



# Epidemiological Bulletin SRI LANKA

# First Quarter

2007

# Epidemiology Unit Ministry of Health

http://www.epid.gov.lk

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#### 1. POLIOMYELITIS

Twenty three (23) Acute Flaccid Paralysis cases were notified to the Epidemiology Unit during the  $1^{st}$  quarter 2007. In comparison during the  $1^{st}$ quarter of 2006 and 2005, 42 and 35 AFP cases were reported respectively. The reported number of cases at completion of the  $1^{st}$  quarter 2007 does not reach the expected number of AFP cases to be reported at this point which is 27 according to WHO surveillance criteria. One hundred and six (106) 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  $1^{st}$  quarter 2007, the non-polio AFP rate was 1.7 per 100,000.

#### **Notification of AFP Cases from Hospitals**

Lady Ridgeway Children's Hospital (LRH), Colombo has reported the majority of the cases (6, i.e.26%) 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 5 AFP cases for the quarter and accounted for another 22% of the caseload. Other hospitals that notified the AFP cases in the 1<sup>st</sup> quarter are as follows:

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Hospital	No. of cases
LRH	6
TH Peradeniya	5
TH Kandy	4
GH Ratnapura	2
National Hospital Sri Lanka	2
TH Kurunegala	1
GH Chilaw	1
DH Vavuniya	1
TH Colombo South	1

.. . .

# Distribution of AFP Cases by Provinces, Districts & MOH Areas

Kandy district in the Central Province had reported the highest number of AFP cases (6 i.e.26%) for the quarter. Gampaha of Western Province and Ratnapura of Sabaragamuwa Province reported 3 cases (13%) each. From the Northern Province Vavuniya district and Batticaloa district in the Eastern Province reported 1 AFP case each within the quarter. The complete list of distribution of AFP cases according to the province, district and MOH area is given in Table 1.

Table	1.
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# GEOGRAPHICAL DISTRIBUTION OF AFP CASES $\mathbf{1}^{\text{ST}}$ QUARTER 2006

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Moratuwa	1
	Gampaha	Mirigama	1
		Katana	1
		Kelaniya	1
	Kalutara	Horana	1
		Mathugama	1
Southern	Galle	Niyagama	1
Central	Kandy	Kurunduwatta	2
		MC Area	1
		Kadugannawa	1
		Thalatuoya	1
		Kundasale	1
	Nuwara Eliya	Walapane	1
		Kothmale	1
Sabara	Ratnapura	Balangoda	1
		Kalawana	1
		Godakawela	1
North Western	Kurunegala	Galgamuwa	1
	Puttalam	Puttalam	1
Eastern	Batticoloa	Batticoloa	1
North Central	Anuradhapura	Kekirawa	1
Northern	Vavuniya	Vavuniya	1

#### Seasonal Distribution of AFP Cases

During the 1<sup>st</sup> quarter 2007, the highest number of AFP cases were reported in the month of January (10 cases i.e.43%). In February and March, 4 cases (18%) and 9 cases (39%) each were reported respectively.

#### Distribution of AFP Cases by Age and Sex

Majority of AFP cases (9 i.e.39%) reported in the  $1^{st}$  quarter 2007 were among those who were between 10 - 14 years of age. In comparison the majority of the AFP cases (35%) reported in the  $1^{st}$  quarter 2006 were in the 5 - 9 years age group. Five children belonged to 1-4 year age group and only 1 child was aged less than 1 year.

Over half (52%) of the AFP cases (12) in the  $1^{st}$  quarter 2007 were boys. A similar trend was observed in the  $1^{st}$  quarter 2006 when 55% of the cases reported were males. However within

the age groups considered, majority of the AFP cases were females except among 1-4 year olds where all 5 cases reported were males. This is in contrast to the trend observed in  $1^{st}$  quarter 2006 where the majority of the cases were males in 3 of the 4 age groups considered. Table 2 shows the age and sex distribution in  $1^{st}$  quarter 2007.

#### Table 2.

DISTRIBUTION OF AFP CASES BY AGE AND SEX  $1^{\rm ST}{\rm QUARTER}\ 2007$ 

Age Group	:	Total	
	Male	Female	
<1 year old	0	1	1
1-4 year old	5	0	5
5-9 year old	3	5	8
10-15 year old	4	5	9
Total	12	11	23

#### Laboratory Surveillance of AFP Cases

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

All 23 AFP cases reported in the 1<sup>st</sup> quarter 2007 had at least one timely stool sample sent to MRI for polio virology. Medical Research Institute received two timely stool samples from 19 cases in this quarter for polio virology.

#### 2. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 1<sup>st</sup> quarter 2007 or the corresponding quarter of 2006.

#### 3. TETANUS

During the 1<sup>st</sup> quarter 2007, 9 tetanus cases were notified to the Epidemiology Unit. This is in comparison to 8 cases reported during the previous quarter and 11 cases reported during the corresponding quarter of 2006.

Three cases notified during the current quarter, were investigated and confirmed as tetanus (two cases from Kurunegala district and 1 case from Vavuniya district) and one case had been fatal. All three patients were adult males.

A case of Neonatal tetanus was notified from Batticaloa district (MOH area Vakarai) but it was not investigated.

#### 4. MEASLES

During the 1<sup>st</sup> quarter 2007, 17 cases of measles were notified to the Epidemiology Unit compared to 9 cases notified during the previous quarter and 7 cases in the corresponding quarter of last year.

Seven cases notified during the 1<sup>st</sup> quarter 2007, were investigated and 04 were confirmed as measles (Table 3).

#### Table 3

1<sup>st</sup> Quarter

# SELECTED CHARACTERISTICS OF CONFIRMED CASES OF MEASLES – 1<sup>ST</sup> QUARTER 2007 .

(N = 04)

(11 - 04)		
Sex	Male	1
	Female	3
Age group	< 1	0
	1-5	0
	>5	4*
District	Gampaha	2
	Kurunegala	1
	Galle	1
mmunization status	Immunized	0
	Non immunized	4

\*adults over 20 years

#### 5. LEPTOSPIROSIS

In the 1<sup>st</sup> quarter 2007, 418 leptospirosis cases were notified to the Epidemiology Unit compared to 509 cases in the previous quarter (4<sup>th</sup>quarter 2006) and 313 cases during the corresponding quarter of the previous year. Among the reported cases 298 were confirmed as leptospirosis. This includes 187 cases and 1 death reported from the 15 hospitals identified as sentinel sites in the high endemic areas.

Out of the total cases reported during this quarter, majority were from the districts of Gampaha (19.8%), Matara (12.4%), Colombo (9%), Kalutara(9%) and Kegalle (7.2%). MOH area Gampaha reported the highest number of cases (22) accounting for 5% of the total case load.

Analysis of special investigations received from sentinel sites showed that around 70% of them were in the age group 20-44 years and male female ratio was 1: 17.

