

# SRI LANKA - 2009

## WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit Ministry of Healthcare and Nutrition

231, de Saram Place, Colombo 01000, Sri Lanka Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk

Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk

Vol. 36 No. 01

27th December 2008 - 2nd January 2009

# Flashback 2008 Disease Surveillance and EPI

For the Epidemiology Unit, 2008 was a year with new challenges and full of activities. Yet, it could be labeled as a year of success. The skipper has changed; Chief Epidemiologist Dr Nihal Abeysinghe secured a new position in the World Health Organization and the Deputy Epidemiologist Dr Paba Palihawadana has directed the march from there onwards.

While the Epidemiology Unit guided and assisted the healthcare staff at national and regional levels to control a number of diseases and prevent seasonal outbreaks, it had to face and deal with several significant disease outbreaks. When there was a national interest for recultivation of abandoned agricultural lands, dealing with worst ever leptospirosis epidemic was not easy. Introduction of new vaccines i.e. the pentavalent vaccine for the betterment of health of children in our country was not devoid of problems.

Increased research activities focusing on both communicable and non communicable diseases were on the agenda for 2008. We believe that in 2008, Epidemiology Unit could provide a significant contribution for a healthy Sri Lanka. It would have been impossible without the commendable enthusiasm and commitment rendered by all staff.

### Control of disease outbreaks

Leptospirosis: During 2008, Epidemiology Unit had to face the largest ever leptospirosis outbreak with more than 7400 suspected case notifications and more than 200 deaths. Worst affected areas were Western and Central provinces. Epidemiology Unit conducted a well represented meeting of stakeholders which included officers from agriculture, environment

and local government sectors. This was to develop the intersectoral coordination and a comprehensive single programme to control leptospirosis. Establishment of a National Coordinating Committee and also to establish coordinating committees at district and divisional level and implementing committees at village level was decided. District level review meetings were held in high risk areas and the Epidemiology Unit provided necessary technical guidelines by participating in these meetings.

Chemoprophylaxis was also provided to affected areas through the Medical Supplies Division. An effort also was made to sero-diagnose the condition in collaboration with the Medical Research Institute and Veterinary Research Institute.

Sentinel sites for special investigation of leptospirosis was increased from 16 to 58 hospitals.

Chikungunya: At the end of the year, there was an outbreak of Chikungunya in some parts of the country. This started in November from the Hambantota district and later spilled into Embilipitiya in the Ratnapura district. Then outbreaks were reported from Moneragala, Kalmunai and Kurunegala districts. Outbreaks in all these districts were serologically confirmed at the Medical Research Institute, Colombo.

Contents	Page
1. Leading Article - Flashback 2008 - Disease surveillance and EPI	1
2. Surveillance of vaccine preventable diseases & AFP (20 <sup>th</sup> − 26 <sup>th</sup> December 2008)	3
3. Summary of newly introduced notifiable diseases (20th - 26th December 2008)	3
4. Laboratory surveillance of dengue fever (20th - 26th December 2008)	3
5. Summary of selected notifiable diseases reported (20th - 26th December 2008)	4

Viral Hepatitis and Leishmaniasis: In addition to the leptospirosis and Chikungunya outbreaks, there was a viral hepatitis outbreak involving Mawanella and Aranayake MOH areas in Kegalle district. Leishmaniasis outbreaks were reported from Matale and Hambantota districts too.

Dengue Fever: Dengue fever was fairly under control as there was no increased case reporting with South Western monsoon in June-July period. However, when compared with the previous year, there was a significant increase of case load in the Matale district. In 2008, there were only 25 deaths due to dengue haemorrhagic fever (DHF) among reported cases of dengue fever/ DHF cases which amounted to slightly over 6500.

### Special surveillance of notifiable diseases

Special Investigation of meningitis and encephalitis were started during 2008. This was a very successful exercise. However, one limiting factor is that this special investigation does not distinguish the aetiology for the condition. But this limitation compensates to a certain extent by the laboratory surveillance data.

### Vaccine preventable diseases and EPI

AEFI to Pentavalent Vaccine: Pentavalent vaccine against diphtheria, pertussis, tetanus, hepatitis-B and *Haemophilus influenza B* was introduced into the EPI schedule from the beginning of the year. However, administration of this vaccine had to be suspended following the observation of a different profile of adverse events following this immunization. The particular concern was that several children lost their lives with reportedly hypotonic hyporesponsive episodes. A causality assessment exercise was commenced by local experts in collaboration with experts from the World Health Organization (WHO). There were no conclusive evidence to suggest that any of these cases involved were causally associated with the administered vaccine.

