OCHOTE 2D' EPIDEMIOLOGICAL BULLETIN

SRI LANKA

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EPIDEMIOLOGY UNIT

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1. POLIOMYELITIS

Twenty one (21) Acute Flaccid cases were notified to the Epidemiology Unit during the 4th quarter 2014. This is lower compared to reported AFP cases of 33 during the 4th quarter 2013. Reported number of AFP cases for the quarter is below 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 survey population. The non-polio AFP rate for the fourth quarter of 2014 was 1.6 :100,000.

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 (71.4%) were notified from the sentinel site hospitals for AFP, the Lady Ridgeway Children's Hospital (LRH), Sirimavo Bandaranayake Specialized Children's Hospital, Teaching Hospital (TH) Peradeniya and TH Kurunegala. Particulars of all hospitals which reported AFP cases are given in Table 01.

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

The highest number of cases were reported from Kandy district with 5 cases. 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 of the cases were girls during the 4^{th} quarter 2014 and this was opposite when compared to the trend reported during the 4^{th} quarter 2013 in which majority was (70%) of boys in the reported AFP cases.

Majority (67%) of the cases was 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 4^{th} quarter 2014.

Table 01: Notification of AFP cases by sentinelhospitals - 4th quarter 2014

Hospital	No: of cases reported
LRH	7
SBSCH	4
T.H.Kurunegala	2
T.H.Peradeniya	2
T.H.Karapitiya	1
G.H.Badulla	1
T.H.Kalubovila	1
G.H. Ratnapura	1
TH Batticoloa	1
NHSL	1
Total	21

Seasonal Distribution of AFP Cases

Majority of AFP cases were reported during October (43%). This is similar to the compatible quarter in 2013 which reported the highest proportion in the same month.

4th Quarter

Table 02: Geographical distribution of AFP cases- 4th quarter 2014

Province	District	MOH Area	Number of AFP cases
Western	Colombo	Kolonnawa	1
		Kaduwela	1
		Nugegoda	1
		Borelesgamuwa	1
	Gampaha	Seeduwa	1
Southern	Hambanrhota	Sooriyawewa	1
Central	Kandy	Gampola	2
		Hasalaka	1
		Galaha	1
		Udunuwara	1
	Matale	Galewela	1
Eastern	Batticoloa	Kattankudy	1
Sabaragamuwa	Ratnapura	Eheliyagoda	1
		Ratnapura	1
	Kegalle	Mawanella	1
North Central	Anuradhpura	Galnewa	1
	Polonnaruwa	Elahera	1
North western	Kurunegala	Udubeddawa	1
		Alawwa	1
Uva	Uva Moneragala		1
Total			21

Table 03: Distribution of AFP cases by Age& Sex, 4th quarter 2014

Age	Total
< 1 year old	00
1-4 year old	08
5-9 year old	07
10–15 year old	06
Total	21

Final diagnoses of AFP cases

Majority (91%) of the reported AFP cases were finally diagnosed as Guillain Barre Syndrome (GBS). Final diagnoses of all 21 cases of AFP are given in table 04.

Table 04: Final diagnoses of AFP patients reportedduring 4th quarter 2014

Final Diagnoses	Frequency
GBS	19
Transverse Myelitis	01
Meningitis	01
Total	21

Laboratory exclusion of poliomyelitis in AFP patients

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 cases 17 AFP cases (81%) had both stool samples collected timely and sent to MRI for polio virology.

2. MEASLES

Out break situation experience in the country continued during the 4th quarter 2014 with declining tendency. Three hundred and forty five cases were suspected of possible measles during the 4th guarter 2014 but only 330 cases were identified as compatible with clinical case definition of "fever and maculopapular rash with one of the signs of cough, coryza or conjunctivitis". Other suspected 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 41% were below 1 year of age whom measles vaccination is not indicated. Western province (40%) and sabaragamuwa province (20%) reported majority of measles cases. Laboratory investigations of suspected measles or rubella patients (299) 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 219 cases were serology positive for measles lam antibodies. Outbreak of measles was considered as continuing at declining tendency during the fourth quarter.

3. LEPTOSPIROSIS

During the 4th quarter 2014, 1391 cases and 20 deaths (CFR 1.43 %) due to Leptospirosis were notified to the Epidemiology Unit compared to 601 cases and 10 deaths in the previous quarter and 1111 cases and 15 deaths during corresponding quarter of 2013.

 Table 05: Selected characteristics of leptospirosis

 patients (%)- 4th quarter 2014

	Sex		
Age Group	Male	Female	
0-9 years	0.28	0.94	
10-19 years	6.53	3.77	
20-29 years	16.76	5.66	
30-39 years	20.73	22.64	
40-49 years	24.00	23.58	
50-59 years	19.17	23.58	
>60 years	11.22	17.92	
Total	100.00	100.00	

4. HUMAN RABIES

Two Human Rabies cases were reported in 4th quarter 2014 compared to 03 cases in the previous quarter and 06 cases in the corresponding quarter of year 2013.

Animal Rabies

During this quarter, 148 dogs were reported positive for rabies, compared to 162 positive in the previous quarter and 178 positive in the same period in the last year at MRI.

Cats-33, Cows-01, Domestic Ruminants - 00.

Rabies Control Activities

Dog vaccination - 595607 dogs were immunized during the quarter under review when compared to 384499 in previous quarter and 416897 in corresponding Quarter of last year.

Animal Birth control

4660 female dogs were injected with progesterone and 59904 female dogs were sterilized by surgical method.