#### 6. HUMAN RABIES

Sixteen (16) cases of human rabies were notified to the Epidemiology Unit in the 1<sup>st</sup> quarter 2007, compared to 26 cases in the previous quarter and 18 cases in the corresponding quarter of year 2006.

#### Animal Rabies

During the quarter 183 dogs were reported positive for rabies compared to 189 in the previous quarter and 175 in the corresponding quarter of 2006.

#### Rabies Control Activities\*

**Dog vaccination** – A total of 275425 dogs were immunized during the  $1^{st}$  quarter 2007 when compared to 236571 in the previous quarter and 208377 in the corresponding quarter of last year.

**Stray dog elimination** – A total of 178 dogs were destroyed during the  $1^{st}$  quarter 2007 when compared to 4039 in the previous quarter and 6786 in the corresponding quarter of last year.

**Birth Control Activities**— Depo Provera injection was administered to 21701 female dogs during the quarter compared to 7104 in the corresponding quarter of last year.

\*Source - Director/PHVS

#### 7. ENTERIC FEVER

In the 1<sup>st</sup> quarter 2007, a total of 606 cases of enteric fever were notified to the Epidemiology Unit, compared to 453 cases in the previous quarter and 650 cases in the corresponding quarter of 2006. Jaffna district reported the highest number of cases (240) accounting for 40% of the case load (Table 22).

The MOH areas MC Jaffna (83), Telippalai (44), Manipay (38) and Point Pedro (30) notified a large number of cases during the quarter under review.

#### 8. VIRAL HEPATITIS

In the 1<sup>st</sup> quarter 2007, 750 cases of viral hepatitis were reported to the Epidemiology Unit, compared to 635 cases in the previous quarter and 796 cases in the corresponding quarter of 2005. Among the reported cases, 307 were investigated and confirmed as viral hepatitis. RDHS area Batticaloa notified the highest number of cases (128) accounting for 17% of the total case load and the MOH areas Batticaloa (47), Uva Paranagama (32 cases), Walapone (25 cases) and Kothmale (22 cases) reported the highest number of cases.

#### 9. DYSENTERY

In the 1<sup>st</sup> quarter 2007, 1266 cases of dysentery were notified to the Epidemiology Unit, compared to 2748 cases in the previous quarter and 1523 cases in the corresponding quarter of 2005.

The MOH areas Balangoda(44), Rattota (30),Batticaloa (29) and Ratnapura (26) notified a large number of cases.

#### 10. JAPANESE ENCEPHALITIS (J.E.)

During the  $1^{\rm st}$  quarter 2007 , 66 cases of Encephalitis were reported to the Epidemiology Unit.

Among the reported cases, 29 cases were investigated and 20 were found to be clinically confirmed as JE. One death was reported during the quarter.

This is in comparison to 23 cases and one death reported during the previous quarter and 3 cases and 2 deaths in the corresponding quarter of 2006.

#### 1<sup>st</sup> Quarter

#### Table 4

#### DISTRIBUTION OF JAPANESE ENCEPHALITIS CASES BY RDHS DIVISION— 1<sup>ST</sup> QUARTER 2007

RDHS Area	Cases	Deaths
Gampaha	4	0
Kalutara	1	0
Galle	3	0
Hambantota	1	0
Vavuniya	2	0
Batticaloa	2	1
Anuradhapura	3	0
Polonnaruwa	1	0
Ratnapura	3	0
Total	20	1

#### 11. MALARIA

During the  $1^{st}$  quarter 2007, there was a significant reduction in the incidence of malaria in comparison with the same period of 2006 as seen in Table 6. Distribution of malaria cases by districts is shown in Table 5.

Table 5.

#### RESULTS OF BLOOD SMEAR EXAMINATION - 1<sup>ST</sup> QUARTER 2007

RDHS Division	Blood smears	Positives	P.v.	P.f./ Mixed
Colombo	15968	0	0	0
Gampaha	7644	3	3	0
Kalutara	1898	0	0	0
Kandy	7163	2	2	0
Matale	3304	0	0	0
Nuwara Eliya	30	0	0	0
Galle	106	0	0	0
Matara	3736	0	0	0
Hambantota	9670	1	1	0
Jaffna	29683	0	0	0
Kilinochchi	6402	0	0	0
Mannar	3578	0	0	0
Vavuniya	5601	1	1	0
Mullativu	6355	1	1	0
Batticaloa	24079	4	4	0
Ampara	8559	2	1	1
Trincomalee	19410	28	28	0
Kurunegala	20000	1	1	0
Maho	7615	3	3	0
Puttalam	6702	2	2	0
Anuradhapura	31712	12	11	1
Polonnaruwa	17729	0	0	0
Badulla	5540	0	0	0
Moneragala	13469	0	0	0
Ratnapura	4607	1	1	0
Kegalle	1074	0	0	0
Kalmunai	13839	0	0	0
τοται	275473	61	59	2

P.v.- Plasmodium vivax

P.f.- Plasmodium falciparum

#### Table 6

#### RESULTS OF BLOOD SMEAR EXAMINATION FOR MALARIA PARASITES - 1<sup>ST</sup> QUARTER 2006/2007

	1 <sup>st</sup> quarter 2006	1 <sup>st</sup> quarter 2007
No. of blood smears examined	275,469	275,473
No. of positives	270	61
No. of <u>P. vivax</u>	259	59
No. of <u>P. falciparum</u>	7	2
No. of <u>P. ovale</u>	0	0
No. of mixed infections	4	0
No. of infant positives	1	0
Slide positivity rate (S.P.R.)	0.1%	0.02%
P.v. : P.f. ratio	37:1	29:1
Percentage of infant positives	0.37%	0%

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

During the  $1^{st}$  quarter 2007, 1499 cases of DF/ DHF and 9 deaths were reported (CFR 0.37%) when compared to 3956 cases and 15 deaths (CFR 0.37%) reported during the previous quarter and 2821 cases and 6 deaths (CFR 0.21%) reported during the corresponding quarter of last year.

Table 8 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 1<sup>st</sup> guarter 2007.

