Remains released	-	137
b. No. referred to JMO for post-mortem	-	03
c. No. alleged suicide	-	04

4. Other Health Activities

a. Polio Vaccination No. of doses given	-	00
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17. LEPROSY**QUARTERLY RETURN OF LEPROSY STATISTICS - 1ST QUARTER 2011**

Table 13

1. National

	At the end of the quarter			Cumulative for end of the quarter		
	1st Quarter 2011	1st Quarter 2010	Diff. (%)	2011	2010	Diff. (%)
New patients detected	546	454	20.2	546	454	20.2
Children	47	41	14.6	47	41	14.6
Grade 2 Deformities	38	32	18.7	38	32	18.7
Multi-Bacillary	251	214	17.2	251	214	17.2
Females	229	191	19.8	229	191	19.8

2. Districts

District	New patients	Deformities	Child	MB	Females
Colombo	99	7	9	46	51
Gampaha	83	7	7	29	41
Kalutara	47	2	3	22	13
Western	229	16	19	97	105
Galle	1	1	0	1	0
Matara	18	1	1	12	6
Hambantota	25	2	3	12	10
Southern	44	4	4	25	161
Kandy	18	2	0	9	10
Matale	1	0	0	0	1
Nuwara Eliya	2	0	0	2	2
Central	21	2	0	11	13
Anuradhapura	8	1	0	6	3
Polonnaruwa	28	0	3	13	17
North Central	36	1	3	19	20
Kurunegala	45	0	2	26	12
Puttalam	46	2	8	14	20
North Western	91	2	10	40	32
Kegalle	10	2	1	9	2
Ratnapura	24	2	2	8	6
Sabaragamuwa	44	4	4	25	161
Badulla	9	1	0	6	3
Moneragala	5	1	1	2	0
Uva	14	2	1	8	3
Trincomalee	5	1	0	1	3
Batticaloa	31	1	2	8	17
Ampara	21	2	4	11	6
Kalmunai	11	2	0	8	3
Eastern	68	6	6	28	29
Jaffna	8	1	0	6	2
Vavuniya	1	0	1	0	1
Northern	9	1	1	6	3
Sri Lanka	546	38	47	251	229

Source : Anti Leprosy Campaign

18. SURVEILLANCE REPORT ON AEFI 1 ST QUARTER 2011

Surveillance of Adverse Events Following Immunization (AEFI) continued in the first Quarter of 2011 has reached 97.7% of completeness of reports, while 43.8% reports were received on time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Almost 56% districts in the country have found at least one adverse event during a month probably due to good awareness and enthusiasm for surveillance by the health staff in MOH areas. Colombo, Gampaha, Kalutara, Galle, Hambantota, Matara, Kilinochchi, Mannar, Vavuniya, Ampara, Trincomalee, Puttalam, Anuradhapura, Polonnaruwa, Monaragala were able to send all reports, for Sri Lanka it was 97.7%. The completeness for Rathnapura (98.1%), Kandy (97.2%) and Matale (97.2%) needs to be improved further. Best timeliness was reported from Hambantota district (80.6%) followed by Vavuniya (75%). (Table 14)

Highest percentage of nil reports were received from Mannar (100%) and Mullativu districts (90%), followed by Kilinochchi district (83.3%) which is much higher than the Sri Lanka average (47.1%) indicating the need for more attention for surveillance. The lowest percentage (16.7%) of such returns received was from the Hambantota district, followed by Gampaha district (17.8%).

Highest rate (403.3 per 100,000 immunizations) of AEFI was reported from the Jaffna district, which are 173 cases of AEFI. Four deaths were reported in the first quarter of 2011. All were following Pentavalent vaccine. Causality assessment done by the national expert committee ruled out any vaccine reactions and categorized all these deaths as coincidental events following immunization. The highest number (560) and rate of AEFI (652.4 per 100,000 doses administered) were reported against DPT vaccine followed by Rubella (346.8 per 100,000 immunization administered) and Pentavalent vaccine (194.1 per 100,000 doses administered). Notably, the first dose of Pentavalent has given more AEFI than 2nd or 3rd doses of the vaccine. High fever (466), Allergic reaction (357), nodule (138) and severe local reactions (102) are the leading AEFI reported. Highest number of fever cases reported were following Pentavalent (230 cases: 87.8 per 100,000 doses administered) and DPT (180 cases: 209.6 per 100,000 doses administered) vaccines. For allergic reactions, it was largely due to DTP (87 cases; 101 per 100,000 doses administered), JE (86 cases: 63.4 per 100,000 doses administered), Pentavalent (77 cases; 29.4 per 100,000 doses administered) and MR (38 cases; 45.6 per 100,000 doses administered). All the reported antigen specific AEFI rates are much less than those reported by either manufacturers or available in medical literature. The number and rates of reported different AEFI against different vaccines are given in table 15.

