OTOFIC 20 EPIDEMIOLOGICAL BULLETIN

SRI LANKA

Fourth Quarter 2013

EPIDEMIOLOGY UNIT

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

CO	NTENTS	PAGE NO
1.	Surveillance of Poliomyelitis	02
2.	Surveillance of Measles	03
3.	Surveillance of Leptospirosis	04
4.	Surveillance of Human Rabies &	
	Control activities	04
5.	Surveillance of Viral Hepatitis	04
6.	Surveillance of Enteric Fever	04
7.	Surveillance of Dysentery	04
8.	Surveillance of Malaria	05
9.	Surveillance of Japanese Encephaliti	s 05
10.	Surveillance of Dengue Fever	07
11.	Surveillance of Rubella and Congenit	al
	Rubella Syndrome	07
12.	Surveillance of Cholera	07
13.	Surveillance of Tetanus	07
14.	Surveillance report on AEFI	08
15.	Surveillance of Tuberculosis	10
16.	Surveillance at Sea Port	10
17.	Surveillance at Air Port	10
18.	Surveillance of Leprosy	11
19.	Sexually Transmitted Diseases	12
20.	Pattern of Enteric Pathogens isolated	d 13
21.	Surveillance of Meningitis	13
22.	Influenza Surveillance	14
23.	Special Report	
	Surveillance Report On Dengue Feve	er/
	Dengue Haemorrhagic Fever	16
24.	Summary of Notifiable Diseases	20







Volume 54

4th Quarter

1. POLIOMYELITIS

Thirty three (33)Acute Flaccid cases were notified to the Epidemiology Unit during the 4th quarter 2013.This is higher compared to reported AFP cases of 11 during the 4th quarter 2012.Reported number of AFP cases for the quarter is above the expected number of AFP cases per quarter of the annual surveillance target of 2:100,000 under 15 year age population, which is 24 according to the current census population. The non polio AFP rate for the 4th quarter 2013 was 2.1/ per 100,000 population.

Notification of AFP Cases from Hospitals

All hospitals where Consultant Paediatricians are available are considered as sentinel sites for AFP surveillance. A total of 69 sentinel sites are currently functioning and last updated in 2013. All sentinel sites are expected to report immediately on AFP case admissions to the Epidemiology Unit and to the Regional Epidemiologist of the respective area of patient's residence.

Majority of the cases (75%) were notified from the sentinel site hospital for AFP, the Lady Ridgeway Children's Hospital (LRH), and Provincial General Hospital, Badulla,Teaching Hospital Karapitiya and SBSCH Kandy. Particulars of all hospitals which reported AFP cases are given in Table 01.

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

Badulla district reported 7 AFP cases during the quarter and that was the highest among all the districts. The complete list of distribution of AFP cases according to the province, district and MOH area is given in Table 02

Age and Sex Distribution of AFP Cases

Majority (23, 68%) of the cases were boys during the 4th quarter 2013 and this was higher compared to the trend reported during the 4th quarter 2012 which was 54% boys among the reported AFP cases.

Majority (81%) of cases were between 1-9 years during the 4th quarter this year and the trend was more or less similar compared to the compatible quarter in the previous year.

The Table 03 shows the age distribution in the 4th quarter 2013.

Table 01

Notification of AFP cases by sentinel hospitals 4th Quarter 2013

Hospital	No: of cases reported
LRH	8
GH Badulla	2
TH Karapitiya	4
SBSCH	3
GH Rathnapura	2
TH Kandy	2
TH Peradeniya	2
National Hospital Sri Lanka	1
Colombo South Teaching Hospital	1
Ashrof Memorial Hospital – Kalmunai	1
GH Polonnaruwa	1
GH Kalutara	1
TH Jaffna	1
TH Karapitiya	4
Total	33

Table 02

Geographical distribution of AFP cases

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Kaduwela	1
		Piliyandala	1
		CMC	1
	Gampaha	Gampaha	1
		Wattala	1
	Kalutara	Bandaragama	1
		Horana	1
Southern	Galle	Baddegama	1
		Induruwa	1
	Matara	Devinuwara	1
	Hambantota	Tissamaharama	1
		Hambantota	1
Central	Kandy	Nawalapitiya	1
		Yatinuwara	1
		Akurana	1
	Nuwara Eliya	Nawathispane	1
		Hanguranketha	1
Sabaragamuwa	Ratnapura	Godakawela	1
		Kuruwita	1
	Kegalle	Kegalle	1
Eastern	Kalmunai	Kalmunai South	1
	Ampara	Dehiattakandiya	1
North Central	Polonnaruwa	Welikanda	1
		Dimbulagala	1
Uva	Badulla	Haputhale	1
		Badulla	1
		Soranathota	1
		Ridimaliyadda	1
		Uvaparanagama	1
		Welimada	1
		Passara	1
	Monaragala	Thanamalwila	1
Northern	Jaffna	Jaffna	1
Total			33

Table 03. Distribution of AFP cases by Age3rd Quarter 2013

Age Group	Total
<1 year old	2
1-4 year old	9
5-9 year old	16
10-15 year old	6
Total	33

Final diagnoses of AFP cases

Majority (79%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 33 cases of AFP are given in Table 4.

Table 4: Final diagnoses of AFP patients reportedduring 4th quarter 2013

Final Diagnoses	Frequency
GBS	26
Transverse Myelitis	1
Bell's Palsy	1
Meningoencephalophalitis	1
Hypocalcaemic Transient Paralysis	1
Encephalitis	1
Acute Demyelinating Encephalo- myelitis	1
Miller Fisher Syndrome	1
Total	33

Laboratory Surveillance of AFP Cases

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

Out of all AFP cases reported 27(82%) had both stool samples collected timely and sent to MRI for polio virology. The main reason for late stool samples or inadequate stool sample collection was the transferring of patients from small hospitals to specialized care institutions and late in stool sample collection or only

MEASLES 4th quarter 2013

Outbreak situation experience in the country continued during the 4th quarter 2013 with declining tendency. One thousand and eight measles cases were reported during the 4th quarter 2013 and out of them 819 were identified as compatible with clinical case definition of "fever and maculopapular rash with one of the signs of cough, coryza or conjunctivitis". All other cases were discarded as non measles cases. These clinical cases were field investigated (60%) by the respective medical officers of health (MOH) of the patients' residential areas and special field investigation reports have been sent to the Epidemiology Unit.

Of the cases compatible with clinical case definition of Measles 38% were above 28 years, 26% were below 1 year of age of whom both categories were not expected to be vaccinated for measles. Western province (34%) and Sabaragamuwa province (35%) reported majority of measles cases. Out of the all clinically confirmed cases 52% were among unvaccinated category but measles cases among children due for age appropriate vaccination for Measles were minimum. Measles vaccination status were unknown in 34% of the cases reported according to the history and majority of them were adults above 20 years.