5. VIRAL HEPATITIS

In the 4thquarter 2014, a total of 586 cases of Viral Hepatitis were reported to the Epidemiology Unit. This was in comparison to the 612 cases in the previous quarter and 608 cases in the corresponding quarter of 2013. Ratnapura(117 cases) reported the highest number of cases followed by Kandy District (91 cases).

6. ENTERICFEVER

In the 4th quarter, a total of 393 cases of Enteric fever were reported to the Epidemiology Unit, compared to 190 cases in the previous quarter and 237 cases in the corresponding quarter of 2013. The district of Jaffna (152) reported the highest number of cases, followed by Vavuniya (54 cases)

7. DYSENTERY

In the 4thquarter, a total of 2052 cases of Dysentery were reported to the Epidemiology Unit, in comparison to 976 cases in the previous quarter and 1480 cases in the corresponding quarter of 2013. Jaffna (625 cases) and Anuradhapura (172 cases) reported the highest number of cases

8. MALARIA

There were no indigenous malaria cases reported during the 4th quarter of 2014.(Table 06)

9. JAPANESE ENCEPHALITIS (JE)

During the 4th quarter of 2014, 38 cases of clinically suspected Encephalitis cases were reported to the Epidemiology Unit through the routine disease notification system. Out of this, 21 cases were clinically confirmed by the Public Health Inspectors during their field investigations.

During the 4th quarter of 2014, not a single lab confirmed JE case was reported.

Table 06: Results of Blood smear examination formalaria parasites - 4th quarter 2014

	4th quar- ter 2013	4th quar- ter 2014
No. of blood smears exam- ined	254,890	269,912
No. of positives	0	0
No. of <i>P. vivax</i>	0	0
No. of P. falciparum	0	0
No. of mixed infections	0	0
No. of infant positives	0	0
Slide positivity rate (S.P.R.)	0	0
P.v. : P.f. ratio	0	0
Percentage of infants posi- tive	0	0

Table 07

Selected characteristics of confirmed cases of JE – 4th quarter 2014

(Total number of cases reported = 19)

_	Male	12 (63%)
Sex	Female	07 (37%)
Age group	< 1 Y	02 (11%)
	1-10 Y	04 (21%)
	11-20 Y	00 (00%)
	21-50 Y	05 (26%)
	> 50 Y	08 (42%)
District	Gampaha	04 (21%)
	Kalutara	01 (05%)
	Matale	01 (05%)
	NuwaraEliya	01 (05%)
	Matara	01 (05%)
	Batticaloa	01 (05%)
	Kurunegala	03 (16%)
	Polonnaruwa	01 (05%)
	Moneragala	01 (05%)
	Ratnapura	03 (16%)
	Kegalle	01 (05%)

4th Quarter

October-December

Table 08: Distribution of blood smears examined by district RMO -4th quarter 2014

RMO	October	November	December	Total
Colombo	6594	7940	5680	20214
Gampaha	3217	1852	2761	7830
Kalutara	1019	2046	1916	4981
Kandy	4617	4440	3554	12611
Matale	3002	2923	2860	8785
Nuwara Eliya	137	213	250	600
Galle	1453	1454	2003	4910
Matara	1943	1960	1506	5409
Hambantota	1852	2310	2215	6377
Jaffna	6819	6402	7760	20981
Kilinochchi	3205	5310	4118	12633
Vavuniya	4168	4555	4630	13353
Mannar	2838	3465	3613	9916
Mullaitivu	1126	2943	4344	8413
Batticaloa	4568	4791	3653	13012
Ampara	1602	1484	1827	4913
Kalmunei	3474	3930	3663	11067
Trincomalie	2535	1900	2721	7156
Kurunegala	5536	5935	5814	17285
Maho	1843	1397	1635	4875
Puttalam	2657	3445	2586	8688
Anuradhapura	6118	6229	6145	18492
Pollonnaruwa	4835	5131	3649	13615
Badulla	2679	2565	3296	8540
Monaragala	2780	3040	3097	8917
Rathnapura	2354	2812	2584	7750
Kegalle	3036	3032	2521	8589
Total	86007	93504	90401	269912

4th Quarter

October-December

Table 09: Morbidity and mortality due to DF/DHF -- 4th quarter 2014

RDHS Division	Cases	Percentage (%)	Deaths
Colombo	3952	26.01	07
Gampaha	3124	20.63	02
Kalutara	525	3.46	01
Kandy	1079	7.12	00
Matale	290	1.91	00
N' Eliya	80	0.52	00
Galle	354	2.33	01
Hambantota	143	0.94	00
Matara	271	1.78	02
Jaffna	954	6.38	01
Kilinochchi	44	0.29	01
Mannar	270	1.78	00
Vavuniya	37	0.24	00
Mulativu	48	0.31	00
Batticaloa	311	2.05	00
Ampara	31	0.20	00
Trincomalee	156	1.03	01
Kurunagale	867	5.72	01
Puttalam	390	2.57	01
A'pura	213	1.40	00
Polonnaruwa	142	0.93	00
Badulla	581	3.83	00
Moneragala	92	0.60	00
Ratnapura	395	2.60	01
Kegalle	407	2.68	00
Kalmunai	384	2.53	00
Total	15,140	100.00	19

October-December

Table 10: DF/DHF Statistics from Department of Virology, MRI –4th quarter 2014

Month	Clinically suspected cases of DF/DHF	Serologically Confirmed Cases of DF/DHF
October	342	161
November	290	130
December	186	77
Total	818	368

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

During the 4th QUarter of 2014, 15,140 cases of DF/DHF and 19 deaths were reported (0.125% CFR) when compared to 12,383 cases of DF/DHF and 24 deaths (0.19 % CFR) reported during the 3rd quarter of 2014. Proportion of cases notified in October, November and December were 23.38%, 36.01%, and 35.60% respectively.