During the 1<sup>st</sup> quarter 2007, 29 blood samples were tested using Ig M capture ELISA test and Haemagglutination Inhibition test at the Department of Virology, MRI and 19 samples were confirmed as positive.(Table 7)

#### Table 7.

# DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI – 1<sup>ST</sup> QUARTER 2007

Month	Clinically Suspected	Serologically confirmed
January	22	15
February	06	4
March	01	0
Total	29	19

#### Table 8

#### MORBIDITY AND MORTALITY DUE TO DF/DHF - 1<sup>ST</sup> QUARTER 2007

RDHS Division	Cases (%)	Deaths(%)
Colombo	430 (29)	5 (55)
Gampaha	165 (11)	0
Kalutara	110 (7)	0
Kandy	183 (12)	0
Matale	50 (3)	0
Nuwara Eliya	18 (1)	0
Galle	44 (3)	0
Hambantota	21 (1)	0
Matara	51 (3)	0
Jaffna	8 (0.5)	0
Kilinochchi	0 (0)	0
Mannar	7 (0.5)	0
Vavuniya	10 (0.6)	0
Mullativu	0 (0)	0
Batticaloa	9 (0.6)	0
Ampara	1 (0.06)	0
Trincomalee	30 (2)	0
Kurunegala	120 (8)	1 (11)
Puttalam	60 (4)	1 (11)
Anuradhapura	19 (1)	1 (11)
Polonnaruwa	20 (1)	0
Badulla	13 (1)	1 (11)
Moneragala	6 (0.4)	0
Ratnapura	59 (4)	0
Kegalle	63 (4)	0
Kalmunai	29 (0.1)	0
TOTAL	1499 (100)	9 (100)

#### 12.1. ENTOMOLOGICAL SURVEIL-LANCE 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 1<sup>st</sup> quarter 2007 are given in Table 9.

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

Breteau Index

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

Table 9

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

Area	January		February		March	
	A	В	А	в	A	в
Nugegoda	2.6	2.0	1.7	2.9	3.0	3.0
Maharagama	2.8	8.0	3.5	4.5	0	4.8
Moratuwa	1.3	2.0	5.0	3.5	5.7	3.5
Kaduwela	1.3	8.0	1.0	11.0	3.3	5.3
Piliyandala	0	7.0	0	6.5	0	11.5
Homagama	0	11.0	0	8.6	0	9.0
Kelaniya	7.3	23.5	2.5	9.5	0.6	2.5
Ragama	0	1.3	1.0	5.0	0.8	4.4
Ja-Ela	2.0	3.3	2.0	6.0	2.0	6.0
Wattala	8.7	5.8	1.0	4.0	-	-
Panadura	1.5	6.5	0	4.2	1.0	9.0

(A) = Aedes aegypti(B) = Aedes albopictus Number of premises examined per area = 300

#### 3. TUBERCULOSIS

A total of 1441 tuberculosis patients were registered for 1<sup>st</sup> quarter 2007 by the National Programme for Tuberculosis Control and Chest Diseases. Of this total, 1159 suffered from pulmonary disease, while the balance, 282 patients from non-pulmonary disease. Seven hundred and seventy nine (779) of these patients were bacteriologically confirmed with a bacteriological confirmation rate of 67.2%.

The distribution of tuberculosis patients by dis-

tricts is given in Table 10.

#### **B.C.G.** vaccination

A total of 352869 B.C.G. vaccinations were carried out during the quarter with 97.0% coverage.

Table 10.

# TUBERCULOSIS PATIENTS BY RDHS DIVISIONS – 1<sup>ST</sup>QUARTER 2007

RDHS DIVI- SION	РТВ	ОТВ	Total	+ve	Pulmo- nary TB Direct SS +ve
Colombo	302	57	359	244	80.8
Gampaha	82	16	98	61	74.4
Kalutara	113	36	149	72	63.72
Kandy	78	19	97	38	48.7
Matale	40	21	61	25	62.5
Nuwara Eliya	41	6	47	30	73.2
Galle	36	6	42	26	72.2
Hambantota	24	5	29	13	54.2
Matara	40	9	49	27	67.5
Jaffna	44	19	63	21	47.7
Vavunia	7	4	11	6	85.7
Kilinochchi	1	0	1	1	100.0
Mannar	6	0	6	6	100.0
Mullativu	1	0	1	1	100.0
Ampara	6	2	8	1	16.7
Batticaloa	25	9	34	22	88.0
Trincomalee	24	2	26	7	29.2
Kurunegala	56	8	64	33	58.9
Puttalam	9	3	12	6	66.7
Anuradhapura	25	10	35	20	80.0
Polonnaruwa	10	3	13	5	50.0
Badulla	34	14	48	21	61.8
Monaragala	20	3	23	14	70.0
Kegalle	64	18	82	53	82.8
Ratnapura	30	10	40	28	93.3
Kalmune	41	2	43	15	36.6
Total	1159	282	1441	779	67.2

PTB-Pulmonary Tuberculosis

OTB-Other Tuberculosis

Data from Central TB Register

#### 14. ADVERSE EVENTS FOLLOWING IMMUNIZATION (AEFI)

In the first quarter of 2007, around 91% of the monthly AEFI returns were received from MOOH, of which 48% were NIL returns. Eighteen districts have sent more than 90% of monthly returns while 5 districts have forwarded less than 80% of monthly MOH returns. Hundred percent Monthly AEFI returns have been sent from Gampaha, Trincomalee, Mullativu and Vavuniyadistricts. A smaller number of NIL returns were received from Colombo (13%), Gampaha (16%) and Puttlam (17%) whereas Kilinochchi (100%), Jaffna (94%), Mannar (94%) and Batticaloa (89%) have forwarded higher number of NIL returns.

The timeliness of the MOH monthly AEFI returns was satisfactory in Badulla (56%), Polonnaruwa (45%), Nuwara Eliya (45%) and Trincomalee (44%). However, Ampara, Mullativu and Jaffna have not sent any single report on time.

Higher incidence rate of AEFI was reported from Ratnapura (262/100,000) Kalutara (214/100,000), Polonnaruwa (142/100,000), Kandy (131/100,000), Colombo (128/100,000) and Gampaha (105/100,000). However, a large number of AEFI was reported in Colombo (268), Gampaha (222) and Kandy (131).(Table 11)

There was a death following MR vaccination in Werellagama MOH area in the Kandy District and investigation was concluded as a coincidental event of AEFI. Among the serious AEFI, 01 case of Encephalopathy following JE vaccine and 50 Seizures for DPT vaccine have been reported. High fever was the commonest AEFI followed by abscess and severe local reaction which followed DPT vaccination (Table 12)

Both the highest number (1145) and the rate (330/ 100,000) of AEFI were related to DPT vaccine while the lowest number (04) and rate (1/100,000) of AEFI were for OPV. Reported number of AEFI in the country was 1416 with the incidence rate of 204.8 per 100,000 immunizations (Table 13).