Laboratory investigations of suspected measles or rubella patients (1010) from October to December who were with fever and maculopapular rash with one of cough, coryza or conjunctivitis were investigated in the WHO accredited virology laboratory at the Medical Research Institute (MRI) and identified 351 cases were serology positive for Measles IgM antibodies. Outbreak of measles was considered as continuing during the fourth quarter with observed reduction of cases below 1 year after supplementary immunization activity of Measles vaccination conducted in the 3rd quarter

3. LEPTOSPIROSIS

During the 4th Quarter 2013, 1111 cases and 15 deaths (CFR 1.35%) due to Leptospirosis were notified to the Epidemiology Unit compared to 788 cases and 14deaths in the previous quarter and 750 cases and 20 deaths during corresponding quarter of 2012

Age and sex distribution of patients, revealed by the special surveillance data is given in Table 05.

Table 05

SELECTED CHARACTERISTICS OF LEPTOSPIROSIS PATIENTS(%)- 3rd QUARTER 2013

Age Group	Sex		
Age Group	Male	Female	
0 - 9 years	0	0	
10 - 19 years	6.62	2.94	
20 - 29years	12.42	2.94	
30 - 39years	22.02	19.12	
40 - 49years	22.85	29.41	
50 - 59 years	22.35	22.06	
>60years	13.74	23.53	
Total	100.00	100.00	

4. HUMAN RABIES

Six cases of Human Rabies were notified to the Epidemiology Unit in the 4th quarter 2013 compared to 10 cases in the previous quarter and 8 cases in the corresponding quarter of year 2012.

.Sandilipai,Mahiyanganaya,Kilinochchi,Naththandiya, Monaragala and Thambuththegama MOH areas reported Human Rabies cases during the quarter, one from each.

Animal Rabies

During this quarter, 178 dogs were reported positive for rabies, compared to 159 in the previous quarter and 147 positive in the same period in the last year. In addition the following animals were also reported positive;

Cats-24, Cows-02, Domestic Ruminants-00

Rabies Control Activities

Dog vaccination - A total of 416,119 dogs were immunized during the Quarter under review when compared to 411,607 in the previous quarter and 355,046 in corresponding Quarter of the last year.

Animal Birth control

Chemical- A total of 7662 female dogs were injected with birth control injections (Progesterone) during the quarter under review.

Surgical– 40,152 female dogs were subjected to sterilization by surgical method during the quarter under review.

5. VIRAL HEPATITIS

In the 4th Quarter 2013, a total of 608 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 603 cases in the previous quarter and 410 cases in the corresponding quarter of 2012. Rathnapura (233 cases) reported the highest number of cases followed by Monaragala District(70 cases)

6. ENTERIC FEVER

In the 4th Quarter 2013, a total of 237 cases of Enteric fever were reported to the Epidemiology Unit, compared to 255 cases in the previous quarter and 357 cases in the corresponding quarter of 2012. The district of Jaffna (56 cases) reported the highest number of cases followed by Colombo (54 cases).

7. DYSENTERY

In the 4th Quarter 2013, a total of 1480 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 1279 cases in the previous quarter and 1524 cases in the corresponding quarter of 2012. Jaffna (221 cases) and Batticaloa (156 cases) reported the highest number of cases

8. MALARIA

There were no indigenous malaria cases reported during the 3rd quarter of 2013 compared to the number of malaria cases detected during the same period of 2012.(Table 06)

9.JAPANESE ENCEPHALITIS (JE)

During the 4th quarter 2013, 62 cases of clinically suspected Encephalitis were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 40 cases were clinically confirmed by the Public Health Inspectors during their field investigations. During the 4th quarter of 2013, MRI has reported 4 lab confirmed JE cases. Out of these 4 lab confirmed JE cases, 2 cases (50%) were investigated by the MOH . Among them, 02 (50%) were less than 10 years, another 01 (25%) was over 50 years of age, and 1 (25%) was between 20 - 50 years of age.

Districts of Galle, Kegalle, Colombo, and Puttalam have reported one lab confirmed JE case each for the 4th Quarter 2013. The majority of confirmed JE cases have not been immunized.

Table 07

SELECTED CHARACTERISTICS OF CONFIRMED CASES OF JE – 3rd Quarter 2013

Sex	Male	02(50%)
362	Female	02(50%)
Age group	< 1 y	00 (00%)
	1-10 y	02 (50%)
	11-20	00 (00%)
	21-50Y	01 (25%)
	> 50 Y	01 (25%)
District	Kegalle	01(25%)
	Puttalam	01(25%)
	Galle	01(25%)
	Colombo	01(25%)

Table 06

Results of Blood smear examination for malaria parasites - 4th Quarter 2013

	4th quarter 2012	4th quarter 2013
No. of blood smears examined	235,060	254,890
No. of positives	2	0
No. of P. vivax	1	0
No. of P. falciparum	1	0
No. of mixed infections	0	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0.0008%	0
P.v. : P.f. ratio	1:1	0
Percentage of infant positives	0%	0

Table 08

DISTRIBUTION OF NUMBER OF BLOOD SMEARS EXAM-INED BY DISTRICT RMO- 4TH QUARTER 2013

RMO	Oct	Nov	Dec	Total
Colombo	7024	5918	6989	19931
Gampaha	3969	3552	2479	10000
Kalutara	1304	1359	1210	3873
Kandy	3747	3533	4066	11346
Matale	1931	1643	2265	5839
Nuwara Eliya	148	168	193	509
Galle	1757	1479	1810	5046
Matara	2393	2051	1610	6054
Hambantota	1889	1669	2540	6098
Jaffna	6481	5345	7244	19070
Kilinochchi	3705	3792	3900	11397
Vavuniya	4356	4097	3793	12246
Mannar	3368	3018	3738	10124
Mullaitivu	1645	1556	2093	5294
Batticaloa	6617	5997	5369	17983
Ampara	1733	1906	1652	5291
Kalmunei	4012	3899	3906	11817
Trincomalie	3564	3168	3324	10056
Kurunegala	5483	4952	5745	16180
Maho	1266	1220	1264	3750
Puttalam	2811	2886	3151	8848
Auradhapura	6603	5691	6054	18348
Pollonnaruwa	4788	4057	2869	11714
Badulla	2184	1592	2224	6000
Monaragala	2157	2190	2082	6429
Rathnapura	2244	2225	2222	6691
Kegalle	1648	1482	1868	4956
TOTAL	88827	80445	85618	254890

Table 09

MORBIDITY AND MORTALITY DUE TO DF/DHF - 4TH QUARTER 2013

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	3051	43.10	12
Gampaha	928	13.11	3
Kalutara	493	6.96	1
Kandy	255	3.60	0
Matale	102	1.44	0
N' Eliya	61	0.86	0
Galle	210	2.97	2
Hambantota	71	1.00	0
Matara	88	1.24	0
Jaffna	225	3.18	0
Kilinochchi	12	0.17	0
Mannar	7	0.10	0
Vavuniya	30	0.42	0
Mulativu	18	0.25	0
Batticaloa	66	0.93	0
Ampara	81	1.14	0
Trincomalee	25	0.35	1
Kurunagale	319	4.51	0
Puttalam	137	1.94	0
A'pura	121	1.71	0
Polonnaruwa	132	1.86	0
Badulla	109	1.54	0
Moneragala	60	0.85	1
Ratnapura	170	2.40	0
Kegalle	293	4.14	1
Kalmunai	15	0.21	0
TOTAL	7079	100.0	21

Table 10

DHF STATISTICS FROM DEPARTMENT OF VIROLOGY, MRI - 4TH QUARTER 2013

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF	
October	385	259	
November	337	185	
December	343	196	
Total	1065	640	

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

During the 4th Quarter 2013, 7,079 cases of DF/DHF and 21 deaths were reported (0.25 % CFR) when compared to 8,118 cases of DF/DHF and 16 deaths were reported (0.20 % CFR) reported during the 3rd Quarter 2013. Proportion of cases notified in October, November, and December was 23.11%,36.88%, and 40.01% respectively.