Table 09 shows the distribution of DF/DHF cases and deaths in the RDHS divisions during the 4^{th} QUarter of 2014

Special surveillance data on 1349 confirmed cases were received and analyzed for the 4th quarter of 2014. Age distribution of reported cases were <4 years of age in 77 (5.70%), 5- 9 years of age in 164 (12.15%), 10 - 14 years of age in 153 (11.34%), 15 - 19 years of age in 150 (11.11%), 20 - 24 years of age in 206 (15.27%), 25 - 29 years of age in 163 (12.08%), 30 - 34 years of age in 114 (8.45%), 35 - 39 years of age in 84 (6.22%), 40 - 44 years of age in 57 (4.22%), 45 - 49 years of age in 53 (3.92%), 50 - 54 years of age in 54 (4.0%), 55 - 59 years of age in 30 (2.22%), >60 years of age in 29 (2.14%).

According to the clinical findings majority of the reported cases 1249 (92.65%) were classified as dengue fever, 6.15 % were classified as Dengue haemorrhagic fever without shock , 0.81% were Dengue haemorrhagic fever with shock while 0.074% falling into unusual dengue category.

During the 4th quarter of 2014, 818 blood samples were tested using IgM capture ELISA test at the Department of Virology, MRI. From the total, 368 (44.98%) samples were confirmed as positive (Table 10).

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

During the whole quarter, 2 suspected Rubella disease cases were reported and one 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. Outbreaks were not reported during the quarter for rubella infection and one 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

MOH MC-Matara of RDHS Matara and MOH Balangoda of RDHS Ratnapura reported clinically confirmed one tetanus case each. Total cases for the fourth quarter were two.

According to the data available there were total of 10 cases of clinically confirmed tetanus were reported in the year 2014 of which four (40%) were male and six (60%) were female. All patients were more than 30 years old. Out of the 10 patients 08 patients received post exposure tetanus toxoid. Final outcome of these 10 patients, 06 died while 04 recovered.

4th Quarter

14. SURVEILLANCE REPORT ON AEFI

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in the 4thQuarter of 2014 has reached 94.2% of completeness of reports, while 45.1% reports were received in time at the Epidemiology Unit indicating the need for more attention on good compliance for the system by the MOOH. Badulla, Mannar, Mullativu and Polonnaruwa were able to send all reports. The best timeliness was reported from the Jaffna district (77.1%) followed by Kegalle (65.6%), Matara (64.0%) and Badulla (60.4%). (Table 1)

The highest percentage of nil reports were received from Vavuniya(54.5%) followed by Ampara district (52.9%), which is more than two fold of the Sri Lanka average (24.5%) indicating the need for more attention for surveillance. Gampaha district has the lowest 'Nil return' of 6.8%,followed by Badulla(8.3) and Jaffna districts (8.6%) indicating the good surveillance system in place. The highest rate (400.7 per 100,000 immunizations) of AEFI was reported from Mannar district, while Kandy reported the highest number of 284 AEFI cases in the fourth quarter 2014.

For the fourth guarter, the highest number of AEFI (n=1404) was reported against Pentavalent vaccine, where as the highest rate of AEFI (729.9/100,000 doses administered) was reported against DTP vaccine. The rate of AEFI for Pentavalent (01st, 02nd& 03rd dose) is 541.8 per 100,000 doses administered. High Fever (884), Allergic Reaction (585), Nodule (412) and injection site abscesses (178) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (505 cases: 194.9 per 100,000 doses admin istered) and DPT (275 cases: 312.2 per 100,000 doses administered) vaccines. For Allergic reactions, it was largely due to LJE (224 cases: 100.5 per 100,000 doses administered), where as nodules, it was largely due to the Pentavalent vaccine (303 cases: 116.9 per 100,000 doses administered). An increasing number of injection site abscesses and local site reactions including nodules have been reported, indicating the possible immunization related errors by MOH staff, which is preventable.

Table 11: Completeness and timeliness of monthly reporting and receipt of "NIL" reports of AEFI by RDHS division - 4th quarter 2014

	•				2
DPDHS	% completeness	% Fimely returns	% Nil Returns	No. of AEFI	AEFI Rate (100,000 vaccine doses)
Colombo	86.3	50.0	13.6	265	211.4
Gampaha	97.8	40.9	6.8	154	120.3
Kalutara	92.3	25.0	22.2	115	149.3
Kandy	95.8	47.8	24.6	284	185.2
Matale	94.9	59.5	16.2	92	255.8
Nuwara Eliya	92.3	44.4	38.9	49	69.9
Galle	98.3	55.9	44.1	99	150.7
Hambantota	86.1	45.2	22.6	88	183.0
Matara	98.0	64.0	18.0	114	211.5
Jaffna	97.2	77.1	8.6	135	390.2
Kilinochchi	75.0	55.6	22.2	14	177.5
Mannar	100.0	40.0	33.3	30	400.7
Vavuniya	91.7	45.5	54.5	26	206.3
Mullativu	100.0	13.3	20.0	25	246.5
Batticaloa	97.6	48.8	29.3	113	290.8
Ampara	81.0	11.8	52.9	19	96.9
Trincomalee	93.9	38.7	45.2	44	134.6
Kurunegala	98.8	56.3	32.5	201	183.6
Puttalam	94.4	14.7	41.2	70	124.0
Anuradhapura	80.7	32.6	19.6	115	164.5
Polonnaruwa	100.0	19.0	23.8	54	172.2
Badulla	100.0	60.4	8.3	224	222.0
Moneragala	97.0	46.9	18.8	75	207.2
Ratnapura	96.3	25.0	25.0	127	161.7
Kegalle	97.0	65.6	15.6	138	191.0
Kalmunai	92.3	22.2	19.4	95	283.6
Sri Lanka	94.2	45.1	24.9	2765	183.1