Та	ble	1	1.
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#### REPORT ON MONTHLY RETURN OF AEFI BY DISTRICTS - 1<sup>ST</sup> QUARTER 2007

RDHS Areas	% Completeness	% Timeliness	% Nil Returns	No. of AEFI	AEFI Rate (/100,000 doses)
Colombo	92.86	30.8	12.82	268	128.0
Gampaha	100.00	31.1	15.56	222	105.3
Kalutara	90.91	36.7	33.33	69	214.1
Kandy	96.97	35.9	29.69	185	131.2
Matale	91.67	27.3	45.45	50	96.7
Nuwara Eliya	95.24	45.0	55.00	18	33.2
Galle	87.50	33.3	80.95	09	16.2
Hambantota	90.91	26.7	33.33	47	72.6
Matara	95.83	34.8	45.65	43	45.9
Jaffna	71.43	0.0	94.05	01	0
Kilinochchi	50.00	16.7	100.00	00	0
Mannar	50.00	33.3	93.75	00	0
Vavuniya	100.00	41.7	83.33	03	17.9
Mullativu	100.00	0.00	53.33	00	0
Batticaloa	69.70	26.1	88.64	06	14.8
Ampara	80.95	0.00	64.71	16	0
Trincomalee	100.00	44.4	62.96	18	36.6
Kurunegala	96.30	23.1	40.38	111	61.3
Puttalam	88.89	25.0	16.67	70	61.4
Anuradhapura	92.98	24.5	62.26	39	33.9
Polonnaruwa	95.24	45.0	35.00	57	142.2
Badulla	95.56	55.8	65.12	39	70.5
Moneragala	93.33	42.9	46.43	38	71.0
Ratnapura	85.42	39.0	41.46	54	262.0
Kegalle	90.91	26.7	36.67	46	54.0
Kalmunai	97.22	40.0	80.00	07	25.6
Sri Lanka	90.9	32.2	48.1	1416	84.4

#### Table 12.

#### SELECTED ADVERSE EVENTS BY ANTIGENS - 1<sup>ST</sup> QUARTER 2007

Vaccine	Seizure	Allergy	Abscess	Severe local reaction	High fever	Lymphadenitis	Encephalopa- thy	Shock	Arthralgia	Death	Total
BCG	0	0	3	0	0	5	0	0	0	0	8
DPT	50	119	177	171	276	3	0	0	3	0	799
OPV	1	0	0	1	1	0	0	0	0	0	3
Measles	2	20	1	3	9	0	0	0	0	0	35
DT	0	9	5	16	3	0	0	0	0	0	33
TT	0	6	1	4	0	0	0	0	0	0	11
Rubella	0	54	0	0	5	0	0	0	0	0	59
JE	2	18	0	4	5	0	1	1	0	0	31
ATd	0	3	0	0	0	0	0	0	0	0	3
MR	0	13	0	2	2	0	0	0	0	1	18
Нер	2	6	4	1	0	0	0	0	0	0	13
Others*	0	0	2	0	0	0	0	0	0	0	2

Table 13

#### Reported AEFI by Antigen - 1<sup>st</sup> Quarter 2007

Vaccine	No of AEFI	Rate (/ 100,000 doses)
BCG	08	11.8
DPT	1145	330.10
OPV	04	1.11
Measles	39	55.04
DT	44	53.42
тт	20	29.77
Rubella	61	64.26
ATd	13	15.14
MR	19	32.84
Нер	18	3.42
JE	32	308.9
Others*	13	-
Total	1416	204.82

\* Hib and TAB vaccine

#### 15. LEPROSY

#### QUARTERLY RETURN OF LEPROSY STATISTICS -1<sup>ST</sup> QUARTER 2007

#### Table 14.

Uva

Trincomalee

Batticaloa

Ampara

Kalmunai

Eastern

Vavuniya

Mannar

Mullativu

Kilinochchi

Northern

Sri Lanka

Jaffna

		At the end of the quarter			Cumulative for end of the quarter		
		1 <sup>st</sup> quarte 2007	er 1 <sup>st</sup> quarter 2006	Diff. (%)	2007	2006	Diff. (%)
New patients detected	ed	386	394	-2.0	386	394	-2.0
Children		41	42	-2.3	41	42	-2.3
Grade 2 Deformities		26	22	18.2	26	22	18.2
Multi-Bacillary		179	154	16.2	179	154	16.2
Females		165	172	-4.0	165	172	-4.0
1. National							
District	New p	oatients	Deformities	Child		MB	Female
Colombo	7	5	3	11		30	31
Gampaha	5	8	2	8		28	23
Kalutara	4	0	2	3		12	19
Western	17	3	7	22		70	73
Galle		5	0	1		1	3
Matara	1	7	1	2		4	8
Hambantota	2	3	1	2		14	10
Southern	4	5	2	5		19	21
Kandy	1	3	2	2		5	5
Matale		3	1	1		2	0
Nuwara Eliya		2	0	0		2	0
Central	1	8	3	3		9	5
Anuradhapura	1	9	4	1		13	6
Polonnaruwa	1	0	1	0		5	5
North Central	2	9	5	1		18	11
Kurunegala	2	1	3	1		10	8
Puttalam		9	0	2		3	4
North Western	3	0	3	3		13	12
Kegalla		7	0	1		4	4
Ratnapura	2	9	1	2		12	16
Sabaragamuwa	3	6	1	3		16	20
Badulla		2	0	0		2	0
Moneragala		1	0	0		1	0

#### 16. SURVEILLANCE AT SEA PORT

Surveillance activities carried out by the Port Health Office at Colombo Sea Port during the 1<sup>st</sup> quarter 2007 is given below.

I. TEHOW FEVEL VALUINALIU	1.	Yellow	Fever	Vaccination	
---------------------------	----	--------	-------	-------------	--

Total number vaccinated-352. Granting Pratique to Vessels<br/>Number issued-11413. Deratting Certification--

5.	Deratting Certification		
	Number issued	-	99

Details of the vaccinations carried out by the Assistant Port Health Office, Colombo 8, during the 1<sup>st</sup> quarter 2007 is given below.

		Total
a.	Yellow fever	561
b.	Meningococcal meningitis	251

#### 17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the International Airport, Katunayake during the 1<sup>st</sup> quarter 2007 is given below.

#### 1. Granting Pratique to Aircrafts

a.	Number issued	-	-
2.	Airport Sanitation		
a.	No. of sanitary inspections carried out including food establishments	-	30
b.	No. of food samples taken under Food Act	-	0
c.	No. found defective	-	0
d.	No. of court cases/prosecuted	-	0
3.	Release of human remains		
	No. of human remains released	-	95
	No. referred to JMO for post-mortem	-	10

#### 18. BACTERIOLOGY REPORT – 1<sup>ST</sup> QUARTER -2007 -MEDICAL RESEARCH INSTITUTE

#### Table 15

			Jan	Feb	March
(A)	CHOLERA				
	No. of stool spe examined	ecimens	-	-	-
	No. of El. tor ch	olera	-	-	-
	Ogawa		-	-	-
	Inaba		-	-	-
	Cholera 0139		-	-	-
(B)	SALMONELLA				
	No. of Blood sp examined	ecimens	23	10	12
	No. positive	S. typhi	-	-	-
		S. paratyphi	-	-	-
	No. of stool spe examined	ecimens	134	103	288
	No. positive	S. typhi	-	-	-
		S. paratyphi A	-	-	-
		Others	01	06	05
(C)	SHIGELLA				
	No. of specime	ns examined	134	103	288
	No. positive	Sh. flexneri 1	01	-	-
		Sh. flexneri 2	09	01	-
		Sh. flexneri 3	-	-	-
		Sh. flexneri 4	-	-	-
		Sh. flexneri 5	-	-	-
		Sh. flexneri 6	-	-	-
		Sh. sonnei	04	04	06
		Sh. dysenteriae	01	-	-
(D)	ENTEROPATH E. COLI	IOGENIC			
	No. of specime	ns examined	55	50	48
	No. positive	Group A	-	04	04
(E)	CAMPYLOBAC	TER SPECIES	10	05	12