Table 9 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 4th quarter.

Special surveillance data on 1,544 confirmed cases were received and analyzed for the 4th quarter 2013. Age distribution of reported cases were <4 years of age in 96 (6.22%), 5 - 9 years of age in 174 (11.27%), 10 - 14 years of age in 168 (10.88%), 15 - 19 years of age in 148(9.59%), 20 - 24 years of age in 229(14.83%), 25 - 29years of age in 202(13.08%), 30 - 34 years of age in 165 (10.69%), 35 - 39 years of age in 90 (5.83%), 40 - 44 years of age in 77(4.99%), 45 - 49 years of age in 41 (2.66%), 50 - 54 years of age in 38(2.46%), 55 - 59 years of age in 45(2.91%), >60 years of age in 30 (1.94%).

According to the clinical findings majority of the reported cases 1,407(91.13%) were classified as dengue fever and with 7.9% were classified as Dengue haemorrhagic fever without shock with 0.84% were Dengue haemorrhagic fever with shock while 0.12% falling into unusual dengue category.

During the 4th quarter 2013, 1,065 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. From the total 640(60.09%) samples were

11. RUBELLA AND CONGENITAL RUBELLA SYN-DROME (CRS)

During the whole quarter 3 suspected Rubella disease cases were reported and all of them were compatible with surveillance case definition [fever and maculopapuler rash, with arthralgia/arthritis, lymphadenopathy (suboccipital, post auricular and cervical) or conjunctivitis] during field investigations All 3 cases were adult males above 25 years. Comparing the compatible quarter in the previous year 10 cases of suspected Rubella cases were reported and 7 of them were compatible with surveillance case definition. Outbreaks were not reported during the quarter for rubella infection and 3 cases reported were laboratory confirmed.

No CRS cases were reported during the quarter and not detected at the laboratory during investigations of babies for TORCH screen.

12. CHOLERA

No confirmed cases of cholera were reported to the Epidemiology Unit during the 4th Quarter 2013. Last case of cholera was reported in the country in January 2003.

13. TETANUS

Five tetanus cases were reported during 4th quarter 2013. MC Galle,Kalutara,Bulathkohupitiya,Kuruwita, and Galewela were the MOH areas which reported.

14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 4th Quarter of 2013 has reached 93.8% of completeness of reports, while 52.8% reports were received in time at the Epidemiology Unit indicating good compliance for the system by the MOOH. Jaffna,Hambantota,Kilinochchi, and Nuwara Eliya were able to send all reports. The best timeliness was reported from the Jaffna district (88.9%) followed by Kegalle (84.4%) Matara (78.7%) and Hambantota (78.1%). (Table 11)

The highest percentage of nil reports were received from Trincomalee (58.1%) followed by Nuwara Eliya district (57.9%), which near two fold of the Sri Lanka average (29.0%) indicating the need for more attention for surveillance. Kegalle reported the lowest 'Nil returns' of 3.1%, followed by Polonnaruwa (5.0%) and Jaffna (5.6%) districts, indicating the good surveillance system in place .The highest rate (458.6 per 100,000 immunization) of AEFI was reported from Jaffan district , while Colombo reported the highest number of 222 AEFI cases in fourth quarter 2013.

For the fourth quarter, the highest number of AEFI (n=817) was reported against Pentavalent vaccine, where as the highest rate of AEFI (839.6/100,000 doses administered) reported against DTP vaccine. The rate of AEFI for Pentavalent (01st, 02nd & 03rd dose) is 334.5 per 100,000 doses administered. High Fever (741), Allergic Reaction (383), Nodule (250) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (380 cases: 155.6 per 100,000 doses administered) and DPT (259 cases: 337.7 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to MMR (98 cases: 59.6 per 100,000 doses administered), and DPT (93 cases: 121.3 per 100,000 doses administered) It is important to note , that there were 8 cases of HHE following PVV (n=3 cases) and DPT (n=5 cases) vaccines. However, this is known reaction following these vaccine are they are within the expected rates of the adverse reaction reported in medical literature.

Table 11

COMPLETENESS AND TIMELINESS OF MONTHLY REPORTING AND RECEIPT OF "NIL" REPORTS OF AEFI BY RDHS DIVI-SIONS - 3RD QUARTER 2013

DPDHS	% com- plete ness	% Time ly re- turn s	% Nil Re- turns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	95.2	57.1	14.3	222	187.7
Gampaha	97.8	48.9	37.8	75	NA*
Kalutara	94.9	21.6	13.5	86	104.0
Kandy	88.9	53.8	23.1	154	150.5
Matale	79.5	51.4	11.4	80	222.0
Nuwara Eliya	100.0	39.5	57.9	87	151.5
Galle	98.2	62.5	39.3	76	104.8
Hambantota	100.0	78.1	12.5	108	226.5
Matara	94.1	78.7	27.7	81	148.4
Jaffna	100.0	88.9	5.6	174	458.6
Kilinochchi	100.0	63.6	9.1	34	366.5
Mannar	93.3	33.3	33.3	22	290.7
Vavuniya	83.3	66.7	50.0	9	66.2
Mullativu	91.7	50.0	10.0	39	433.6
Batticaloa	95.2	35.9	41.0	59	135.8
Ampara	76.2	40.0	40.0	21	100.4
Trincomalee	97.0	48.4	58.1	28	85.4
Kurunegala	95.1	56.4	23.1	181	158.7
Puttalam	91.7	25.2	37.1	58	94.4
Anuradhapura	91.2	43.9	24.6	100	134.2
Polonnaruwa	90.5	15.0	5.0	46	NA*
Badulla	97.9	66.0	23.4	84	132.9
Moneragala	93.9	48.5	33.3	34	86.4
Ratnapura	96.3	40.4	48.1	70	90.9
Kegalle	90.9	84.4	3.1	96	166.4
Kalmunai	92.3	50.0	52.6	26	67.5
Sri Lanka	93.8	52.8	29.0	2050	155.3

Note :NA* Gampaha and Polonnaruwa districts EPI returns are not received .Therefore, without the number of vaccine doses administered to the children in the 4th quarter 2013, AEFI reporting rates fort these districts were unable to be estimated.

** In estimating the national reporting rate, the number of AEFI reported form Gampaha and Polonnaruwa districts were excluded.