4th Quarter

Table 12: Number of Selected Adverse Events by Vaccines – 4th quarter 2014

	BCG	OPV	PVV	DPT	MMR	LJE	DT	Π	aTd	Total number of AEFI report- ed
Total Number of AEFI Re- ported	08		1404	643	159	365	102	38	36	2755
AEFI reporting rate/100,000 doses administered	9.5		541.8	729.9	87.2	163.8	118.4	50.6	45.0	
High Fever (>39°C)			505	275	30	53	18	3		884
Reporting rate/100,000 doses administered			194.9	312.2	16.4	23.8	20.9	4.0		
Allergic reactions Reporting rate/100,000 doses			136	94	84	224	27	15	05	585
administered			52.5	106.7	46.1	100.5	31.3	20.0	6.3	
Severe local reactions Reporting rate/100,000 doses			69	24	3	36	2	3	1	138
administered			26.6	27.2	1.6	16.2	2.3	4.0	1.3	
Seizure (Febrile/Afebrile) Reporting rate/100,000 doses			34	38	3	9	1			85
administered			13.1	43.1	1.6	4.0	1.2			
Nodules			303	91	3	4	9	2		412
Reporting rate/100,000 doses administered			116.9	103.3	1.6	1.8	10.4	2.7		
Injection site abscess	6		149	10	5		6	2		178
Reporting rate/100,000 doses administered	7.1		57.5	11.4	2.7		7.0	2.7		
HHE Demonstration and a factors			3	1						04
Reporting rate/100,000 doses administered			1.2	1.1						

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.

15. TUBERCULOSIS

A total of 2157 TB patients were notified to the NPTCCD by H816A, and 2332 patients were registered at chest clinics for the 4th Quarter 2014. Out of this 2332 TB patients, 2138 (91.7%) were New TB Cases,103 (4.4%) were Re– treatment Cases and 91 (3.9%) were Other Cases. Out of New TB cases 1047 (49%) were New Smear Positive TB, 451 (22%) were New Smear Negative TB and 640 (29.9%) were New Extra Pulmonary TB Cases. A total of 2010 TB patients were screened for HIV, out of them **three** patients were found positive. **Two** Multi Drug Resistant TB patients were detected during above quarter. Distribution of TB Patients by RDHS division is given in the Table 13.

Table 13: Tuberculosis patients by RDHS divisions4th quarter 2014

RDHS		Ne	Retreat- ment &	Total			
DIVISION	РТВ	РТВ	EPTB	Total	other	10101	
Colombo	270	104	167	541	71	612	
Gampaha	127	47	53	227	23	250	
Kalutara	76	18	52	146	12	158	
Kandy	57	40	44	141	06	147	
Matale	19	07	12	38	02	40	
Nuwara Eliya	29	17	23	69	02	71	
Galle	47	24	38	109	10	119	
Matara	31	11	18	60	05	65	
Hambantota	08	04	07	19	01	20	
Jaffna	21	18	20	59	08	67	
Vavuniya	08	04	04	16	00	16	
Batticaloa	08	12	07	27	01	28	
Ampara	01	06	06	13	00	13	
Kalmunai	15	17	06	38	00	38	
Trincomalee	11	09	12	32	01	33	
Kurunegala	67	35	35	137	25	162	
Puttalam	22	02	12	36	02	38	
Anuradhapura	33	09	12	54	02	56	
Polonnaruwa	19	03	08	30	01	31	
Badulla	23	05	16	44	04	48	
Monaragala	14	03	05	22	00	22	
Rathnapura	65	18	41	124	08	132	
Kegalle	57	31	28	116	06	122	
Mannar	04	03	04	11	00	11	
Mulathivu	05	00	04	09	01	10	
Kilinochchi	10	04	06	20	03	23	
Total	1047	451	640	2138	194	2332	

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 2014, is as follows;

		Total
Α.	Yellow fever	932
В.	Meningococcal meningitis	190
C.	Oral polio	195

17. SURVEILLANCE AT AIRPORT

Surveillance activities carried out at the Inter national Airport, Katunayake during the 4th Quarter 2014 is given below.