This unusual presentation strongly justifies further strengthening of AEFI surveillance and investigation of all deaths that are temporally related to immunization. As a result the Epidemiology Unit has developed a standardized protocol for investigation of deaths following immunization and it was presented to all Consultant Judicial Medical Officers of the country at a consultative meeting held.

AFP Surveillance: Year 2008 marked the 14<sup>th</sup> year after the reporting of the last case of poliomyelitis in Sri Lanka. Special surveillance activities of acute flaccid paralysis was also further strengthened in this year which included consultative reviews with clinicians and also a review visit to the Kurunegala Teaching Hospital with National Committee for Certifi-

cation of Poliomyelitis Eradication. The manual - Guidelines for Medical Officers on Eradication of Poliomyelitis was reprinted and distributed throughout the country.

Immunization Guide: In order to reprint the Immunization Guide revising the contents was commenced in 2008. It is expected that the new version of Immunization Guide could be published n mid 2009.

Japanese Encephalitis Vaccine: To continue with the immunization programme in operation, there were constraints in obtaining Japanese Encephalitis killed virus vaccine. Therefore, the limited available vaccine stocks were used to administer the 3<sup>rd</sup> dose of primary immunization and the 4<sup>th</sup> booster dose for the cohorts of those children already partially immunized.

### Avian Influenza Preparedness

Activities related to Highly Pathogenic Avian Influenza (HPAI) preparedness were continued throughout the year 2008. Accordingly, a special operation cell on Avian Influenza was established in the National Focal Point, Epidemiology Unit with new recruitments consisting of financial assistants, programme assistants and data entry operators. This was funded by the Health Sector Development Project of World Bank. Provincial and District Technical Committees on Avian Influenza Preparedness were also established in Western, North Western, Central and Eastern provinces.

A national workshop with table top exercises on HPAI preparedness was held for all key stakeholders in order to evaluate the present National Plan of Action for HPAI Preparedness. A training workshop on rapid response and containment of HPAI was also held in the early part of 2008 with the participation of middle-level managers from Ministries of Health, Livestock Development & Local Government and Armed Forces.

In addition, development of infrastructure facilities and capacity building at peripheral level was also carried out. This included development of isolation units in the sentinel hospitals where refurbishment work in 13 hospitals and supply of equipments to 9 hospitals has been commenced. In addition essential supplies i.e. personal protective equipment (PPE) and laboratory reagents were distributed to all sentinel hospitals and laboratories. The antiviral agent Oseltamivir stocks were made available in all sentinel hospitals.

IEC materials and a National Communication Strategy were developed after a behavioural community survey. An emergency rehabilitation plan for Infectious Disease Hospital (IDH) also was prepared during 2008.

To be continued into the next issue

Table 1: Vaccine-preventable Diseases & AFP

20th - 26th December 2008 (52ndWeek)

				No. of C	ases b	y Provinc	ce	Number	Number			Difference			
Disease	W	С	S	N	E	NW	NC	U	Sab	of cases during current week in 2008	of cases during same week in 2007	Total number of cases to date in 2008	Total number of cases to date in 2007	between the number of cases to date in 2008 & 2007	
Acute Flac- cid Paralysis	02 GM=1 KL=1	00	00	00	00	00	00	01 BD=1	01 KG=1	04	00	103	85	+21.2%	
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	01	00	-	
Measles	00	00	00	00	00	00	00	00	00	00	01	108	81	+33.3%	
Tetanus	00	00	00	00	00	00	00	00	00	00	01	36	39	-07.7%	
Whooping Cough	00	00	00	00	00	00	00	00	01 KG=1	01	00	57	47	+21.3%	
Tuberculosis	111	11	12	00	06	64	04	02	24	234	153	8181	9817	-16.7%	

Table 2: Newly Introduced Notifiable Disease

20th - 26th December 2008 (52ndWeek)

			N	lo. of C	Number	Number			Difference						
Disease	W	С	S	N	E	NW	NC	U	Sab	of cases during current week in 2008	of cases during same week in 2007	Total number of cases to date in 2008	Total number of cases to date in 2007	between the number of cases to date in 2008 & 2007	
Chickenpox	15	02	12	01	06	05	03	02	11	57	54	5493	3435	+59.9%	
Meningitis	04 GM=2 KL=2	00	01 HB=1	00	01 BT=1	02 KR=1 PU=1	00	03 BD=2 MO=1	07 RP=4 KG=3	18	18	1300	783	+66.0%	
Mumps	01	02	06	09	00	01	08	02	08	37	90	2909	2314	+25.7%	

### Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

DPDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna,

KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam,

AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

National Control Program for Tuberculosis and Chest Diseases: Tuberculosis

Table 3: Laboratory Surveillance of Dengue Fever 20th - 26th December 2008 (52ndWeek)

Samples	Number tested	Number positive	Serotypes *								
	testeu	positive	D1	D2	D3	D4	Negative				
Number for current week	01	01	00	01	00	00	00				
Total number to date in 2008	288	35	00	17	10	00	02				

Sources: Genetic Laboratory, Asiri Surgical Hospi-

\* Not all positives are subjected to serotyping. **NA**= Not Available.