October-December

Table 12: Number of Selected Adverse Events by Vaccines – 3rd Quarter 2013

Table 12: Number of Selected	Auverse	Events	s by vac	cines – a	siu Quar	101 2013				
	BCG	ΟΡ٧	PVV	DPT	MMR	LJE	DT	π	aTd	Total num- ber of AEFI re- porte d
Total Number of AEFI Re- ported	26	3	817	644	236	97	140	37	29	2029
AEFI reporting rate/1,000,000 doses administered	31.1	0.7	334.5	839.6	143.5	116.9	174. 2	52.1	43.1	
High Fever (>39°C)			380	259	43	26	31	1	1	741
Reporting rate/1,000,000 doses administered			155.6	337.7	26.2	31.3	38.6	1.4	1.5	
Allergic reactions	1		84	93	98	47	35	16	9	383
Reporting rate/1,000,000 doses administered	1.2		34.4	121.3	59.6	56.6	43.5	22.5	13.4	
Severe local reactions	1		27	38	2	1	12	6		87
Reporting rate/1,000,000 doses administered	1.2		11.1	49.5	1.2	1.2	14.9	14.6		
Seizure (Febrile/Afebrile)			20	27	1	6			1	55
Reporting rate/1,000,000 doses administered			8.2	35.2	0.6	7.2			1.5	
Nodules	5	2	146	67	6	3	19	2		250
Reporting rate/1,000,000 doses administered	6.0	0.5	59.8	87.4	3.6	3.6	23.6	2.08		
Injection site abscess	12		32	18	2	2	7	1	1	75
Reporting rate/1,000,000 doses administered	14.4		13.1	23.5	2.12	2.4	8.7	1.4	1.5	
HHE			3	5						8
Reporting rate/1,000,000 doses administered			1.2	6.5						

Note: The total number of AEFI reported in monthly returns include all vaccines in use, where as this table shows only selected vaccines. Therefore the total numbers of AEFI in these two tables are not the same.

Volume 54

4th Quarter

15. TUBERCULOSIS

A total of 2297 Tuberculosis patients were registered for the 4th Quarter 2013.Of this total 2142 were New pulmonary TB Patients. Out of all TB cases 1007 (43.8%) were New Smear Positive Pulmonary TB, while the balance 450 (19.6%) were New Smear Negative Pulmonary TB Patients and 685 (29.8%) from New Extra Pulmonary cases.

There were 92 (4.0%) Retreatment Cases and 63 (2.7%) were other cases. There was one HIV/TB positive patients found in the quarter. There was no Multi Drug Resistant TB patients detected. The distribution of Tuberculosis patients by RDHS division is given in Table 13.

Table 13: TUBERCULOSIS PATIENTS BY RDHS DIVISIONS - 3rd Quarter 2013

RDHS		Nev		v		7-4-1
DIVISION	РТВ	PTB	ЕРТВ	Total	ment & other	Total
	sp+ve	sp-ve		Total		
Colombo	235	112	160	507	49	556
Gampaha	127	39	63	229	10	239
Kalutara	64	30	60	154	12	166
Kandy	71	49	55	175	11	186
Matale	11	7	11	29	2	31
Nuwara Eliya	24	24	24	72	7	79
Galle	57	21	44	122	11	133
Matara	28	12	21	61	9	70
Hambantota	20	7	8	35	0	35
Jaffna	29	14	20	63	3	66
Vavuniya	6	0	9	15	2	17
Batticaloa	37	8	14	59	5	64
Ampara	5	3	2	10	1	11
Kalmunai	19	6	4	29	1	30
Trincomalee	10	5	6	21	1	22
Kurunegala	38	16	32	86	12	98
Puttalam	19	7	6	32	3	35
Anuradhapura	34	5	19	58	2	60
Polonnaruwa	14	12	6	32	1	33
Badulla	36	15	20	71	6	77
Monaragala	7	5	6	18	0	18
Rathnapura	70	26	53	149	2	151
Kegalle	34	19	34	87	1	88
Mannar	3	5	2	10	0	10
Mulathivu	4	2	2	8	3	11
Kilinochchi	5	1	4	10	1	11
Total	1007	450	685	2142	155	2297

PTB-Pulmonary Tuberculosis

EPTB-Extra Pulmonary Tuberculosis

SP + ve - Sputum Positive

SP - ve - Sputum Negative

Data from Central TB Register

Source - National TB Register

16. SURVEILLANCE AT SEA PORT

Details of the vaccinations carried out by the Assistant Port Health Office during the 4th quarter 2013, is as follows;

		Total
Α.	Yellow fever	971
В.	Meningococcal meningitis	94
C.	Oral polio	58

17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the Inter national Airport, Katunayake during the 3rd Quarter 2013 is given below.

1. Yellow Fever Surveillance

a. No. with valid certificate	-	12
b. No. without valid certificate & De- ported	-	00
c. No. without valid certificate & Iso- lated	-	00
2. Disinfection of Aircrafts		
a No. of flights arrived	-	6129
b No. of flights has to be disinfected	-	5257
c No. of flights disinfected	-	4913
3. Passenger Arrivals & departures	-	—
a No. of passengers arrived	-	929055
b No. of passengers departures	-	—
4. Release of Human Remains		
a. No. of human remains released	-	135
b. No. of released to J.M.O. For post- mortern	-	10
c. No. Alleged suicide	-	06
5 Surveillance of other infectious diseases	-	Nil
6 Airport Sanitation		
a No of sanitary inspections carrie- dout including Food establishments	-	26
b No. of food samples taken under Food Act	-	00
c No. Found defective	-	00
d No. of court cases / prosecuted / Warned	-	00
7 Other Health Activities		
a Poloi Vaccination No - of doses given	-	00
b Health talks given to staff	-	19
8 a. No. of water samples taken for Bacteriological Analysis	-	06
b. No. Reported Contaminated	-	00

18. LEPROSY

QUARTERLY RETURN OF LEPROSY STATISTICS - 3RD QUARTER 2013

Table 14

1. National

	At the	end of the quarte	Pr	Cumulative for end of the quarter			
	4th QTR,2013	4th QTR,2012	Diff (%)	2013	2012	Diff (%)	
New patients detected	515	469	46	2067	2212	6.56	
Children	51	33	18	192	238	19.33	
Grade 2 Deformities	36	33	3	138	149	7.38	
Multi-Bacillary	241	238	3	1027	1075	4.47	
Females	202	209	-7	849	936	9.29	

2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	19	3	2	9	5
Kandy	9	1	0	2	3
Matale	10	2	2	7	2
NuwaraEliya	0	0	0	0	0
Eastern	71	1	9	28	31
Ampara	7	0	0	4	2
Batticaloa	38	0	7	12	20
Kalmunai	22	1	2	10	8
Trincomalee	4	0	0	2	1
Northern	16	1	5	5	4
Jaffna	8	1	3	3	2
Vavuniya	6	0	2	2	1
Mannar	0	0	0	0	0
Killinochchi	2	0	0	0	1
Mulathivu	0	0	0	0	0
North Central	43	5	3	27	19
Anuradhapura	19	2	2	11	8
Pollonnaruwa	24	3	1	16	11
North Western	49	4	4	33	18
Kurunegala	32	3	1	23	11
Puttalam	17	1	3	10	7
Sabaragamuwa	15	2	0	4	5
Kegalle	10	1	0	2	4
Rathnapura	5	1	0	2	1
Southern	64	3	5	33	25
Galle	25	0	3	10	12
Hambanthota	25	3	2	12	10
Matara	14	0	0	11	3
Uva	12	2	2	5	2
Baddulla	3	0	0	1	0
Monaragala	9	2	2	4	2
Western	226	15	21	97	93
Colombo	127	8	17	52	60
Gampaha	50	4	3	25	14
Kalutara	49	3	1	20	19
Sri Lanka	515	36	51	241	202