1. Yellow Fever Surveillance

a. No. with valid certificate	-	326
b. No. without valid certificate & De- ported	-	-
c. No. without valid certificate & Iso- lated	-	-
2. Disinsection of Aircrafts		
a No. of flights arrived	-	6201
b No. of flights has to be disinsected	-	5357
c No. of flights disinsected	-	4972
3. Passenger Arrivals & departures		
a No. Of passengers Arrived	-	996636
b No.of Passengers Departures	-	—
4. Release of Human Remains		
a. No. of human Remains released	-	123
b. No. of released to J.M.O. For post- mortern	-	01
c. No. Alleged suicide	-	07
5 Surveillance of other infectious diseases	-	Nil
6 Airport Sanitation		
a No of sanitary inspections carried out including Food establishment	-	10
b No. Of food samples taken under Food Act	-	03
c No. Found defective	-	-
d No. of court cases / prosecuted / Warned	-	-
7 Other Health Activities a Polio Vaccination No - of doses		
given	-	-
b Health talk given to staff 8	-	08
a. No. of water samples taken for Bacteriological Analysis	-	07
b. No. Reported Contaminated	-	-

18. LEPROSY

Table 14: Quarterly return of Leprosy statistics -4th quarter 2015

1. National

	At th	e end of the quar	ter	Cumulative for end of the quarter			
	4th QTR,2014	4th QTR,2013	Diff (%)	2014	2013	Diff (%)	
New patients detected	545	515	5.82	2277	2069	10.05	
Children	52	51	1.96	216	190	13.68	
Grade 2 Deformities	34	36	-5.55	170	138	23.18	
Multi-Bacillary	257	241	6.63	1100	1011	8.80	
Females	224	202	10.89	892	847	5.31	

2. Districts

District	New patients	G2-Deformity	Children	MB	Females
Central	18	02	01	08	05
Kandy	11	02	01	04	04
Matale	03	00	00	01	01
NuwaraEliya	04	00	00	03	00
Eastern	65	02	09	27	25
Ampara	10	00	01	04	03
Batticaloa	30	00	05	09	11
Kalmunai	18	02	02	10	08
Trincomalee	07	00	01	04	03
Northern	21	02	01	13	09
Jaffna	12	00	00	06	03
Mannar	02	00	00	02	01
Mulathivu	05	02	01	03	03
Vauniya	02	00	00	02	02
North Central	36	02	03	18	15
Anuradhapura	17	00	03	07	08
Pollonnaruwa	19	02	00	11	07
North Western	63	04	02	36	31
Kurunegala	38	01	00	21	16
Puttalam	25	03	02	15	15
Sabaragamuwa	38	03	04	20	11
Kegalle	08	02	02	04	01
Rathnapura	30	01	02	16	10
Southern	59	07	06	28	27
Galle	19	06	01	11	08
Hambanthota	19	00	03	08	08
Matara	21	01	02	09	11
Uva	12	01	00	06	09
Baddulla	07	00	00	05	05
Monaragala	05	01	00	01	04
Western	233	11	26	101	92
Colombo	118	04	14	50	53
Gampaha	64	04	04	37	26
Kalutara	51	03	08	14	13
Sri Lanka	545	34	52	257	224

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 2014

Disease		New cases or new disease episodes during the quarter			Total new cases or new episodes for the calendar year up to end of the quarter **			
		Male	Female	Total	Male	Female	Total	
HIV positi	ives ¹	46	14	60	159	62	221	
AIDS		11	02	13	47	14	61	
	Early Syphilis ²	45	20	65	179	76	255	
Syphilis	Late Syphilis ³	159	112	271	760	425	1185	
	Congenital Syphilis⁴	03	02	05	15	11	26	
Gonorrho	ea ⁵	111	28	139	464	110	574	
Ophthalm	ia Neonatorum ⁶	01	00	01	02	01	03	
Non spec	ific cervicitis/urethritis	124	404	528	583	1492	2075	
Chlamydi	al infection	02	04	06	02	04	06	
Genital H	erpes	292	402	694	1260	1626	2886	
Genital W	larts	263	208	471	1068	804	1872	
Chancroid	d	01	00	01	03	00	03	
Trichomo	niasis	07	20	27	12	97	109	
Candidias	sis	248	425	673	882	1504	2386	
Bacterial Vaginosis		00	329	329	02	1221	1223	
Other sex	cually transmitted diseases ⁷	72	43	115	389	140	529	
Non vene	real	853	468	1321	3819	2024	5843	

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 RE-SEARCH INSTITUTE

	ост	NOV	DEC
(A) CHOLERA			
No. of stool specimens Examined	22	265	51
No. of positives	0	0	0
(B) SALMONELLA			
No of blood specimens ex- amined			
S.typhi			
S.paratyphi A			
No of stools specimens ex- amined	70	297	103
S.typhi	0	0	0
S.paratyphi A	0	0	0
Others	3	8	1
(C) SHIGELLA			
No of stool specimens examined	70	297	103
Sh.sonnei	0	1	0
Sh.flexneri 1	0	1	0
Sh.flexneri 2	0	0	2
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) ENTERO PATHOGENIC E.COLI			
No of stool specimens examined	5	5	1
No of positive	0	0	0
(E) CAMPYLOBACTER			
No of stool specimens exam- ined	30	23	26
No of Positives	0	0	1
(F) ISOLATES			
Clinical	21	16	21
S. Typhi	2	0	0
S. Paratyphi A	1	0	1
Other Salmonella	4	4	8
Shigella spp	7	1	6

Table 16

21. SURVEILLANCE OF MENINGITIS

Meningitis is a notifiable disease condition in Sri Lanka since year 2005. During the 4th quarter 2014, 240 cases of suspected meningitis cases were reported to the Epidemiology Unit through the routine disease notification system.

Out of this 213 cases were clinically confirmed by the Public Health Inspectors during their field investigations. Highest number of meningitis cases were reported from the Colombo and Badulla districts (20 each) followed by Jaffna (16) and Rathnapura (16) districts.