Table 14

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVISIONS - 1ST QUARTER 2011

RDHS Division	(%) Completeness	(%) Timeliness	(%) "Nil" Returns	Reported AEFI	
				Number	Rate
Colombo	100.0	28.6	19.0	124	92.5
Gampaha	100.0	62.2	17.8	126	93.3
Kalutara	100.0	25.0	36.1	74	83.1
Kandy	97.2	45.7	41.4	94	110.3
Matale	97.2	74.3	25.7	75	193.1
Nuwara Eliya	94.9	40.5	64.9	17	36.2
Galle	100.0	38.6	56.1	48	70.2
Hambantota	100.0	80.6	16.7	92	213.2
Matara	100.0	64.7	70.6	25	47.0
Jaffna	97.0	59.4	37.5	173	403.3
Kilinochchi	100.0	58.3	83.3	2	19.8
Mannar	100.0	33.3	100.0	0	0.0
Vavuniya	100.0	75.0	58.3	10	70.6
Mullativu	83.3	20.0	90.0	11	250.1
Batticaloa	92.6	23.1	64.1	33	81.4
Ampara	100.0	19.0	61.9	9	48.9
Trincomalee	100.0	30.3	72.7	10	30.4
Kurunegala	94.2	33.8	35.4	129	113.6
Puttalam	100.0	33.3	18.5	69	113.3
Anuradhapura	100.0	38.6	40.4	94	125.9
Polonnaruwa	100.0	19.0	61.9	20	67.3
Badulla	93.3	54.8	50.0	35	66.6
Moneragala	100.0	42.4	51.5	42	123.7
Ratnapura	98.1	32.1	64.2	41	50.5
Kegalle	97.0	62.5	18.8	77	151.9
Kalmunai	94.9	37.8	67.6	18	51.1
Sri Lanka	97.7	43.8	47.1	1448	103.7

* Rate Per 100,000 immunizations

Table 15

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

Vaccine	Seizure	Allergic Reaction	Injection Site Abscess	Severe Local Reactions	High Fever	Lymphadenitis	HHE	Meningitis	Nodule	Arthralgia	Toxic Shock Syndrome	Persistent Screaming	Others	Total	Rate/ 100,000 dosed
BCG	0	0	1	0	0	1	0	0	0	0	0	0	1	3	3.9
DPT	44	87	30	54	180	0	0	0	73	2	0	2	88	560	652.4
Penta	23	77	9	30	230	0	9	3	59	1	1	19	47	508	194.1
Penta 1 st	13	42	6	13	122	0	6	1	23	1	1	12	20	260	301.8
Penta 2 nd	2	19	2	12	50	0	1	0	22	0	0	5	13	126	140.7
Penta 3 rd	8	16	1	5	58	0	2	2	14	0	0	2	14	122	141.6
OPV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Measles	8	16	1	0	17	0	0	0	0	0	0	1	4	47	53.6
DT	2	13	1	6	14	0	1	0	5	2	0	0	15	59	71.3
TT	0	3	0	1	1	0	0	0	0	0	0	0	5	10	12.1
JE	14	86	1	5	19	0	1	0	0	0	0	0	7	133	98.2
aTd	0	6	0	0	1	0	0	0	0	0	0	0	24	31	53.3
MR	1	38	1	6	2	0	0	0	0	0	0	0	0	48	57.4
Rubella	0	24	0	0	0	0	0	0	0	0	0	0	8	32	346.8
H1N1	2	7	0	0	2	0	1	0	0	0	0	0	4	16	
Total	94	357	44	102	466	1	12	3	138	5	1	22	203	1447	103.7