#### **19. SEXUALLY TRANSMITTED DISEASES**

#### Table 16.

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA\* - 1<sup>ST</sup> QUARTER 2007

Disease	New c episode	ases or ne s during the o	ew disease 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 <sup>1</sup>	14	10	24	14	10	24
AIDS	5	1	6	5	1	6
Early Syphilis <sup>2</sup>	21	9	30	21	9	30
Syphilis Late Syphilis <sup>3</sup>	78	66	144	298	292	590
Congenital Syphilis <sup>4</sup>	0	0	0	0	0	0
Gonorrhoea⁵	130	45	175	130	45	175
Ophthalmia neonatorum <sup>6</sup>	1	0	1	1	0	1
Non specific cervicitis/urethritis	124	180	304	124	180	304
Chlamydial Infection	7	10	17	7	10	17
Genital Herpes	187	256	443	187	256	443
Genital Warts	153	121	274	153	121	274
Chancroid	0	0	0	0	0	0
Trichomoniasis	3	31	34	3	31	34
Candidiasis	209	341	550	209	341	550
Bacterial Vaginosis		219	219		219	219
Other sexually transmitted diseases <sup>7</sup>	79	97	176	79	97	176
Non-venerial <sup>8</sup>	908	697	1605	908	697	1605

\* - 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

- <sup>1</sup> includes AIDS cases
- <sup>2</sup> diagnosed within 2 years of infection and considered to be infectious
- <sup>3</sup> diagnosed after 2 years of infection and considered to be non-infectious
- <sup>4</sup> includes both early and late cases
- <sup>5</sup> includes presumptive gonorrhoea
- <sup>6</sup> includes both gonococcal and chlamydial conjunctivitis in neonatal period
- <sup>7</sup> includes Lympho granuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.
- <sup>8</sup> number of STD clinic attendees who were not having sexually transmitted diseases.

#### 20. SURVEILLANCE REPORT OF DENGUE FEVER/ DENGUE HAEMORRHAGIC FEVER -2006

Dengue Fever is endemic in the country and epidemics have been occurring with increasing magnitude every other year since 2002 (Figure 1). The worst ever epidemic of DF/DHF occurred in year 2004 in which there were 15467 suspected cases and 88 deaths. During the following year, the case load came down approximately by 40% (5965 cases and 28 deaths). During the year 2006, 11972 suspected Dengue Fever /Dengue Haemorrhagic Fever cases and 48 deaths (CFR 0.4%) were reported to the Epidemiology Unit which was a 100% increase in the number of cases when compared to 2005. The incidence rate was 6.0 per 10000 population.

Although the usual seasonal increase in incidence which occurs in relation to the monsoon rains was not marked during 2006, there was an increase in the case load during the latter half of the year. Furthermore a state of high endemicity was observed through out the year (Figure 2 & 3).

The cases of DF/DHF were distributed in almost all the districts but majority of the cases were reported from the Western Province which accounted for 51% of the total case load. The districts of Kandy, Kurunegala and Ratnapura also reported a high case load. Distribution of cases by RDHS divisions is given in Figure 4 and Table 17.

Some of the 'high-risk ' MOH areas identified in 2004 continued to report a significant number of cases during the year 2006. Colombo Municipal Council area reported 848 cases (7% of the total case load) followed by the MOH areas Piliyandala (444 cases i.e. 3.7%), Maharagama (408 cases i.e. 3.4%) and Dehiwala (329 cases i.e. 2.7%). Furthermore, the disease has spread to some MOH areas considered as predominantly rural. The MOH areas which had a major contribution to the case load are given in Table 18.

Figure 1.







DISTRIBUTION OF NOTIFIED CASES OF DF/DHF BY MONTH 2004—2006 Figure 2: Distribution of suspected DF/DHF cases by month - Sri Lanka, 2004 - 2006 4000 3500 3000



1<sup>st</sup> Quarter

					In siden as Data		
District	No. of noti- fied cases	%	*No. of con- firmed case	%	(per 10000 popula- tion)	No of deaths	%
Colombo	3423	28.6	1975	35.0	14.1	12	25
Gampaha	1775	14.8	1150	20.4	8.6	6	12.5
Kalutara	988	8.3	521	9.2	9.0	0	0
Kandy	1512	12.6	177	3.1	10.9	5	10.4
Matale	391	3.3	198	3.5	8.3	1	2.1
Nuwara Eliya	42	0.4	4	0.1	0.6	0	0
Galle	268	2.2	85	1.5	2.6	0	0
Matara	537	4.5	198	3.5	6.7	1	2.1
Hambantota	219	1.8	125	2.2	4.0	2	4.2
Jaffna	57	0.5	3	0.1	1.0	2	4.2
Kilinochchi	2	0.01	0	0.0	0.1	1	2.1
Mullaitvu	2	0.01	0	0.0	0.1	0	0
Vavuniya	20	0.2	16	0.3	1.2	0	0
Mannar	3	0.02	2	0.0	0.3	1	2.1
Trincomalee	48	0.4	32	0.6	1.2	1	2.1
Batticaloa	63	0.5	4	0.1	1.1	0	0
Ampara	33	0.3	10	0.2	1.3	0	0
Kalmune	47	0.4	12	0.2	1.2	0	0
Kurunegala	690	5.8	276	4.9	4.6	4	8.4
Puttalam	405	3.4	189	3.3	5.4	5	10.4
Anuradhapura	132	1.1	95	1.7	1.7	1	2.1
Polonnaruwa	86	0.7	86	1.5	2.3	0	0
Badulla	156	1.3	72	1.3	1.8	0	0
Moneragala	43	0.3	16	0.3	1.0	0	0
Ratnapura	547	4.6	51	0.9	5.1	2	4.2
Kegalle	483	4.0	278	4.9	6.1	4	8.4
unknown	0	0	71	1.3			
Total	11972	100	5646	100	6.0	48	100

#### Table 17. DISTRIBUTION OF CASES AND DEATHS DUE TO DF/DHF BY DISTRICTS – 2006

\* Source - Special Surveillance data

Table 18.

