

# 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 Web: http://www.epid.gov.lk

## Vol. 36 No. 27

## 27<sup>th</sup> June – 03<sup>rd</sup> July 2009

### Communicable disease surveillance at IDP camps in Cheddikulum

Disease surveillance

#### Background

Since January 2009, thousands of Internally Displaced People (IDP) have turned up from the no fire zone continuously giving rise to a mass problem with a myriad of acute issues. By 18 June 2009, available data revealed that the total number of IDPs in Vavuniya district was 262,514 and currently it is more or less established. Presently IDPs are housed in 19 sites, of which 7 are established relief villages/ welfare centers (number of IDPs amounts to 237,620) and the rest are either established in schools or other government centers (number of IDPs 24,894). Since there are many acute and chronic problems related to many aspects including health, legal issues, security issues, provision of basic needs of the displaced, planning proper and effective strategies to manage these vast issues is a timely need. In order to improve the health of the displaced in terms of reducing communicable diseases, the Epidemiology Unit has established a disease surveillance system for communicable diseases. It enables early detection and prevention of possible epidemic situations which are one of the main concerns in this situation.

Therefore surveillance on diseases in these areas would provide many important data which will be useful in determining the magnitude of the problem, providing suggestions to the health authorities in further improving the living conditions of the IDP as well as early implementation of preventive strategies and proper conduct of control programmes by using surveillance as a warning system. Surveillance on diseases also provides information on the efficiency of the existing health infrastructure and helps assessing its adequacy in managing the situation with limited resources. This in turn will help in improving existing shortcomings. The specially created surveillance system was confined to IDP welfare centers at Cheddikulum in the Vavuniya district . The area is further divided into 6 zones (zone 0-5) where 87% of the IDPs (227,325) have been settled. Each zone was further divided into blocks demarcated by the roads running through the camp site, allocating accessible numbers of population for each block.

Surveillance is being carried out with especial emphasis on main communicable diseases including watery diarrhoea, dysentery, viral hepatitis, chickenpox, typhoid and malaria prevalent in the area. Regional hospitals and the health centers placed in the camp site act as resource centers for collecting data regarding communicable diseases. Volunteers hand over the collected data daily to the PHI of the area. At the end of each day, a compiled report of each zone is submitted by the PHI to the relevant MOH. Initially these data were collected at zone level but later, since the zones were further divided into blocks, data collection is being done at the block level enabling identification of clusters of diseases by the block levels. This was of utmost importance since the interventions to control the disease can be confined specifically to affected areas in the event of an outbreak.

The surveillance data till 28<sup>th</sup> June were analyzed. The results were as follows.

| disease            | 1 <sup>st</sup><br>week | 2 <sup>nd</sup><br>week | 3 <sup>rd</sup><br>week | 4 <sup>th</sup><br>week |
|--------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Viral<br>hepatitis | 593                     | 765                     | 532                     | 448                     |
| Watery<br>diarrhea | 1559                    | 2716                    | 2081                    | 956                     |
| Dysen-<br>tery     | 793                     | 210                     | 117                     | 250                     |
| Typhoid            | 4                       | 8                       | 3                       | 68                      |
| Chicken-<br>pox    | 250                     | 289                     | 215                     | 249                     |
| Malaria            | 15                      | 0                       | 5                       | 112                     |

Watery diarrhoea accounts for the majority of the reported communicable diseases while dysentery, viral hepatitis and chickenpox also amount to a heavy disease burden. However the incidence of watery

| Contents   | Page |
|--|------|
| 1. Leading Article - Communicable disease surveillance at IDP camps in Cheddikulam                   | 1    |
| 2. Surveillance of vaccine preventable diseases & AFP (20 <sup>#</sup> - 26 <sup>#</sup> June 2009)  | 3    |
| 3. Summary of newly introduced notifiable diseases (20 <sup>th</sup> - 26 <sup>th</sup> June 2009)   | 3    |
| 4. Surveillance of Communicable diseases among IDP's (20 <sup>th</sup> - 26 <sup>th</sup> June 2009) | 3    |
| 5. Summary of selected notifiable diseases reported (20 <sup>th</sup> - 26 <sup>th</sup> June 2009)  | 4    |

## WER Sri Lanka - Vol. 36 No. 27

diarrhoea is currently on the decline. Typhoid and malaria remained at a low prevalence initially but showed an increased incidence towards the end of the month. It is essential to bear in mind that improved notification also has played a role in the increasing trend of diseases.

#### Watery diarrhea / dysentery

During the surveillance period of four weeks from 1<sup>st</sup> to 28<sup>th</sup> June, there had been 7312 cases of watery diarrhoea and 1370 of dysentery cases reported. Watery diarrhea has reached a climax during the second week with 2716 reported cases and has been on the decline since then with incidence being reduced to 956 in the last week. However, after a peak incidence of dysentery during the 1<sup>st</sup> week (793), case load of cases has gradually come down. Though the total number of these diseases from all IDP sites showed a declining trend, the incidence rate of dysentery in the recently established zone 4 and incidence rate of diarrhoea in 3 and 4 zones were much higher than the average incidence for IDPs.