19. SEXUALLY TRANSMITTED DISEASES

Table 16

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA* 1ST QUARTER 2011

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	14	32	18	14	32	
AIDS	5	2	7	5	2	7	
	Early Syphilis ²	36	17	53	36	17	53
Syphilis	Late Syphilis ³	60	45	105	60	45	105
	Congenital Syphilis ⁴	0	0	0	0	0	0
Gonorrhoea ⁵		39	19	58	39	19	58
Ophthalmia Neonatorum ⁶		0	0	0	0	0	0
Non specific cervicitis/urethritis		131	268	399	131	268	399
Chlamydial Infection		0	0	0	0	0	0
Genital Herpes		248	352	600	248	352	600
Genital Warts		240	146	386	240	146	386
Chancroid		0	0	0	0	0	0
Trichomoniasis		3	24	27	3	24	27
Candidiasis		246	392	638	246	392	638
Bacterial Vaginosis		0	242	242	0	242	242
Other sexually transmitted diseases ⁷		130	48	178	130	48	178
Non STI/Uncertain		-	-	-	-	-	-

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

** - Includes adjustments for revised diagnosis, reporting delays or any other amendments

¹ - Includes AIDS cases

² - Diagnosed within 2 years of infection and considered to be infectious

³ - Diagnosed after 2 years of infection and considered to be non-infectious

⁴ - Includes both early and late cases

⁵ - Includes presumptive Gonorrhoea

⁶ - Includes both gonococcal and chlamydial conjunctivitis in neonatal period

⁷ - Includes Lympho granuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.

20. BACTERIOLOGY REPORT –1ST QUARTER 2011 –MEDICAL RESEARCH INSTITUTE

Table 17

	Jan	Feb	Mar
(A) CHOLERA			
No. of stool specimens Examined	10	51	2
El Tor Cholera	-	-	-
Ogawa	-	-	-
Inaba	-	-	-
Cholera 0139	-	-	-
(B) SALMONELLA			
Blood– No. Examined	40	19	24
S.typhi	-	-	-
S.paratyphi A	-	-	1
Stools—No. examined	37	68	34
S.typhi	-	-	-
S.paratyphi A	1	-	-
Others	2	-	-
(C) SHIGELLA			
No. Examined	37	68	34
Sh.flexneri 1	-	-	-
Sh.flexneri 2	-	-	-
Sh.flexneri 3	-	-	-
Sh.flexneri 4	-	-	-
Sh.flexneri 5	-	-	-
Sh.flexneri 6	-	-	-
Sh. sonnei	-	-	-
(D) ENTEROPATHOGENIC E.COLI			
Stool - No.Examined	5	5	1
No. of +ve	-	-	-
(E) CAMPYLOBACTER			
Stool - No.Examined	61	35	78
No. Positive	1	1	2
(F) SPECIAL TESTS			
Clinical	14	9	6
S. Typhi	1	-	1
S. Paratyphi A	1	1	1
Other Salmonella	1	2	2

21. SURVEILLANCE OF MENINGITIS

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 1st quarter 2011, 250 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this 182 cases were clinically confirmed by the Public Health inspectors during their field investigations. Highest number of clinically confirmed meningitis cases were reported from the Kurunegala district (35), followed by Ratnapura (31) and Gampaha (28) districts.

Twenty five percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 30% belonged to the age group 1-4 years and 19% belonged to age group 5 – 14 years. Fifty six percent of the clinically confirmed cases were males and 43% were females.

22 INFLUENZA SURVEILLANCE

Pandemic/Avian Influenza preparedness activities began in the country in 2005 following global Avian/Pandemic preparedness programme and influenza surveillance in animals and humans were initiated by the Department of Animal Production and Health (DAPH) of Ministry of Livestock Development and Epidemiology Unit of Ministry of Health respectively. These activities are supervised by the National Technical Committee for Avian/Pandemic Influenza Preparedness. This report summarizes progress of influenza surveillance activities for the 1st quarter 2011, January to March.