Source : Anti Leprosy Campaign

19. SEXUALLY TRANSMITTED DISEASES

Table 15

NEW EPISODES OF STD/HIV/AIDS REPORTED OR TREATED AT STD CLINICS IN SRI LANKA

4TH QUARTER 2013

Disease		New cases or new disease epi- sodes during the quarter			Total new cases or new episodes for the calendar year up to end of the quar- ter **		
		Male	Female	Total	Male	Female	Total
HIV positive	es ¹	27	10	37	129	67	196
AIDS		7	2	9	41	18	59
	Early Syphilis ²	47	10	57	193	82	275
Syphilis	Late Syphilis ³	189	130	319	616	373	989
	Congenital Syphilis ⁴	0	1	1	5	5	10
Gonorrhoea	a ⁵	119	35	154	423	124	547
Ophthalmia	a Neonatorum ⁶	2	1	3	2	3	5
Non specifi	c cervicitis/urethritis	149	426	575	660	1498	2158
Chlamydial	infection	0	0	0	3	0	3
Genital Her	rpes	336	409	745	1165	1563	2728
Genital Wa	rts	290	225	515	1120	791	1911
Chancroid		0	1	1	3	3	6
Trichomoni	asis	2	48	50	6	131	137
Candidiasis	5	242	381	623	914	1460	2374
Bacterial Va	aginosis	0	343	343	0	1294	1294
Other sexu	ally transmitted diseases ⁷	128	30	158	470	156	626
Non venera	al	1052	507	1559	3578	1763	5341

Source: NSACP

(Includes cases diagnosed and reported to the 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
- Includes Lymphogranuloma venerium, Granuloma inguinalae, Molluscum contagiosum, Scabies, Tinea, Hepatitis B etc.
- 8 Number of STD clinic attendees who were not having sexually transmitted diseases.

20. BACTERIOLOGY REPORT, MEDICAL RESEARCH INSTITUTE 4th QUARTER 2013

Table 16-BACTERIOLOGY REPORT, MEDICAL RE-
SEARCH INSTITUTE 4th QUARTER 2013

	Oct	Nov	Dec
(A) CHOLERA			
No. of stool specimens Exam- ined	98	197	50
No. of positives	0	0	0
(B) SALMONELLA			
Blood- No. Examined	43	33	39
S.typhi	0	0	2
S.paratyphi A	0	0	0
Stools—No. examined	132	232	62
S.typhi	0	0	1
S.paratyphi A	0	0	0
Others	6	5	3
(C) SHIGELLA			
No. Examined	132	232	62
Sh.flexneri 1	0	1	0
Sh.flexneri 2	0	0	0
Sh.flexneri 3	0	0	0
Sh.flexneri 4	0	0	0
Sh.flexneri 5	0	0	0
Sh.flexneri 6	0	0	0
(D) ENTEROPATHOGENIC E.COLI			
No.Examined	2	4	3
No.+ve	0	0	0
(E) CAMPYLOBACTER			
No.Examined	15	20	11
No. Positive	0	0	0
(F) ISOLATES			
Clinical	4	4	7
S. Typhi	0	0	0
S. Paratyphi A	0	0	0
Other Salmonella	2	2	2
Shigella spp	0	0	0

21. SURVEILLANCE OF MENINGITIS-3rd quarter 2013

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 3rd quarter 2013, 308 suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system.

Out of this 258 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Gampaha and Kalutara districts (24 each) followed by Rathnapura and Colombo (22 each) districts and Matara(21).

Twenty nine percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 29% belonged to the age group 1-5 years and 26% belonged to age group 6 - 15 years. Sixty three percent of the clinically confirmed cases were males and 37% were female.

Table 17

Summary findings for special investigations carried out for clinically confirmed cases of meningitis in 4th quarter 2013

CSF Culture Report							
CSF Culture	Number	(%)					
CSF results available	240	35%					
No Growth	(227)						
Grouup B streptococci	(06)						
Haemophillus influenza	(01)						
Colliform	(02)						
Strept Pneumoniae	(02)						
 Staph Aureus 	(02)						
Culture results not known	438	63%					
Not done	15	02%					
Total	693	100%					
Final outcome of the	ne patient						
Outcome	Number	(%)					
Cured	655	96%					
Died	10	01%					
Information not available	28	03%					
Total	693	100%					
Final Diagnosis (based on clin	ical and lab findin	gs)					
Diagnosis	Number	(%)					
Culture confirmed	13	02%					
Probable bacterial meningitis	61	09%					
Probable viral meningitis	59	09%					
Suspected Meningitis	559	80%					
Total	693	100%					

22. INFLUENZA SURVEILLANCE

Human Influenza surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory tract Infections (SARI) surveillance. Epidemiological data are collected through 19 sentinel hospitals throughout the country. Samples are collected from 19 sentinel hospitals for ILI and from 4 sentinel hospitals for SARI.

Human Influenza surveillance Epidemiological Component ILI Surveillance

Fifteen surveillance hospitals have reported out of nineteen surveillance hospitals. Reporting rate was 78.94%. Total 17,544 ILI cases were reported out of 8, 66,272 OPD visits (2.02%) in the 4th quarter year 2013. Out of reported ILI cases, maximum number reported was from T.H.Anuradhapura 3514 (20.03%) and majority age group reported was age 15 – 49 years, 5932 (33.81%).

Severe Acute Respiratory Infections (SARI) Surveillance

A total of 521 SARI cases were reported from 22337 admissions (2.33%) of all 4 surveillance hospitals (T.H Ragama, G.H Matara,T.H, Peradeniya and LRH). Maximum number of SARI cases was reported from LRH (Lady Ridgeway Hospital) 199 (38.2%) from total SARI cases.

Laboratory Component ILI Surveillance

Under ILI laboratory surveillance a total of 636 samples were received from sentinel hospitals for the 4th quarter. There were 248 samples in October, 185 in November and 203 in December. T.H Kurunegala (66) had sent the highest number of samples followed by GH Ratnapura (60), Lady Ridgeway Children's Hospital (LRH) (58), T.H Batticaloa (53) and T.H Ragama (50). All sentinel hospitals except General Hospital Vavuniya had sent in samples within the quarter. Table 18:- shows the monthly performance of sentinel hospitals in the laboratory component of the ILI surveillance

Surveinance				
	Oct	Nov	Dec	Total
LRH	20	16	22	58
NHSL	13	05	17	35
CSTH	17	16	18	51
IDH	16	11	10	37
NCTH	20	15	15	50
TH Peradeniya	22	12	17	51
GH Nuwara Eliya	12	12	6	30
TH Karapitiya	5	7	10	22
GH Matara	7	11	0	18
TH Jaffna	6	0	0	6
GH Vavuniya	0	0	0	0
GH Ampara	8	0	0	8
TH Batti- caloa	20	20	13	53
TH Kurune- gala	24	21	21	66
GH Chilaw	15	4	12	31
TH Anurad- hapura	14	7	7	28
GH Polonna- ruwa	4	5	2	11
GH Badulla	0	13	8	21
GH Rat- napura	25	10	25	60
Total	248	185	203	636

Influenza A was the predominant circulating Influenza viral strain identified in the quarter followed by Influenza (H3 N2) and Influenza A (untyped).