#### DISTRIBUTION OF SUSPECTED CASES OF DF/DHF CASES BY HIGH RISK MOH AREAS-2006

RDHS area	MOH area	No. of notified cases	% of the total case load	Incidence Rate		
Colombo	MC Colombo	848	7.0	12.3		
	Piliyandala	444	3.7	27.4		
	Maharagama	408	3.4	27.0		
	Dehiwala	329	2.7	14.7		
	Nugegoda	268	2.2	27.0		
	Boralesgamuwa	224	1.9	37.7		
Gampaha	Wattala	226	1.9	12.0		
	Gampaha	193	1.6	10.3		
	Kelaniya	191	1.6	12.9		
Kalutara	Panadura	270	2.3	12.1		
	Horana	206	1.7	11.7		
Kandy	MC Kandy	283	2.4	23.3		
	Yatinuwara	193	1.6	19.0		
Kurunegala	Kurunegala	243	2.0	15.2		

VO	IIIma	<u> 18</u>
	IUIIC	-

1<sup>st</sup> Quarter

#### Figure 3.





Figure 5.



Number

Figure 6.

DISTRIBUTION OF DEATHS DUE TO DF/DHF BY AGE GROUPS AND AGE SPECIFIC CASE FATALITY RATES-2006



1<sup>st</sup> Quarter

#### Figure 4.

NOTIFIED DF/DHF CASES BY DISTRICT - 2006



#### Special Surveillance of DF/DHF

Special surveillance data were received from the Infection Control Nursing Officers in Medical institutions where dengue patients were treated. Colombo South Teaching Hospital and North Colombo Teaching hospital provided a major proportion of the special surveillance data. Several leading private hospitals in the Colombo district also significantly contributed to the surveillance data (Table 17 & 20).

Special surveillance data in respect of 5646 cases were received during 2006. All age groups were affected by the disease but 31% of the cases were in the 20-29 year age group(1731) while 22% of the cases(1270) were less than 15 years of age (Figure 5).

Deaths due to DF/DHF had occurred among all age groups except 15-19 years and the case

Figure 7.

fatality rate calculated for the DHF cases was 3.4%. The highest number of deaths (12) was among the 20-29 year age group (25%) while 21% of the deaths (10) were among those less than 15 years. Twenty five percent (25%) of the deaths (12) had occurred in 50-59 year age group and the case fatality rate was highest among them followed by the under one year age group and 10—14 year age group (Figure 6).

According to the WHO classification approximately 75% of the confirmed patients (4222) had Dengue fever. The remaining 25% of the patients had DHF(1424), the majority of whom had DHF II (16.2% of all patients)/(Figure 7).

#### Serological confirmation of DF/DHF

A total of 131 blood samples were tested for dengue antibodies using Ig M capture ELISA test and Haemagglutination Inhibition test at the Department of Virology of the Medical Research Institute during the year and 84 (64%) were positive for Ig M antibodies.

# Sentinel Laboratory Surveillance of Dengue Fever

Nested PCR test was carried out to determine the serotype of dengue virus in 1795 patients by Genetech Laboratory, Colombo 8 and 287 were found to be positive. The virus serotypes DEN 3 and DEN 2 have been predominantly prevalent during the year (Table 19).

Table 19.

# DISTRIBUTION OF CONFIRMED CASES OF DF/DHF BY MEDICAL INSTITUTION—2006

No tested	1795	
No. positive	287	
Serotype	DEN 1	20 (7.4%)
	DEN 2	121 (43%)
	DEN 3	126 (45%)
	DEN 4	14 (4.6%)

#### DHFII 916 DF (64.3%) DHF 4222 1424 (75%) (25%) DHFI DHFIII 447 33(2.3%) (31.4%) DHFIV 28 (2%)

#### CLASSIFICATION OF PATIENTS ACCORDING TO WHO CLASSIFICATION

Table 20.

# CONTRIBUTION TO THE SPECIAL SURVEILLANCE DATA BY MEDICAL INSTITUTION—2006

Name of the hospital	Number of cases	%		
TH Colombo South	793	14.0		
TH Colombo North	540	9.6		
GH Sri Jayawardanapura	388	6.9		
National Hospital Sri Lanka	283	5.0		
Lady Ridgeway Hospital	232	4.1		
BH Horana	211	3.7		
GH Matara	191	3.4		
GH Matale	187	3.3		
BH Gampaha	155	2.7		
TH Karapitiya	151	2.7		
TH Peradeniya	146	2.6		
GH Kegalle	137	2.4		
GH Kurunegala	137	2.4		
BH Negombo	132	2.3		
BH Wathupitiwala	123	2.2		
BH Kuliyapitiya	109	1.9		
GH Anuradhapura	102	1.8		
Asiri Pvt. Hospital	304	5.4		
Nawaloka Pvt. Hospital	207	3.7		
Durdans Pvt. Hospital	174	3.1		
Others	944	16.7		
Total	5646	100		

#### 21. AFP SURVEILLANCE REPORT - 2006

Poliomyelitis was made a notifiable disease in Sri Lanka in 1944. Immunization with OPV was initiated island wide in i964. The largest outbreak in the country was reported in 1962 and every 6 years thereafter, however with decreasing severity. The last case of confirmed polio was reported in 1993, in a female child aged 2 years from Kataragama in the RDHS Division of Moneragala. Polio virus (P1 wild) was isolated and it was found that the child had been immunized with only 2 doses of OPV.

In 1990 Acute Flaccid Paralysis (AFP) was gazetted as a notifiable disease and individual case based surveillance of AFP was commenced in 1991. The definition of an AFP case cited such a case as any child under15 years of age presenting with acute onset flaccid paralysis or a person of any age highly suspected of poliomyelitis.

Epidemiology Unit is the central co-ordinating agency for the National AFP Surveillance pro-

gramme under the Poliomyelits Eradication Initiative, receiving information about AFP cases from Medical Officers in curative institutions where the patients seek treatment and also from Medical Officers of Health (MOOH).

In addition to the routine surveillance, active surveillance is carried out in the premier Children's Hospital in Colombo (Lady Ridgeway Hospital). An Epidemiologist from the Central Epidemiology Unit visits the hospital at least three days a week and checks the wards for cases of AFP. In addition, 55 sentinel surveillance sites have been set up since 1996 in major hospitals in every RDHS Division where Consultant Paediatricians are in place. Regional Epidemiologists are expected to visit their respective sentinel sites in the regions at least once a week. A monthly report of cases of AFP including a nil report is received from the Regional Epidemiologists at the Epidemiology Unit in Colombo.

Weekly reports of AFP cases including zero or nil reports from the 55 sentinel sites in the entire country are being monitored at the Epidemiology Unit. Infection Control Nurses (ICN) of each sentinel site are responsible for sending this weekly return.

As a measure to counteract the threat posed from the neighbouring countries that report polio cases, MOOH in every district in northern and eastern provinces, Puttalam district and Nuwara Eliya district, carry out immunization of children less than 15 years of age who return to Sri Lanka from South India with an extra dose of OPV. A register of these South Indian returnees is maintained and updated regularly in each such MOH office. A monthly return summarizing the number of children under 15 years of age among the returnees, their OPV immunization coverage etc is sent to the relevant Regional Epidemiologist who sends a consolidated district report to the Epidemiology Unit monthly.