Human Influenza surveillance

ILI Surveillance –Laboratory Component

Under ILI laboratory surveillance a total of 435 samples were received from hospitals identified as sentinel surveillance sites for Avian/Pandemic Influenza for the said quarter. There were 117 samples in January, 166 in February and 152 in March. Lady Ridgeway Children's Hospital (LRH) sent in the highest number of samples (66) with North Colombo Teaching Hospital (NCTH) and General hospital Nuwara Eliya sending in 44 and 43 samples respectively. However Infectious Diseases Hospital (IDH) and GH Badulla failed to send any samples within the quarter. Sri Jayawardanapura General Hospital (SJGH) had sent 3 samples. There were 5 samples from GH Vavuniya and 1 from TH Jaffna. Table 18 shows the performance of sentinel hospitals in the laboratory component of the surveillance programme for this quarter.

These samples were processed in the Medical Research Institute (MRI) which is the National Influenza Centre (NIC) for the country. Pandemic A H1N1 was the predominant influenza viral strain while the second wave of the H1N1 pandemic prevailed during the month of January but it was replaced by Influenza B which became the predominant seasonal influenza viral strain by February. There were 12 Influenza B cases in February compared to 5 pandemic H1N1 cases. By March both Pandemic H1N1 and Influenza B prevailed as seasonal influenza viruses with 3 cases each. Table 19 below shows the results yielded for Influenza samples in the 1st quarter 2011 at MRI.

ILI Surveillance – Epidemiological Component

In the sentinel hospitals ILI patients are diagnosed by the medical officers of the Out Patients' Departments (OPD) on the surveillance case definitions adopted. ICNO would collect information on the number of total OPD attendees and the number with ILI at the end of each day and would consolidate this information into a weekly return that is sent to the Epidemiology Unit.

In January 2011 there were 2712 ILI cases visiting OPD of sentinel hospitals and 4372 in February and 4889 in March.

The following graph in figure 1 shows the distribution of ILI attendance in OPD by month 2008-2011. In 2009 the country suffered from the Influenza A H1N1 pandemic and in 2010 its second wave was reported which ended by the beginning of 2011. Year 2008 was a non-pandemic year.

Although ILI data are underestimated as few of the sentinel hospitals had sent in these data, the trend of disease activity can be clearly observed over the years.

The trend for 2008 shows the two influenza peaks within a year with very low influenza activity in between. The first peak occurs in the warmer months from April to June and the second peak occurs towards the end of the year during the colder months of November – January. This trend was seen distorted in 2009 where only a large first peak was seen. ILI surveillance was totally disrupted during the pandemic period which began in October and therefore the second much higher peak was not evident. In 2010 special measures were taken to sustain the OPD ILI surveillance during the second pandemic wave and a second much higher peak was seen in addition to the smaller first peak. The trend within the first quarter 2011 corresponded with the expected flu' pattern in the country showing the beginning of the first peak in the year.

Severe Acute Respiratory Infections (SARI) Surveillance

SARI surveillance was initially established in 3 hospitals in the country; Lady Ridgeway Children’s Hospital (LRH), Colombo South Teaching Hospital (CSTH) and Teaching Hospital Peradeniya. They are expected to send up to 20 respiratory samples per month from inward patients admitted with severe acute respiratory tract infections. For the epidemiology component of this activity ICNO with the help of surveillance officers of the programme stationed within these hospitals, would collect the information on the number of total inward patients in relevant wards and the number with SARI, daily and consolidate this information into a weekly return that is sent to the Epidemiology Unit.

SARI Surveillance – Lab surveillance

There were a total of 227 samples from SARI patients in above 3 hospitals received by the MRI for the 1st quarter 2011. In January there were 109 samples. For the whole quarter LRH had sent in the highest (142) for the quarter with 66 from CSTH. Table 20 below shows the performance of 3 SARI sentinel hospitals in the laboratory component of the SARI surveillance for this quarter.

Along with ILI samples, these SARI samples are processed at the NIC, MRI. Similar to ILI results, Pandemic A H1N1 was the predominant influenza viral strain among SARI patients while the second wave of the H1N1 pandemic prevailed during the month of January but it was replaced by Influenza B which became the predominant seasonal influenza viral strain by February. There were 3 Influenza B cases in February compared to a single pandemic H1N1 case. In March no Pandemic H1N1 and Influenza B were seen. Table 21 below shows the results yielded for SARI samples in the 1st quarter 2011 at MRI.