Table 19

Types of Respiratory Viruses Isolated in ILI samples – 4th Quarter 2013

Mont h	To- tal	In- flue nza A	(H1N1 pdm) 2009	A (H3 N2)	A un- typ ed	Influ- enza yield
Oct	248	2	1	0	1	1.61%
Nov	185	3	0	2	1	3.24%
Dec	203	1	0	0	0	0.49%
Total	636	6	1	2	8	2.67%

Severe Acute Respiratory Infections (SARI) Surveillance

Out of the total of (120) samples collected to the MRI, Lady Ridgeway Children's Hospital (LRH) had sent the highest number of samples (73) followed by T.H Ragama (24), G.H Matara (20) and T.H Peradeniya (3).

Table 20 : Monthly performance of sentinel hospi-
tals in the laboratory component of the SARI sur-
veillance - 4th Quarter 2013

Institution	Oct	Nov	Dec	Total
LRH	23	26	24	73
T.H Ragama	8	12	4	24
GH Matara	17	0	3	20
TH Peradeniya	3	0	0	3
Total	51	38	31	120

Predominant circulating Influenza virus strain in the quarter was Influenza A , Influenza (H3N2), Influenza A (Untyped) and followed by Influenza B

Table 21 : Types of Respiratory Viruses Isolated in SARI Samples - 4th Quarter 2013

Mont h	Total	In- flue nza A	A (H3N2)	A (untyped)	Influ- enza B	Influenza yield
Oct	51	1	0	2	2	9.80%
Nov	38	1	1	0	1	7.89%
Dec	31	4	1	0	0	16.13%
Total	120	6	2	2	3	10.83%

Animal Influenza Surveillance

Sri Lanka has been considered a high risk country for Avian Influenza because of its location in the South Asian Region and due to country's large poultry industry with a considerable proportion of people engaged in backyard poultry. Also it being a tropical island which attracts over a two hundred species of migratory birds fleeing cold winters of temperate countries every year is another risk factor for continuation of animal influenza surveillance.

Table 22 Animal samples collected by month and district – 4th Quarter 2013

	No. o	f sam-					
Mont	ples		Districts samples				
h	Poole d	Serum	were collected from				
			Colombo, Kandy,				
Oct	377	536	Ampara, Hamban-				
Oci	3/1	550	tota,Rathnapura,				
			Polonnaruwa, Puttlam				
			Colombo, Kandy,				
	636	577	Matale, Kegalle, Rath-				
			napura, Anurad-				
Nov			hapura, Gampaha,				
			Badulla, Vavuniya,				
			Jaffna, Matara, Ku-				
			runegala				
			Colombo, Gampaha,				
Dec	416	198	Hambantota, Kegalle,				
Dec	-10	190	Puttlam, Vavuniya,				
			Jaffna				
Total	1429	1311					

23. Special Report Surveillance Report on AFP –2012

Introduction

Poliomyelitis is a highly infectious acute viral disease, affecting mainly young children causing irreversible paralysis or death. It is an enteroviral infection with faecooral transmission. During the 19th and 20th centuries, poliomyelitis was an epidemic, more frequently observed, reaching its peak in the mid 1950s globally. The worldwide prevalence of poliomyelitis has decreased significantly with immense efforts of polio immunization. Global Polio Eradication Initiative started in 1988 to achieve eradication strategies and by 2012 only 3 endemic countries were remaining globally; i.e. Nigeria, Afganistan, and Pakistan. India has not reported cases since January 2011 and intensified immunization programmes of polio is continuing and it is planned to declare polio free status by 2014. India was the only endemic country in the South East Asia Region and the Region would be polio free if all regional countries are obliged in maintaining high polio immunization coverage, strengthened AFP surveillance, Laboratory containment and wild polio virus detection at

History of Poliomyelitis situation in Sri Lanka

Poliomyelitis was made a notifiable disease in Sri Lanka since 1944. The largest outbreak in the country was reported in 1962 with 1810 cases and 180 deaths. Introduction of Oral Polio Vaccine (OPV) to Colombo and suburbs for children aged 3 months -15 years was done in 1962. But the island wide mass immunization with OPV was initiated in 1964. Since then OPV coverage in Sri Lanka gradually increased and since 1995 the national OPV coverage of the 3rd dose (OPV 3) was maintained >90%.

Acute Flaccid Paralysis was gazetted as a notifiable disease in 1990 and individual case based investigation of all AFP cases started in 1991. In 1993 a total of 15 cases were identified with 10 of clinically confirmed and 5 of laboratory confirmed cases. The case definition of an AFP case was cited a case as any child < 15 years of age presenting with acute onset of flaccid paralysis or a person of any age highly suspected of poliomyelitis.

The last case of Poliomyelitis was detected in a female child aged 2 years in the district of Moneragala, in Kataragama area in November 1993. It was found that the child had been immunized with only 2 doses of OPV. The wild polio virus type 1 was isolated from this last virologically confirmed case. Type 2 Polio virus was last detected in 1993 while type 3 was last detected in 1985 in Sri Lanka. In addition, sentinel site hospital surveillance has been set up since 1996 in major hospitals in every Regional Director of Health Services [RDHS] Division where Consultant Paediatricians are in place. Regional Epidemiologists are expected to visit their respective sentinel site hospitals in the regions at least once a week. However, the premier children's hospital in Colombo (Lady Ridgeway Children's Hospital) and the National Hospital of Sri Lanka in Colombo are under the direct purview of the Epidemiology Unit. A weekly report of cases of AFP including a 'nil' report from sentinel site hospitals and a compiled monthly report of AFP cases presented from each district from the Regional Epidemiologists are received at the Epidemiology Unit and are closely monitored..

National Committee for Certification of Polio Eradication (NCCPE) was established in 1999. All relevant decisions and issues in the Poliomyelitis Eradication Initiative are discussed at quarterly meetings.

National Polio Expert Committee with experts of relevant fields in Paediatrics, Neurology, Virology Neurophysiology and Epidemiology are involved in reviewing cases of AFP surveillance in identifying final diagnoses in confirming or discarding the case as a nonpolio AFP case.

National Immunization days in giving an additional OPV dose to all children under 5 years of age irrespective of the age appropriate routine immunization were conducted in the country from 1995 to 1999. Sub—National

Sub-national Immunization Days were conducted from 2000-3003 in the Nothern and Eastern provinces.Mopping up Immunization Programmes were conducted in 1993 in the Puttalam District, 1994 in the Trincomalee District and from 2001-2003 in districts in the Northern and Eastern Provinces. The criteria in identifying districts to conduct such supplementary immunization activities were based on factors identified as relatively low immunization coverage, population in transit, difficulty to reach communities due to the existing civil conflict situation in the country, and high population density in urban areas. These supplementary immunization activities are being carried out to strengthen population immunity levels in addressing the risk of transmission of possible imported cases

Present polio eradication situation in Sri Lanka

Routine Immunization of OPV in 2012

Uniform high OPV immunization coverage is maintained in all districts with 5 doses of OPV given at 2, 4, 6, months of age and boosters at 18 months and 5 years. Immunization of OPV 3 coverage by each district is given in table 23.