Thirty seven percent of the clinically confirmed meningitis cases belonged to the age group less than one year, another 24% belonged to the age group 1-5 years and 21% belonged to age group 6 - 15 years. Sixty three percent of the clinically confirmed cases were males and 37% were females.

Table 17: Summary findings for special investigations carried out for clinically confirmed cases of Meningitis from 1st January to 31th December 2014.

CSF Culture Report							
CSF Culture	Number	(%)					
CSF results available	238	43%					
No Growth	(225)						
Grouup B streptococci	(08)						
Haemophillus influenza	(03)						
Streptococcus Pneumoniae	(02)						
Culture results not known							
Not done	298	54%					
Total	10	02%					
	548	100%					
Final outcome of the patient							
Outcome	Number	(%)					
Cured	517	94%					
Died	09	02%					
Information not available	16	03%					
Total	548	100%					
Final Diagnosis (based on clin	ical and lab fin	dings)					
Diagnosis	Number	(%)					
Culture confirmed	12	02%					
Probable bacterial meningitis	61	11%					
Probable viral meningitis	44	08%					
Suspected Meningitis	431	79%					
Total	548	100%					

22. INFLUENZA SURVEILLANCE

Human Influenza Surveillance

Human Influenza surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory Infections (SARI) surveillance. Epidemiological data are collected from 19 sentinel hospitals throughout the country. Respiratory samples are collected from 13 sentinel hospitals for ILI and 4 sentinel hospitals for SARI and are analyzed at the National Influenza Center (NIC), Medical Research Institute (MRI).

Epidemiological Component

ILI Surveillance

In the 4th quarter of year 2014, 11 hospitals out of 19 have reported with a reporting rate of 57.8% Total number of ILI cases were 5205, which amounted to 1.00% of the total OPD visits (n=517286). The highest number of ILI cases were reported from Teaching Hospital Anuradhapura (n=3144, 60.4%) and majority of the patients were in the age group 15 – 49 years (n= 1271; 24.4%).

SARI Surveillance

A total of 128 SARI cases were reported for the 4th quarter of 2014 from the SARI sentinel hospitals. Out of all hospital admissions during (N=6810) the quarter, 1.88% were due to SARI.

Laboratory Component

ILI Surveillance

A total of 247 ILI respiratory samples were received by the MRI from sentinel hospitals during the 4thquarter of 2014; 88 samples in October, 94 in November and 65 in December. IDH (n=33) had sent the highest number of samples followed by Provincial General Hospital Ratnapura (n=29), Teaching Hospital Kalubowila (n=25), Teaching Hospital Batticaloa (n=23) and Teaching Hospital Anuradhapura (n=23). (Table 01). All sentinel hospitals except General Hospital Vavuniya, General Hospital Ampara had sent samples within the quarter. Out of sub-typed samples, influenza A (H3N2) was the predominant circulating Influenza viral strain identified, followed by Influenza B (Table 20).

SARI Surveillance

A total of 24 respiratory samples were sent to the MRI during the 4th quarter of year 2014, by all four SARI sentinel hospitals. Lady Ridgeway Children's Hospital (LRH) had sent the highest number of samples (n=16). Out of sub-typed samples, influenza A(H3N2) was the predominant circulating Influenza viral strain identified

(Table 21).

Table 18: Monthly performance of sentinel hospitals in the laboratory component of the ILI surveillance for the 3rdquarter of the year 2014

	Oct	Nov	Dec	Total
NHSL	0	4	10	14
THKalubowila	9	15	1	25
IDH	19	8	6	33
GH Nuwaraeliya	6	0	11	17
TH Karapitiya	0	9	0	9
TH Jaffna	5	6	3	14
TH Batticaloa	9	9	5	23
TH Kurunegala	5	10	5	20
GH Chillaw	5	0	0	5
TH Anuradhapura	10	13	0	23
GH Polonnaruwa	4	5	7	16
PGH Badulla	6	6	7	19
PGH Rathnapura	10	9	10	29
Total	88	94	65	247

(Source: Epidemiology Unit)

Table 19: Monthly performance of sentinel hospitals in the laboratory component of the SARI surveillance for the 4th quarter of the year 2014

	Oct	Nov	Dec	Total
TH Ragama	2	1	0	3
TH Peradeniya	4	0	0	4
GH Matara	1	0	0	1
LRH	6	5	5	16
Total	13	6	5	24

(Source: Epidemiology Unit)

Table 20: Types of respiratory viruses isolated in ILI samples for the 4thquarter of the year 2014

Month	Total	Influenza A	pdm09	A(H3N2)	Untyped	Influenza B	RSV
Oct	88	09	00	07	02	03	00
Nov	94	25	01	10	14	03	00
Dec	65	23	00	13	10	09	00
Total	247	57	01	30	25	15	00

(Source: NIC/MRI)

 Table 21: Types of respiratory viruses Isolated in

 SARI samples for the 4thquarter of the year 2014

Month	Total	Influenza A	pdm09	A (H3N2)	Untyped	Influenza B	RSV
Oct	13	3	0	0	3	1	0
Νον	6	3	0	2	0	0	0
Dec	5	0	0	0	0	0	0
Total	24	6	0	2	3	1	0

(Source: NIC/MRI)

Bird Influenza Surveillance

Sri Lanka has been considered a high risk country for Avian Influenza because of its location in the South East Asian Region and due to the country's poultry industry with a considerable proportion of people engaged in backyard poultry. Also the country being a tropical island which attracts over two hundred species of migratory birds every year in two migratory seasons is another risk factor that necessitates continuing bird influenza surveillance. Bird surveillance is conducted by the Department of Animal Production and Health (DAPH) with serum samples collected from poultry farms on a monthly basis and fecal samples collected from migratory bird hotspots during the two migratory seasons where fifteen fecal samples are collected from each bird hotspot, pooled in bottles with five samples in each and analyzed at the at the virology laboratory at Polgolla.