SARI Surveillance – Epidemiological surveillance

There were total of 167 patients treated inward for severe respiratory tract infections in the said 3 hospitals. The highest number (67) was reported from CSTH and LRH and TH Peradeniya reported 51 and 49 respectively. The number of patients reported by January (112) decreased by February and March indicating the waning second wave of the H1N1 pandemic. Table 22 below shows the distribution of SARI patients in the 3 hospitals by month in the 1st quarter 2011.

Animal Influenza Surveillance

This is carried out by the Department of Animal Production and Health (DAPH) of the Ministry of Livestock Development who is the partner of the Ministry of Health in Avian/Pandemic Preparedness activities. Under routine animal influenza surveillance, pooled and serum samples are collected randomly from backyard farms, industrial farms and hot spots for migratory birds. These also include identified special targets such as wet markets, processing plants, parent stocks, pet birds and ducks. Any unusual bird deaths or disease outbreaks are also investigated. Sampling is mainly carried out by the Veterinary Investigation Officers (VIO). These samples are tested for Highly Pathogenic Avian Influenza (HPAI) viral strains at their laboratory, Veterinary Research Laboratory (VRI).

In the 1st quarter 2011 there were 459 pooled samples and 852 serum samples collected and tested at the VRI for HPAI. None of the samples had yielded HPAI. The following table 23 shows the number of samples collected by month and the districts they were collected from.

Figure 1: Distribution of OPD ILI visits by month 2008 - 2011

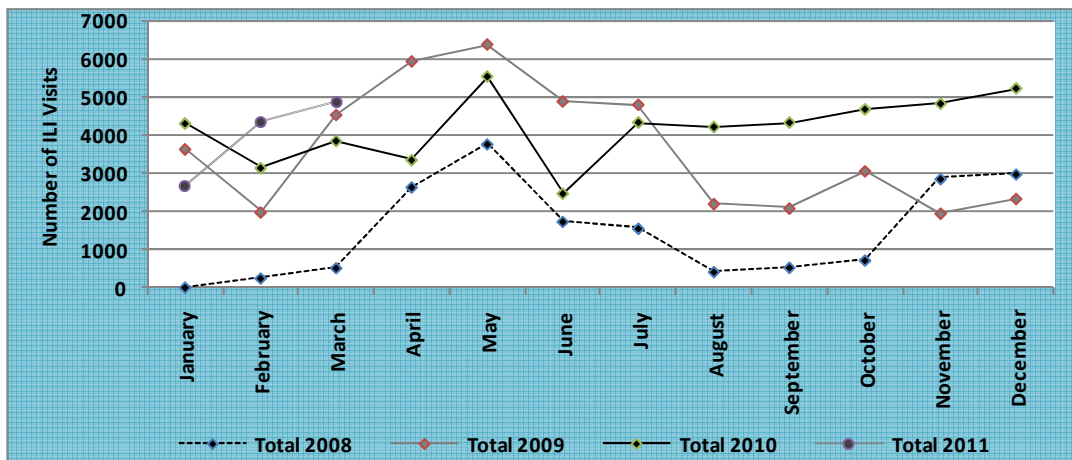


Table 18: performance of sentinel hospitals in the laboratory component of the surveillance programme 1st Quarter 2011

Institution	Jan	Feb	Mar	Total
LRH	19	20	27	66
NHSL	0	11	7	18
CSTH	2	6	5	13
IDH	0	0	0	0
SJGH	0	3	0	3
NCTH	20	22	2	44
TH Peradeniya	0	6	12	18
GH Nuwara Eliya	13	20	10	43
TH Karapitiya	1	13	5	19
GH Matara	0	5	11	16
TH Jaffna	1	0	0	1
GH Vavuniya	5	0	0	5
GH Ampara	0	0	10	10
TH Batticaloa	1	10	16	27
TH Kurunegala	13	10	10	33
GH Chilaw	6	16	15	37
TH Anuradhapura	11	6	6	23
GH Polonnaruwa	17	12	11	40
GH Badulla	0	0	0	0
GH Ratnapura	8	6	5	19
Total	117	166	152	435

Table 19: Types of Respiratory Viruses Isolated in ILI samples – 1st Quarter 2011