#### **Geographical Distribution of AFP Cases**

A total of 125 AFP cases were reported for the year 2006 (Fig.8). The highest number of cases, 11 (9%) was reported from Nuwara Eliva RDHS Division. Ten cases each were reported from Colombo RDHS Division and Ratnapura RDHS division. Kalutara, Matale and Badulla RDHS Divisions reported 9 cases each. Highly populated Western and Central provinces accounted for 26 (21%) and 27 (22%) cases respectively. Most RDHS divisions had reported more than the expected number of AFP cases during the year. However Colombo, Gampaha, Matara, Hambantota, Kandy and Anuradhapura had less than the required number and a non polio AFP rate below 2 per 100,000 under 15 year old population. Trincomalee and Vavuniya had not reported a single case for the year.

#### Seasonal Distribution of AFP Cases 2006

January recorded the highest number of cases for the year. The number reported was 21 (17%). Thirteen cases were reported in October and 12 cases each were reported in February, June and August. The lowest number of cases (06 each) were seen in July and November (Figure 9).

#### Age and Sex Distribution of AFP Cases 2006

There were more male AFP cases than female AFP cases reported in 2006. Out of the total of 125 AFP cases, 73 (58%) were males and 52 (42%) were female children. This is in contrast to the trend observed last year where female cases were predominant. In 2006, this male predominance was observed in all age groups. A majority (38%) of the cases (47) were 5 - 9 years old. Forty one children (33%) were between 10 - 14 years of age and 37(30%) were less than 5 years of age (Fig.10).

# Immunization Status of AFP Cases Reported in 2006

All AFP cases reported during the year 2006 were age appropriately immunized with OPV. Data supporting the immunization status of the children had been obtained from the Child Health Development Record (CHDR) by the medical officers treating the patients or by the Medical Officer of Health (MOH) team.

#### **Final Classification of AFP Cases 2006**

In 2006 all 125 cases reported were assigned a final classification. A majority of the cases (110)

#### FIGURE 8. GEOGRAPHICAL DISTRIBUTION OF AFP CASES BY DISTRICT 2006

were classified as Guillan Barre syndrome (GBS) by the respective clinicians who reported these cases. This amounted to 88% of the total caseload in the year. This trend has been observed in the surveillance programme of the country throughout the recent years.

There were 4 cases (3%) of Transverse Myelitis and 2 cases (1.6%) of post infective viral myositis. Table 21 shows the final classification of the AFP cases for the year.

#### Table 21.

# DISTRIBUTION OF FINAL CLASSIFICATION OF AFP CASES 2006

Diagnosis	Number of AFP				
	Cases (%)				
Guillan Barre Syndrome	110 (88%)				
Transverse Myelitis	4 (3.2%)				
Periodic Paralysis	2 (1.6%)				
Viral Myositis	2 (1.6%)				
Brachial Neurits	1(0.08%)				
Tetanus	1(0.08%)				
Suspected syringomyelia	1(0.08%)				
Viral Myalgia	1(0.08%)				
Investigated for sudden onset weakness	1(0.08%)				
Investigated for unsteady gait	1(0.08%)				
Limb girdle dystrophy	1(0.08%)				
Total	125				



FIGURE 9. DISTRIBUTION OF AFP CASES BY MONTH 2006



#### Volume 48 1<sup>st</sup> Quarter January - March 2007 Figure 10. AGE AND SEX DISTRIBUTION OF AFP CASES 2006 125 140 120 100 73 80 52 60 47 11 33 40 25 24 20 17 20 0 Male Female Total ■ <1 year □ 1-4 yrs ■ 5-9 yrs □ 10-14 yrs □ Total

#### Feedback Information on AFP Cases

Feed back information on AFP cases reported from institutions is sent to the respective clinicians once the cases are discarded with a final classification. This has proved to be an effective method of obtaining their cooperation for the surveillance programme. Copies of these feedback forms are sent to the respective Regional Epidemiologists and MOH.

Apart from this case based individual feedback, information is sent routinely to all the Deputy Provincial Directors of Health Services (DPDHS), Regional Epidemiologists (RE), MOH, Heads of Health Institutions and all the clinicians through the Weekly Epidemiological Report (WER). The Epidemiological Unit has been publishing the WER since 1973 with the objective of providing a quick feedback in the form of a weekly statement on the notifiable diseases reported on the Weekly Return on Communicable Diseases from the Medical Officer of Health (MOH) areas.

in addition to the feedback sent through these two methods, Quarterly Epidemiological Bulletin published by the Epidemiology Unit provides summary information on AFP surveillance activities for each quarter.

# Indicators of AFP Surveillance and Laboratory performance 2006

Performance of an AFP surveillance programme is considered to be of adequate standard if a number of performance criteria were achieved. Firstly the system should detect at least one case of non-polio AFP for every 100,000 population of children aged less than 15 years. Secondly two adequate diagnostic stool specimens (2 stools specimens collected at least 24 - 48 hours apart within 14 days of onset of paralysis and received in good condition at the laboratory) should be collected from at least 80% of AFP cases reported. The other criteria are based on the performance of the laboratory processing the specimens, monitoring mechanisms in place to streamline the reporting system and the clinical investigation procedures involved.

# 1. Non polio AFP rate in children < 15 yrs. of age (Target >/= 1/100,000)

Sri Lanka achieved a non-polio AFP rate (Number reported/number expected) of 2.4 during the year 2006. This exceeds the expected rate of 2 per 100,000 population of under 15 year old children. This rate is an improvement compared to the non-polio AFP rate of 2.1/100,000 under 15 year old population reported in 2005.

In the year 2006 most of the districts in the country have reported the expected number or more AFP cases. The AFP rate is monitored for each district and surveillance is strengthened in those districts where the AFP rate has been low during the previous year

#### 2.Completeness of reporting

2.1 Weekly reporting of Notifiable Diseases All Medical Officers of Health (MOOH) send a weekly return of notifiable diseases to the Epidemiology Unit. Completeness (number received/ number expected) of these returns and their timeliness are monitored by the Epidemiology Unit. The returns are expected to be received within a week to be timely.

In the previous year the completeness of weekly notifiable disease reporting was 95%.

2.2 Weekly reporting of AFP cases from institutions

Fifty five hospitals around the country have been identified as sentinel sites (compared to 50 sites in 2004) which routinely report on AFP cases from the respective institutions. These weekly returns are monitored centrally for their completeness and the timeliness.

In 2006 the completeness of weekly reporting of AFP cases from those institutions was 82%.

#### 2.3. Monthly reporting of AFP cases by Regional Epidemiologists (REE) (Target >90%)

Regional Epidemiologists in all 26 districts send a monthly return on AFP to the Epidemiology Unit. Completeness and timeliness of these returns are monitored centrally. In the previous year the completeness of monthly reporting was 78%.

#### 3. Timeliness of reporting

#### 3.1 Weekly reporting of Notifiable Diseases

The weekly reports from MOH on notifiable diseases received within a week from the due date are considered as timely. During the year 2006 the timeliness of reporting was 72%.