Table 22:					and
district for	the 4 th o	uarter of	the year 2	014	

	Numk Sam		
Month	Pooled fecal	Serum	Districts Samples were collected from
Oct	1264	598	Colombo,Gampaha,Vavunia, ,Puttalam,Hambanthota, Kegalle, Pol- onnaruwa,Kurunegala, Jaff- na
Nov	919	315	Colombo, Gampaha, Put- talam, Hambantota, Matara, Rathnapura, Anuradhapura, Vavunia, Kegalle, Jaffna
Dec	1667	877	Colombo,Gampaha,Badulla, C h i - Iaw,Vavunia,Hambanthota,M atara,Ratnapura, Kurunega- Ia,Polonnnaruwa,Jaffna, Gal- Ie
Total	3850	1790	

(Source:DAPH)

23. SPECIAL REPORT

Surveillance Report on AEFI - 2014

Surveillance of Adverse Events Following Immunization (AEFI) effectively continued in 2014 has reached 92.8% of completeness of reports, while only 33.8% reports were received in time at the Epidemiology Unit indicating the need of attention for the system by the MOOH.

Only the district of Mannar was able to send all reports. This performance is necessarily reflecting that both at district (Regional Directors of Health Services and Regional Epidemiologists) and MOH level shall give more attention to improve the AEFI surveillance system in the respective districts/MOOH areas. The best timeliness was reported from the Kegalle district (63.6%) followed by Matara (53.6%). (Table 23)

The highest percentage of nil reports were received from Ampara(62.5%) followed by Galle(56.4%) and Puttalam (56.0%) districts, while the country average is 40.7%. Jaffna district has reported the lowest of 7.7% 'Nil return', Indicating the more vigilant nature of surveillance system in place.

Therefore, districts and MOOH where the "Nil return' rates are high, need to ensure that possible under reporting is minimized. A total of 6959 AEFI cases were reported during the year 2014, giving AEFI reporting rate of 123.7 per 100,000 immunizations, indicating that Sri Lanka has a functioning AEFI surveillance system in the country.

The highest rate (408.8 per 100,000 immunizations) of AEFI was reported from the Jaffna district, while Colombo has reported the highest number of 739 AEFI cases in 2014.

For year 2014, the highest number of AEFI (n=3339) was reported against Pentavalent vaccine, whereas the highest rate of AEFI (552.9/100,000 doses administered) has been reported against DTP vaccine

The rate of AEFI for Pentavalent (01st, 02nd& 03rd dose) is 321.8per 100,000 doses administered. High Fever (2434), Allergic Reaction (1275), Nodule (960) are the leading AEFI reported. Highest numbers of fever cases reported were following Pentavalent (1326 cases: 127.8 per 100,000 doses administered) and DPT (781 cases: 224.3 per 100,000 doses administered) vaccines.

For Allergic reactions, it was largely due to LJE (328 cases: 60.7 per 100,000 doses administered), Pentavalent (306 cases: 29.5 per 100,000 doses administered) and DTP (270 cases: 77.5 per 100,000 doses administered) vaccines.

Febrile seizures following whole cell pertussis containing vaccines is an expected adverse reaction, but reported rates of 34.5 and 6.5 per 100,000 doses administered following DTP and Pentavalent vaccines respectively.

It is important to note that all reported vaccine specific adverse reactions are within the expected rates, as reported in published medical literature (Reference : *Global manual on surveillance of adverse events following immunization, WHO 2014* <u>http://www.who.int/vaccine_safety/publications/</u> <u>aefi_surveillance/en/</u>)

4th Quarter

Table 23: Report on monthly return of AEFI by District – 2014

S:	DPDHS	%	%	%	No. of	AEFI Rate	
No:	Division	Completeness	Timely	of Nil	AEFI	(100,000	
			Returns	Returns		doses)	
1.	Colombo	91.2	46.2	28.5	739	144.0	
2.	Gampaha	96.1	46.8	36.4	315	61.6	
3.	Kalutara	87.2	19.9	41.9	244	79.6	
4.	Kandy	81.9	32.2	47.0	510	114.4	
5.	Matale	92.9	45.5	51.0	179	123.6	
6.	NuwaraEliya	90.4	39.7	53.2	173	75.5	
7.	Galle	94.6	46.7	56.4	231	90.6	
8.	Hambantota	94.4	20.6	41.2	278	149.0	
9.	Matara	96.1	53.6	35.7	303	140.2	
10.	Jaffna	98.6	28.9	7.7	578	408.8	
11.	Kilinochchi	85.4 14.6 22.0		83	239.9		
12.	Mannar	100.0 15.0 50.0		50.0	86	280.3	
13.	Vavuniya	97.9	23.4	53.2	76	152.2	
14.	Mullativu	88.3	3.8	26.4	107	306.0	
15.	Batticaloa	98.2	46.1	40.0	313	198.5	
16.	Ampara	79.8	22.4	62.7	44	58.0	
17.	Trincomalee	97.0	30.5	40.6	170	134.3	
18.	Kurunegala	96.0	21.2	38.6	536	126.4	
19.	Puttalam	86.8	16.0	56.0	154	67.9	
20.	Anuradhapura	83.3	16.8	34.7	304	111.7	
21.	Polonnaruwa	96.4	14.8	40.7	132	109.4	
22.	Badulla	97.9	52.1	30.3	456	157.9	
23.	Moneragala	97.7	43.4	48.1	166	113.4	
24.	Ratnapura	95.8	17.9	50.7	269	90.7	
25.	Kegalle	97.7	63.6	25.6	302	117.0	
26.	Kalmunai	94.2	32.0	40.8	211	158.1	
	Sri Lanka	92.8	33.8	40.7	6959	123.7	