Supplementary OPV immunization for returnees & travellers

In addressing the potential risk of importation of Poliomyelitis into the country special supplementary OPV immunization is being carried out in Sri Lanka since 2004. In the districts of northern and eastern provinces, Puttalam district and NuwaraEliya district, OPV vaccination for children less than 15 years of age who return to Sri Lanka from South India and other countries was carried out., with 2 doses of OPV vaccination ; 1st dose as early as possible and the 2nd dose one month later, irrespective of their age appropriate polio vaccination status. This measure was expected to counteract the threat of transmission posed from the neighbouring countries that report polio cases. A monthly return summarizing the number of children < 15 years of age among the returnees and their OPV immunization coverage is being sent to the relevant Regional Epidemiologists who consolidate data monthly to a district report to be sent to the Epidemiology Unit.

Also, since November 2007 all pilgrims departing for pilgrimages to India and especially to Buddhagaya should receive a dose of OPV at least 2 weeks prior to their travel date. This immunization activity is being carried out at all MOH offices and also at the Port Health Office in Colombo.

AFP surveillance

Geographical Distribution of AFP cases 2012

A total of 75 AFP cases were reported for the year 2012 (Table 2). This yielded a non polio AFP rate of 1.5 per 100,000 under 15 year age child population. This is calculated according to the population estimates for 2012 in the country. The highest number of cases, 20 (27%) was reported from the Western Province. Districts of Kalmunai, Vavuniya, Mannar and Killinochchi did not report any cases for the year. Countries in the endemic regions are expected to report 2 of non polio AFP cases per 100,000 under 15 year age child population per year and Sri Lanka needs more reported cases of AFP to achieve this expected surveillance target.

Table 2: Reported AFP cases by district, 2012

The main sentinel site for AFP, out of the 69 sentinel sites in the country, Lady Ridgeway Children Hospital (LRH), Colombo which is a tertiary paediatric care centre receiving referrals from other hospitals all over the country had reported 31% of the total caseload (23 cases) in 2012 Teaching Hospital Kandy, Sirimavo Bandaranayake Specialized Children's Hospital (SBSCH), Peradeniya and Teaching Hospital Karapitiya were other referral centres which had reported 19 cases (25%) of the AFP case reporting during the year. Figure1 below shows the distribution of AFP cases notified from hospitals during the year.

Table 23 : OPV3 Immunization Coverage by District- 2012

District	Number of Doses	OPV3 Coverage
Colombo	28,985	91.5
Gampaha	31,870	94.7
Kalutara	18,860	93.2
Galle	16,595	92.8
Matara	13,366	90.8
Hambantota	11,256	93.1
Kandy	22,842	92.3
Matale	8,787	92.6
NuwaraEliya	13,876	95.4
Ratnapura	18,344	92.5
Kegalle	13,612	94.1
Kurunegala	27,179	95.2
Puttalam	14,307	94.5
Ampara	4,979	94.0
Kalmunai	8,693	94.6
Trincomalee	8,411	95.3
Batticoloa	10,035	92.9
Polonnaruwa	7,927	92.8
Anuradhapura	17,829	92.5
Moneragala	9,005	93.4
Badulla	14,517	92.4
Vavuniya	3,506	94.2
Mannar	1,848	95.1
Kilinochchi	2,359	95.4
Jaffna	8,990	93.7
Mulativu	1,467	95.4
Total	324,442	93.4

Table 24 : Reported AFP cases by district : 2012

District	No. of cases	OPV3 Cover- age	Number of cases
Colombo	9	Ampara	1
Gampaha	9	Kalmunai	0
Kalutara	2	Trincomalee	2
Galle	4	Batticoloa	2
Matara	1	Polonnaruwa	2
Hambantota	2	Anuradhapura	4
Kandy	4	Moneragala	3
Matale	1	Badulla	5
NuwaraEliya	7	Vavuniya	0
Ratnapura	4	Mannar	0
Kegalle	2	Kilinochchi	0
Kurunegala	3	Jaffna	4
Puttalam	3	Mulativu	1
Total			75

Figure 1: Number of AFP cases reported from sentinel site hospitals : 2012

Sentinel site hospitals are expected to notify the AFP cases admitted to their institutions as early as possible to the Epidemiology Unit, Regional Epidemiologist and the relevant Medical Officer of Health of the patient's residential area for necessary outbreak response activities and for completion of patient investigation and surveillance activities. Completion of the patient investigation form (Form 1 or the Pink form) and dispatch to Epidemiology Unit is the responsibility of clinicians who are treating AFP patients at sentinel site hospitals once a patient is admitted.

Number of AFP cases reported from sentinel

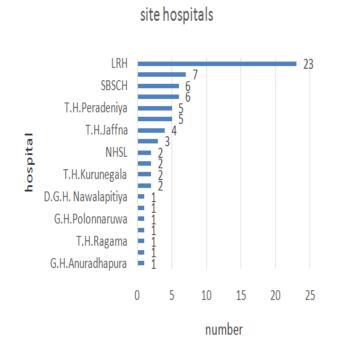


Figure2 : Number of AFP cases reported from sentinel site hospitals:2012

Of the 75 reported cases males are little higher (52%) than females. During 2011 also the similar pattern was observed as 53% males from the 88 reported AFP cases.

Majority of the reported cases were between 1-9 years (51 case, 68%). 1-9 years. This trend of presentation was compatible with the presentation of AFP cases for the previous year which was 70% (62 cases).

All AFP cases reported should have two stool samples collected within 14 days of onset of paralysis. Timely stool collection is defined as both stool sample collected within 14 days of the onset of paralysis with minimum of 24 hours apart in each sample. Timely stool samples collected in adequate amounts which is specified as 6-8g collected to a screw capped, clean, dry containers provided at the sentinel sites are expected to be dispatched to the Virology laboratory at Medical Research Institution (MRI) in the cold box provided for specimen transport. Stool specimens collected are required to be received at the MRI within 72 hours of collection, in ice with a proper request form. Laboratory investigation procedure in Polio virus isolation is carried out in the Virology Laboratory at the MRI and this is a WHO accredited regional reference Polio Laboratory serving Sri Lanka and Maldives. The timely stool collection rate satisfying the above criteria in 2012 was 81%.

Immunization Status of AFP Cases Reported in 2012

All 88 cases reported during the year had received age appropriate OPV vaccination according to the information received. Information on immunization status of the children were obtained from the Child Health Development Record (CHDR) by the medical officers treating the patients received through patient investigation form (Form 1/Pink Form) and by the Medical Officer of Health (MOH) team through the relevant surveillance form (Form 2 / Yellow Form).