#### 3.2 Weekly reporting of AFP cases from institutions

During the year 2006 the timeliness of weekly reporting of AFP was extremely poor at 38%. Steps have been taken to educate the infection control nurses who are responsible for this activity in sentinel sites with repeated supervisions by the central as well as the regional level authorities.

# 3.3 Monthly reporting of AFP cases by REE (Target> 80%)

Monthly reports received from REE before the 20<sup>th</sup> of the following month are considered as timely. Timeliness of monthly reporting in 2006 was 66%.

# 4. Reported AFP cases investigated within 48 hrs of reporting (Target>/= 80%)

All AFP cases notified should be examined and investigated by an epidemiologist (at central or regional level) within 48 hrs of notification. In the year 2006, 98% of the AFP cases reported were investigated by an epidemiologist within 48 hours of notification.

# 5. Reported AFP cases with 2 stools specimens collected within 14 days of onset of paralysis (Target> 80%)

All cases of AFP reported should have two stool samples collected within 14 days of onset of the paralysis. Eighty percent of cases should have two such timely stool samples to fulfill the criteria stipulated by the WHO.

In 2006, 2 samples of stools were collected for virology within 14 days of the onset of paralysis from 107 cases (86%) of the 125 cases reported. Samples of stools have been collected from 124 out of the 125 cases reported, irrespective of the timeliness.

#### Stool samples from contacts

Following notification, stools samples are collected from 3 to 5 contacts of all AFP cases during the outbreak response activities carried out by the respective MOH. The contact stool sampling was satisfactory during the previous year and samples of stools were collected from contacts of 114 AFP cases(91%) of the 125 cases reported in 2006.

6. Reported AFP cases with a follow-up examination at 60 days after onset of paralysis to verify the presence of residual paralysis

#### or weakness (Target >/=80%)

All the reported AFP cases should be followed up at 60 days of onset of paralysis by an epidemiologist at central or regional level for presence of residual paralysis. In 2006, 113 cases out of the 125 cases reported were followed up after 60 days of onset of paralysis with 4 cases still pending. It therefore achieved 94% follow up rate.

# 7. Specimens of stools arriving at National Laboratory (MRI) within 03 days of being collected (Target> 80%)

In the year 2006, 38 samples out of the total of 278 samples collected have been received after 3 days of being collected. This amounts to a 86.3% of the samples of stools being received timely.

## 8. Specimens of stools arriving at the National Laboratory in good condition (Target >80%)

In 2006, out of the 278 samples of stools collected from 125 AFP cases and 262 samples were in 'good' condition (94.2%) on arrival at the laboratory. Good condition means that upon arrival:

- a) There is ice in the container
- b) Specimen volume is adequate
- c) There is no evidence of leakage or desiccation
- d) Appropriate documentation is complete

# 9. Specimens of stools with a turn around time <28 days (Target>80%)

In the previous year out of the 278 samples of stools collected and sent, results of all 278 specimens of stools were reported within 28 days. This achieved the target with a percentage of 100%.

# 10. Stool specimens from which non-polio enterovirus was isolated (Target> 10%).

Non polio enterovirus was isolated from samples of stools of 29 cases out of the total 125 cases (10.5%). This is just above the expected target of 10%. Wild poliovirus was not isolated at the MRI during 2006.

# National Polio Expert Committee Meetings 2006

The National Polio Expert Committee consists of experts from fields of paediatrics, virology, epidemiology, clinical neurology and neurophysiology. The expert committee meets once every quarter to discuss AFP cases that could not be discarded on laboratory results. In 2006, 12 such AFP cases were presented to the committee for deliberations. Ten of these cases had late stools and 2 cases had only one stool sample collected each. All of them were reviewed and discarded by the Expert committee as non Polio AFP cases with diagnosis of Guillain Barre' Syndrome in 11 of the cases and Transverse myelitis in the other case.

#### Table 22

#### 22. SUMMARY OF NOTIFIABLE DISEASES -1<sup>ST</sup> QUARTER 2007

Health Region	Cholera	Acute Flaccid Paralysis (AFP)	Dysentery	Dengue Haemorrhagic Fever	Encephalitis	Enteric Fever	Food Poisoning	Human Rabies	Leptospirosis	Measles	Simple Contd. Fever	Tetanus	Typhus Fever	Viral Hepatitis
Colombo	0	1	63	430	3	26	40	0	38	1	6	0	1	11
Gampaha	0	3	60	165	9	22	27	2	83	3	3	0	6	33
Kalutara	0	2	69	110	1	16	11	1	38	2	3	0	1	28
Kandy	0	6	46	183	3	21	5	2	33	1	8	0	25	90
Matale	0	0	61	50	3	5	3	0	13	0	2	0	3	53
Nuwara Eliya	0	2	47	18	0	24	366	1	6	2	1	1	18	75
Galle	0	1	37	44	5	4	3	1	19	1	0	0	16	8
Hambantota	0	0	22	21	2	8	4	0	15	0	1	0	17	7
Matara	0	0	69	51	2	16	4	1	52	0	1	0	94	10
Jaffna	0	0	32	8	2	240	0	1	0	0	19	0	76	7
Kilinochchi	0	0	0	0	0	2	0	1	0	0	0	0	2	2
Mannar	0	0	11	7	0	35	0	1	0	0	0	0	0	4
Vavuniya	0	1	16	10	2	8	6	0	2	0	1	1	0	3
Mullativu	0	0	5	0	3	10	0	0	0	0	1	0	0	0
Batticaloa	0	1	67	9	3	12	2	1	0	0	0	0	0	128
Ampara	0	0	31	1	0	3	0	0	0	0	0	2	0	8
Trincomalee	0	0	31	30	1	10	18	1	1	1	0	0	2	19
Kurunegala	0	1	70	120	0	19	4	2	10	2	2	2	23	10
Puttalam	0	1	25	60	9	23	0	0	5	0	0	0	0	41
Anuradhapura	0	1	26	19	6	14	3	0	9	1	0	0	12	19
Polonnaruwa	0	0	41	20	2	3	0	0	12	1	1	0	0	3
Badulla	0	0	112	13	0	26	8	0	16	0	5	1	33	73
Moneragala	0	0	54	6	0	14	0	0	16	0	0	0	20	6
Ratnapura	0	3	189	59	7	25	6	1	18	1	34	0	5	28
Kegalle	0	0	51	63	3	15	3	0	32	0	1	2	9	19
Kalmunai	0	0	31	2	0	5	0	0	0	0	0	0	2	65
TOTAL	0	23	1266	1499	66	606	513	16	418	17	89	9	365	750

No polio cases. (from AFP surveillance system).

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This document is available on the internet www.epid.gov.lk.

Figures given may be subject to revision.

The editor welcomes accounts of interesting cases, outbreaks or other public health problems of current interest to health officials.

Such reports should be addressed to:

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

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