4th Quarter

October-December

Table 24: Number of Selected Adverse Events by Vaccines –2014

	BCG	OPV	PVV	DPT	MMR	LJE	DT	π	aTd	Total number of AEFI report- ed
Total Number of AEFI Reported AEFI Report- ing rate/100,000 doses	29	3	3339	1925	478	597	335	74	142	6922
administered	8.8	0.2	321.8	552.9	68.0	110.5	98.0	24.0	47.9	
High Fever (>39°C) Re- porting rate/100,000	4		1326	781	110	124	78	5	6	2434
doses administered	1.2		127.8	224.3	15.7	23.0	22.8	1.6	2.0	
Allergic reactions Re-			306	270	231	328	77	30	33	1275
porting rate/100,000 doses administered			29.5	77.5	32.9	60.7	22.5	9.7	11.1	
Severe local reactions Reporting rate/100,000	1		165	90	12	40	21	4	2	335
doses administered	0.3		15.9	25.8	1.7	7.4	6.1	1.3	0.7	
Seizure (Febrile/ Afe- brile) Reporting			67	120	10	27	3		1	228
rate/100,000 doses ad- ministered			6.5	34.5	1.4	5.0	0.9		0.3	
Nodules Reporting	1		662	244	11	9	35	3	3	960
rate/100,000 doses ad- ministered	0.3		63.8	70.1	1.6	1.7	10.2	1.0	1.0	
Injection site abscess	14		309	59	7	1	15	3	3	411
Reporting rate/100,000 doses administered	4.3		29.8	16.9	1.0	0.2	4.4	1.0	1.0	
HHE Reporting rate/100,000 doses ad-			7	2	2				1	12
ministered			0.7	0.6	0.3				0.3	

*PVV- Pentavalent vaccine **Total given only for nine vaccines listed in the table

4th Quarter

24. SUMMARY OF NOTIFIABLE DISEASES

Table 25

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	49	04	37	148	00	105	61	00	00	01	19	03	3952	229	62	05	13	00
Gampaha	34	00	09	08	00	246	61	00	00	07	81	01	3124	195	45	05	22	01
Kalutara	30	05	19	25	00	148	24	00	00	02	08	00	525	36	56	04	11	00
Kandy	31	02	27	03	00	45	12	05	00	13	91	00	1079	104	33	07	08	01
Matale	30	01	04	01	00	13	04	00	00	05	26	00	290	40	07	01	03	06
Nuwara-Eliya	96	00	05	03	00	15	00	02	00	07	16	01	80	58	44	06	21	00
Galle	25	01	01	00	01	104	31	04	00	36	11	02	354	134	71	11	13	00
Hambantota	28	03	01	01	00	19	04	01	00	07	03	01	143	21	22	02	05	83
Matara	20	00	01	03	00	61	20	01	01	30	26	01	271	65	47	12	10	21
Jaffna	625	03	152	19	00	09	01	17	00	190	10	04	954	71	09	05	16	00
Kilinochchi	65	02	09	00	00	00	00	01	00	04	01	00	44	23	01	00	00	00
Mannar	37	00	06	00	00	00	00	00	00	04	02	00	270	18	01	00	00	02
Vavuniya	75	01	54	10	00	01	00	00	00	08	00	00	37	18	01	00	07	04
Mullaitivu	29	01	05	08	00	05	01	00	00	01	00	00	48	11	00	00	02	00
Batticaloa	161	00	09	03	00	02	07	01	00	01	01	00	311	29	15	02	05	00
Ampara	26	00	01	08	00	09	03	01	00	01	01	00	31	13	51	07	02	01
Trincomalee	47	01	03	05	00	04	05	01	00	07	01	00	156	34	20	03	05	04
Kurunegala	59	02	06	08	00	86	41	00	00	11	24	00	867	159	136	10	12	37
Puttalam	41	01	04	02	00	07	24	00	00	07	03	03	390	21	13	01	10	03
Anuradhapura	172	01	01	19	01	97	15	06	00	05	09	03	213	49	42	12	13	82
Polonnaruwa	42	01	01	01	00	28	00	00	01	00	06	00	142	36	25	06	06	46
Badulla	93	00	05	08	00	09	03	00	00	25	47	00	581	57	41	05	24	01
Moneragala	74	00	00	00	00	44	01	01	00	16	18	01	92	21	29	03	05	06
Ratnapura	62	04	12	08	00	167	18	01	01	20	117	04	395	66	42	02	18	06
Kegalle	15	01	21	00	00	165	08	00	00	12	64	06	407	106	50	08	06	00
Kalmunai	86	00	00	09	00	02	01	01	00	00	01	00	384	34	25	02	03	00
Total	2052	34	393	300	02	1391	345	43	03	420	586	30	15140	1648	888	119	240	304

No polio cases. (from AFP surveillance system).

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Figures given may be subject to revision.

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

Such reports should be addressed to:

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