MONTH	TO-TAL	IN-FLU B	PA (H1N1)	H3N2	A UN-TYPED
Jan	117	5	13	0	0
Feb	166	12	5	0	3
Mar	152	3	3	0	1

Table 20: performance of sentinel hospitals in the laboratory component of the SARI surveillance - 1st Quarter 2011

Institution	Jan	Feb	Mar	Total
LRH	47	49	46	142
CSTH	49	12	5	66
TH Peradeniya	13	4	2	19
Total	109	65	53	227

Table 21: Types of Respiratory Viruses Isolated in SARI Samples - 1st Quarter 2011

MONTH	TO-TAL	IN-FLU B	PA (H1N1)	H3N2	A UN-TYPED
Jan	109	4	9	0	1
Feb	65	3	1	0	0
Mar	53	0	0	0	1

Table 22: Distribution of SARI patients by month – 1st Quarter 2011

Institution	Jan	Feb	Mar	Total
LRH	20	13	18	51
CSTH	43	18	6	67
TH Peradeniya	49	0	0	49
Total	112	31	24	167

Table 23: Animal samples collected by month and district – 1st Quarter 2011

Month	No. of samples		Districts samples were collected from
	Pool ed	Se-rum	
January	137	163	Gampaha, Colombo, Puttalam, Badulla, Mulativu, Kurunegala
February	216	257	Gampaha, Colombo, Jaffna, Puttalam, Kurunegala, Kandy, Hambantota, Badulla
March	106	432	Gampaha, Colombo, Matale, Polonnaruwa, Anuradhapura, Ampara, Kegalle, Kandy

HUMAN RABIES SURVEILLANCE REPORT – 2010

Human rabies is a notifiable disease in Sri Lanka. The number of human rabies deaths declined from 133 in 1991 to 50 in 2010 (Table 24). All Fifty (50) cases of human rabies were reported through the routine notification system and confirmed as human rabies clinically or by laboratory data for year 2010 (Table 24). The distribution of notification and confirmed cases of human rabies cases by Regional Director of Health Services divisions is given in Table 25. In 2010, the highest number of 6 cases was notified from districts of Gampaha and Batticaloa..

Age and Sex Distribution

The age distribution of investigated / confirmed cases of rabies for the year 2010 is given in Table 26. The highest percentage of cases 29 (58%) occurred in the age group 20-59 years. Zero cases were reported in children less than 1 year of age. A similar pattern of age distribution was shown during 2001 – 2009, where the age group 20-59 years was the most affected. Reported male: female ratio of 4:1 (approximately) highlights the increased susceptibility of males. (Table 27)

Exposure Information

According to data analyzed through confirmed rabies cases 36% (18 cases) of human rabies were due to stray dogs. The dog (82%) is the main reservoir (41 cases) as well as the transmitter of rabies in the investigated cases (Tables 28 & 29).

Since the National Rabies Control Programme (NRCP) commenced in 1975, animal vaccination and elimination activities were strengthened to a greater extent; dog vaccination has increased significantly from 1975 to 2009 (Table 30). It is important to maintain the dog vaccination strategy as a control measure. At least around one third of human rabies cases (Table 28) were due to household / neighbours' 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 the animal too. However, partial and ad hoc dog vaccination practice 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 had not been vaccinated completely and thereby not protected. Though the public support for the dog vaccination is remarkable, there is a tendency of resistance for dog elimination, particularly from the animal lovers. Similar to dog vaccination, stray dog elimination has increased steadily from 1975 to 2001. But since 2006 onwards local government

authorities have completely stopped the dog elimination activities.

Table 31 shows the data on human brains tested for rabies virus at the laboratory of the Medical Research Institute, Colombo.

Rabies Control Programme

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.

The Public Health Veterinary Services (PHVS) Unit is the body to control and prevent human and animal rabies in the country. National Programme objectives of the PHVS are to ensure protection for those exposed to suspected rabies infection, to ensure protection for those who are at a higher risk of contacting rabies, to establish herd immunity in animal reservoirs with special emphasis on dogs, to control the population of animal reservoirs with special emphasis on dogs through appropriate methods and remove all rabies suspected dogs humanely.