Table 4: Selected notifiable diseases reported by Medical Officers of Health 20th - 26th December 2008 (52nd Week)

DPDHS Division	Dengue Fever / DHF*					epha- itis		nteric ever	Food Poisoning		Leptospi- rosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns Received Timely**
	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	%
Colombo	15	1594	0	298	0	15	2	205	1	144	13	1071	0	8	0	118	0	0	77
Gampaha	7	964	4	241	0	20	0	62	0	119	4	829	1	10	1	197	0	7	64
Kalutara	1	477	3	367	0	14	0	87	0	44	5	691	0	4	1	48	0	2	92
Kandy	11	366	4	321	0	12	0	68	1	101	5	537	1	107	3	134	0	2	72
Matale	4	208	2	240	1	6	0	57	0	17	8	849	0	2	0	31	0	0	67
Nuwara Eliya	0	30	6	320	0	6	1	261	0	169	0	76	0	45	0	108	0	1	77
Galle	0	107	7	224	0	23	0	18	0	50	5	446	0	16	0	8	0	5	94
Hambantota	6	136	4	144	0	8	0	8	0	22	3	142	5	104	0	17	0	1	82
Matara	22	391	8	246	o	14	2	38	0	15	6	500	4	241	0	15	0	1	94
Jaffna	0	60	0	160	0	4	0	261	0	20	0	1	0	174	0	45	0	0	0
Kilinochchi	0	1	0	162	0	0	0	1	0	4	0	2	0	0	0	2	0	0	0
Mannar	8	38	0	29	0	6	0	165	0	0	0	0	0	1	0	17	0	1	50
Vavuniya	0	12	1	78	0	3	0	15	0	25	0	6	0	1	0	5	0	0	100
Mullaitivu	0	0	0	62	0	0	0	16	0	13	0	0	0	1	0	10	0	1	0
Batticaloa	1	89	2	272	0	8	0	32	0	30	0	12	0	0	0	95	0	7	73
Ampara	0	33	1	273	0	1	0	9	0	348	2	27	0	0	0	14	0	0	29
Trincomalee	0	185	0	127	0	3	0	13	0	14	0	34	0	17	0	15	0	0	70
Kurunegala	2	362	6	277	1	18	0	58	4	34	2	695	4	41	1	89	0	10	63
Puttalam	1	289	8	202	0	12	0	165	0	42	2	69	0	38	0	34	0	5	89
Anuradhapura	2	122	6	182	0	10	0	12	0	56	6	270	0	14	0	16	0	3	63
Polonnaruwa	0	66	0	149	0	1	0	29	0	25	0	111	0	1	0	22	0	0	57
Badulla	1	109	1	514	0	8	2	132	0	113	1	74	1	132	7	200	0	1	93
Monaragala	1	64	5	366	0	4	1	58	3	128	5	104	5	113	0	63	0	2	100
Ratnapura	2	315	17	460	0	35	1	57	0	85	4	262	0	82	0	65	0	0	83
Kegalle	16	473	2	321	1	26	2	89	1	27	3	594	0	74	0	523	0	1	91
Kalmunai	0	38	12	344	0	2	0	17	0	18	0	4	0	3	1	29	0	0	69
SRI LANKA	10	6529	99	6379	3	259	11	1933	10	166	74	7406	21	122	14	1920	0	50	73

Source: Weekly Returns of Communicable Diseases (WRCD).

### PRINTING OF THIS PUBLICATION IS FUNDED BY THE UNITED NATIONS CHILDREN'S FUND (UNICEF).

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by Email to chepid@sltnet.lk.

### ON STATE SERVICE

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

<sup>\*</sup>Dengue Fever / DHF refers to Dengue Fever / Dengue Haemorrhagic Fever.

<sup>\*\*</sup>Timely refers to returns received on or before 03 January, 2009 Total number of reporting units =309. Number of reporting units data provided for the current week: 225

A = Cases reported during the current week. B = Cumulative cases for the year.