Table 25 : Age a	and sex d	listribution o	f AFP	cases
in 2012				

Age cate- gories	Male	Female	Total
<1 year	0	1	1
1-4 years	9	12	21
5-9 years	17	13	30
10-14years	13	10	23
Total	39	36	75

Final Classification of AFP Cases 2012

All cases reported finally had a final diagnosis and classification of final diagnoses is given in table 3.

Majority (72) of cases were GuillanBarre syndrome (GBS) and in comparison to 2009 same pattern was observed as per 60 reported AFP cases, finally diagnosed as GBS, out of the total 78 AFP cases.

Table 26: Distribution of Final Classification of AFP
cases -2012

Diagnosis	No	Percentage (%)
GuillanBarre Syndrome	56	75%
Transverse Myelitis	4	5.3%
Brainstem Glioma	1	1.3%
Miller-Fisher Syndrome	3	4%
Krait bite	2	2.7%
Bell's Paulsy	1	1.3%
Inter-hemispheric le-	1	1.3%
sion		0.70/
Polymyositis	2	2.7%
Cerebellitis	1	1.3%
Common Peronial Nerve Paulsy	1	1.3%
Neuroblastoma	1	1.3%
Meningoencephalitis	1	1.3%
Primary Syringomyelia	1	1.3%

Community based outbreak response activities

Subsequent to notification of AFP cases, relevant Medical Officers of Health are informed and the public health team working at the field level is expected to carry out outbreak response activities at the community. This includes stool samples to be collected from 3-5 contacts (a single sample as early as possible) specified as siblings or playmates of the relevant index patient and sent to MRI in reverse cold chain within 72 hours of the collection with adequate information. Further an additional OPV vaccination dose will be given to children below 15 years without considering their age appropriate vaccination status. The contact stool samples of stools were collected from contacts of all(100%) AFP cases reported in 2012 and this figure for 2011 was 98%.

Feedback Information on AFP Cases

All reported cases compiled according to geographical location and together with all reported institutions were discussed at the Regional Epidemiologits' Quarterly review. All Regional Epidemiologists are expected to discuss the progress and strengthen notifications at respective sentinel site hospitals In addition weekly reported AFP cases are given at the Weekly Epidemiological Report (WER) and this publication is made available to all health institutions The Epidemiology 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 Dis-

eases from the Medical Officer of Health (MOH) areas.

Further, Quarterly Epidemiological Bulletin published by the Epidemiological Unit provides summary information on AFP surveillance activities for each guarter and year

Indicators of AFP Surveillance and Laboratory performance 2012

Performance of an AFP surveillance programme is considered to be of adequate standards if an expected surveillance performance criteria are to be achieved. These criteria are stipulated by the Global Poliomyelitis Eradication Initiative of the World Health Organization. Firstly it is expected to detect 2 cases of non-polio AFP for every 100,000 population of children < 15 years of age in countries of the endemic region. 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. Theother 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. The expected performance indicators and performance achieved during 2011and 2012 are given in table 27.

Table 27

AFP surveillance performances indicators 2012

Indicator	Expected	2012	2011
Non Polio AFP Rate)	2:100,000, <15 years	1.5	1.4
Two timely stools Rate	>80%	81%	89%
Investigation within 48hrs	>80%	100%	100%
60 Day Follow up Rate by the Regional Epidemiologist	>80%	99%	99%
Detection of Non Polio Entero Virus Rate % in the Laboratory	>10%	7.5%	5%
Timeliness of weekly reporting from sentinel site hospitals including "nil" returns	>80%	85%	78%
Timeliness of monthly reporting by Regional Epidemiologists at district level	>80%	56%	64%
Reporting time of laboratory results within 28 days	>80%	91%	100%

October-December

Table 28 :Summary of NOTIFIABLE Diseases 4th Quarter 2013

Health Region	Dysentery	Encephalitis	Enteric Fever	Food Poisoning	Human Rabies	Leptospirosis	Measles	Simple Con. Fever	Tetanus	Typhus Fever	Viral Hepatitis	Whooping Cough	Dengue Fever /DHF	Tuberculosis	Chickenpox	Mumps	Meningitis	Leishmaniasis
Colombo	76	1	54	8	0	49	163	0	0	3	26	3	3051	101	120	10	21	1
Gampaha	58	10	11	12	0	163	113	1	1	10	34	1	928	158	47	12	22	0
Kalutara	48	2	16	4	0	125	34	0	0	2	10	2	493	17	126	11	29	0
Kandy	49	2	8	14	0	34	15	0	0	12	54	2	255	259	60	9	14	3
Matale	41	0	1	2	0	22	6	0	1	0	26	0	102	39	5	7	7	9
Nuwara-Eliya	46	2	10	2	0	10	5	1	0	9	5	0	61	56	55	17	5	0
Galle	43	2	5	10	0	87	86	8	1	17	3	0	210	137	72	16	4	2
Hambantota	32	1	1	6	0	22	39	1	0	11	17	9	71	29	17	2	19	99
Matara	34	6	2	3	0	45	41	5	0	21	23	3	88	60	43	17	27	29
Jaffna	221	5	56	18	1	2	2	23	0	123	1	0	225	67	19	8	9	0
Kilinochchi	32	0	3	0	1	1	0	0	0	2	0	0	12	9	1	0	0	3
Mannar	16	1	13	0	0	0	1	0	0	3	0	0	7	10	1	0	2	0
Vavuniya	37	2	5	14	0	1	4	0	0	1	1	0	30	16	1	4	6	9
Mullaitivu	16	1	3	12	0	1	1	1	0	1	1	0	18	3	0	1	2	5
Batticaloa	156	0	5	4	0	13	17	0	0	0	5	0	66	65	9	0	2	0
Ampara	77	0	1	1	0	10	1	0	0	0	5	0	81	13	35	42	6	1
Trincomalee	24	0	2	1	0	4	5	1	0	3	1	1	25	21	5	10	1	2
Kurunegala	85	11	5	8	0	134	30	4	0	18	20	1	319	103	93	25	11	21
Puttalam	25	1	2	0	1	9	35	1	0	4	1	1	137	26	18	5	4	5
Anuradhapura	37	1	0	37	1	45	30	2	0	7	9	0	121	61	26	17	23	102
Polonnaruwa	43	2	0	11	0	32	6	2	0	0	7	0	132	32	32	5	8	36
Badulla	56	1	5	4	1	11	12	0	0	28	6	0	109	82	37	2	22	2
Moneragala	29	3	4	12	1	17	23	0	0	16	49	0	60	22	25	7	4	5
Ratnapura	85	1	10	6	0	136	306	0	1	22	233	7	170	100	72	12	19	6
Kegalle	42	2	12	7	0	135	31	0	1	9	70	0	293	103	87	17	21	1
Kalmunai	78	1	3	14	0	3	2	0	0	1	1	0	15	27	34	5	5	0
Total	1486	58	237	210	6	1111	1008	50	5	323	608	30	7079	1616	1040	261	293	341

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 @ sltnet.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,

PRINTING OF THIS PUBLICATION IS FUNDED BY THE WORLD HEALTH ORGANIZATION (WHO)

ON STATE SERVICE

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

ISSN NO: 2345-9360