Major activities coming under the above objectives are:

- Provision of Post Exposure Treatment for rabid and rabies suspected animal bites
- Mass immunization of dogs against rabies
- Mass Animal Birth Control programmes
- Promotion of multi sectoral co-operation and community participation with public awareness programmes.
- Training of all stakeholders of rabies control programme
- Research and surveys
- Monitoring and evaluation of ongoing rabies control activities
- Strengthening of the Rabies surveillance system
- Enforcement of rabies control legislation

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 the hospital 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 24: Mortality and Notification of Human rabies cases - 1991- 2010

Year	No. of suspected cases notified \square	Cases Confirmed	
		Number	*Rate
1991	133	133	0.79
1992	112	112	0.64
1993	104	98	0.55
1994	122	105	0.58
1995	178	124	0.68
1996	195	110	0.59
1997	150	135	0.72
1998	123	111	0.59
1999	194	110	0.58
2000	132	109	0.56
2001	105	83	0.43
2002	78	64	0.33
2003	86	76	0.39
2004	97	97	0.5
2005	55	55	0.3
2006	74	68	0.37
2007	55	55	0.27
2008	51	51	0.27
2009	58	58	0.28
2010	50	50	0.24

Source –Epidemiology Unit * Rate per 100,000 population

Table 25: Number of confirmed cases of Human rabies by RDHS divisions– 2010

RDHS DIVISION	Number of Cases confirmed	Rate / 100,000 Population
Anuradhapura	4	0.49
Batticaloa	6	1.02
Colombo	2	0.08
Galle	5	0.46
Gampaha	6	0.24
Jaffna	2	0.32
Kalmunai	1	0.23
Kalutara	3	0.25
Kandy	1	0.07
Kilinochchi	2	5.71
Kurunegala	3	0.19
Mannar	1	1.05
Matale	1	0.21
Moneragala	4	0.86
Mulaitivu	1	4.94
Puttalam	1	0.12
Ratnapura	3	0.27
Trincomalee	2	0.49
Vavuniya	2	0.66
SRI LANKA	50	0.24

Source: Epidemiology Unit (H399 & H411 and Special Investigation forms).

Table 26: Age distribution of confirmed Human Rabies Cases, 2001-2010

Age Group	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	0	0	0	0	0	0	0	0	0	0
1 - 4 years	8	2	6	3	0	2	3	3	1	2
5 - 19 years	17	15	19	17	11	18	6	9	9	7
20 - 59 years	31	29	48	46	30	32	35	31	38	29
60 & Over	10	10	3	16	9	16	11	8	10	12

Source – Epidemiology Unit

Table 27: Sex distribution of confirmed Human Rabies Cases, 2001 - 2010

Sex	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	51	38	58	59	38	54	37	40	42	39
Female	15	18	18	22	12	14	18	11	16	11

Source – Epidemiology Unit

Table 28: Distribution of Human Rabies Cases by nature of Animal, 2001 – 2010

Type of animal	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Household Pet	34	29	18	13	11	13	10	13	8	15
Neighbors' Pet	6	4	9	7	8	11	4	5	3	6
Stray	16	18	35	36	24	28	21	24	8	18
Unknown	10	5	14	24	7	16	20	9	39	11

Source – Epidemiology Unit

Table 29: Distribution of Human Rabies Cases by type of animal, 2001 – 2010

Animal	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Dog	49	36	63	69	42	58	45	43	48	41
Cat	5	5	4	2	1	1	4	2	3	3
Other	3	15	4	2	0	2	0	4	1	0
unknown	9	6	5	7	7	7	6	2	6	6

Source – Epidemiology Unit

Table 30: Rabies control activities and number of human deaths from Rabies, 1975 – 2010

Year	Vaccination of dogs	Elimination of dogs	Animal brains 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	1.4
1985	268,561	58,238	344	55.5	113	0.7
1990	412,586	63,233	963	70.2	154	0.9
1995	452,828	106,862	1,217	69.7	124	0.7
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
2006	964,242	12,091	1413	57.9	68	0.3
2007	1037617	-	1412	53.3	55	0.3
2008	1103258	-	1627	53.1	51	0.3
2009	1189157	-	1479	(864) 57.2	58	0.3
2010	972541	-	1534	(699) 45.3	50	0.2

Sources: Rabies Control Programme (PHVS), Medical Research Institute, Epidemiology Unit

* Per 100,000 population # includes human brains

Table 31: Human brains tested for suspected Rabies deaths, 2003-2010

Year	No. brains tested	No. brain positive	positive Rate (%)
2003	33	15	45
2004	42	24	57
2005	28	20	71
2006	44	31	70
2007	38	32	84
2008	43	30	70
2009	48	44	91
2010	42	38	90

Table 32

SUMMARY OF NOTIFIABLE DISEASES - 1st quarter 2011

Health Region	Dysentery	Encephalitis	Enteric Fever	Food Poisoning	Human Rabies	Leptospirosis	Measles	Simple continued Fever	Tetanus	Typhus Fever	Viral Hepatitis	Whooping Cough	Dengue Fever/ Dengue Haemorrhagic Fever	Rubella	Chickenpox	Mumps	Meningitis	Leishmaniasis
Colombo	63	2	49	4	1	102	6	0	0	4	14	2	1041	0	111	45	12	1
Gampaha	30	6	17	8	2	205	2	2	0	11	24	0	380	0	84	18	28	0
Kalutara	41	2	22	6	0	63	2	0	0	0	2	0	157	0	103	15	17	0
Kandy	118	3	11	23	0	35	1	0	0	28	18	0	86	1	65	15	8	1
Matale	42	2	7	3	0	57	1	3	1	6	4	0	44	0	22	11	4	4
Nuwara-Eliya	70	1	14	12	0	15	4	0	0	26	3	0	20	0	40	21	2	0
Galle	25	1	2	5	0	31	1	3	0	12	7	0	56	0	82	21	15	0
Hambantota	11	3	1	6	0	156	0	10	0	19	0	0	51	0	11	10	6	45
Matara	21	1	5	1	1	103	0	3	0	21	5	0	67	0	73	83	8	18
Jaffna	49	2	88	9	1	2	0	2	1	149	13	0	116	0	31	16	3	0
Kilinochchi	4	2	4	0	0	1	0	0	0	4	1	1	16	0	1	0	3	0
Mannar	4	0	8	0	0	11	0	0	0	27	0	0	17	0	0	0	1	0
Vavuniya	11	7	5	2	0	31	0	0	0	2	0	0	31	0	5	0	4	0
Mullaitivu	12	1	1	0	0	3	0	1	0	0	1	0	5	0	0	0	0	0
Batticaloa	114	2	3	7	1	10	0	0	2	1	1	1	176	0	12	2	8	0
Ampara	33	0	5	20	0	32	0	0	0	0	4	2	19	0	15	50	0	2
Trincomalee	139	1	1	5	0	49	0	0	0	1	3	0	49	0	30	4	5	1
Kurunegala	83	4	37	24	0	1022	3	3	0	31	12	0	140	1	169	105	51	9
Puttalam	59	0	6	1	1	43	2	0	0	6	2	5	185	0	38	4	6	0
Anuradhapura	39	1	2	8	0	171	2	0	1	11	4	0	53	0	68	14	16	62
Polonnaruwa	19	1	3	8	0	38	0	0	0	0	4	0	63	0	70	14	5	30
Badulla	38	2	16	3	0	19	0	5	1	8	14	0	58	0	24	10	3	0
Moneragala	21	1	12	4	0	41	0	9	0	24	22	0	56	0	15	17	2	0
Ratnapura	127	3	13	6	0	105	0	7	0	14	16	1	125	0	82	13	31	4
Kegalle	31	6	20	7	0	88	1	1	0	8	24	0	67	0	116	67	11	0
Kalmunai	107	0	0	1	0	3	0	0	0	1	1	0	10	0	25	0	1	0
Total	1311	54	352	173	7	2436	25	49	6	414	199	12	3088	2	1292	555	250	177

No polio cases. (from AFP surveillance system).

The Bulletin is compiled and distributed by the:

Epidemiology Unit, Ministry of Health, 231, De Saram Place, Colombo 10.
Telephone : 2695112, FAX No : 2696583, E-mail: chepid@sitnet.lk

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:

The Editor, Quarterly Epidemiological Bulletin
 Epidemiology Unit, P.O. BOX 1567, Colombo, SRI LANKA.

ON STATE SERVICE

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