Stool cultures for dysentery used for laboratory confirmation of patients revealed the presence of bacteria Shigella flexneri type 1 which is sensitive to the following antibiotics; Ciprofloxacin, Nalidixic acid, Selexid, Ceftriaxone, Ceftazidime, and Ceotaxime. The Medical Research Institute advices not to use the following antibiotics for treatment of dysentery; Furazolidone, Cotrimoxazole and amoxicillin. This information was disseminated among treating medical officers.

#### Viral hepatitis

Up to 28<sup>th</sup> June 2009, 2338 hepatitis cases were notified from all IDP settings and the highest incidence was reported during the 2<sup>nd</sup> week. Incidence rate of hepatitis in zone 1 and 3 were more than the average incidence rate for IDPs. Despite frequent peaks, generally a declining trend in admissions to the hospitals has been observed. The peaks were attributed to failure of transferring patients immediately to the isolation facility. Area MOOH have been notified about these cases and requested to conduct field investigations to find out possible sources and take control measures.

#### Typhoid

The disease had been at low incidence but towards the end of the month has shown a slight increase with 68 notified cases. Majority of these patients who were getting treatment were young children and for the high risk groups vaccination with Vi polysaccharide typhoid vaccine has been initiated. These high risk groups include food handlers (those involved in cooking and serving food at the community kitchens in IDP sites), close contacts of patients who are living in the same tents and health workers. Guidelines were made for prevention and treatment of typhoid fever in IDP camps including information on the disease as well as treatment methods and basic preventive strategies.

#### Chickenpox

During the surveillance period of the month of June up to 28<sup>th</sup>, 1003 chickenpox cases from all IDP settings have been detected. Incidence has remained more or less constant throughout the month ranging around 250 cases per week. Incidence rates of chickenpox in the recently established zone 4 and transit camps were found to be much higher than the average incidence for IDPs.

Epidemiology unit has developed guidelines for containment of the outbreak, prophylaxis and on treatment of chickenpox patients with acyclovir.

#### Malaria

From June 1st to June 28th period, there had been 132 cases of clini-

cally suspected malaria reported from the IDPs. Almost all of them (112) were detected during the last week. The diagnoses were made using rapid test kits.

#### Other health measures taken

Immunization services in the IDP settings at Vavuniya and Cheddikulam has been strengthened. Vaccination teams consisting of PHNS, PHI and two PHMS were sent to small IDP camps especially to those which have reported few cases of suspected measles/rubella cases. Interim guidelines were made for provision of immunization services to IDPs in Vavuniya and Chedddikulam. All children under five years of age are currently screened for immunization and new Child Health Development Records are being issued for those who have not still received them. A thorough immunization history is taken from the respective parent or guardian. Public health midwives in charge of demarcated blocks within each zone should maintain Birth and Immunization Registers for all children less than five years of age and these children should be followed up for obtaining age appropriate immunization until they are resettled in other areas. Any child who missed any age appropriate immunization will be given the missed doses at the earliest and the schedule will be continued according to the National Immunization Schedule. Children less than five years of age are examined for the presence of BCG scar and in the absence of which an additional dose will be given. Irrespective of the previous immunization status, a dose of polio vaccine is given to all children below five years.

The MR vaccine is also advanced by administering it to all children between one to three years in lieu of giving it at the third year with a view to minimizing the susceptibility of children for measles among IDPs. Furthermore an additional dose of measles vaccine is given to infants between 6 and 12 months of age irrespective of previous immunization with measles. Children between 6 and 9 months of age who have received the additional dose should receive their routine dose of measles vaccine at the completion of 9 months as usual. However there should be a minimum interval of four weeks between the additional dose and the routine dose. Females in childbearing age also should be screened for a previous history of rubella vaccination and those without record or reliable history of having been immunized with a dose of rubella vaccine. All children between 4 years and 12 years of age should be screened for previous history of administration of MR vaccine and should be immunized where appropriate. All males and females are screened for administration of aTd vaccine and those who haven't received should be offered with a dose of vaccine.

In addition to these activities, for essential high risk categories, limited stocks of Vi polysaccharide typhoid vaccine is available. These high risk categories are defined as follows;

- Food handlers; people involved in cooking at common community kitchens
- Close contacts of patients who are living under the same tent
- Health care workers involved in regular/ permanent IDP camp services

A single intramuscular dose of 0.5 ml is recommended for both children and adults belonging to these risk categories.

This article was compiled by Dr. Upekha Seneviratne. Consultant Epidemiologist, Dr. Samitha Ginige and Medical officer, Dr. Deepa Gamage are appreciated for providing expertise in preparing this article.

## Table 1: Vaccine-preventable Diseases & AFP

20th – 26th June 2009 (26th Week)

27<sup>th</sup> June- 03<sup>rd</sup> July 2009

|                            |                    |    | No  | o. of Cas  | es by F                                       | Province  | e   | Number   | Number | Tatal | Tatal | Difference |      |        |
|----------------------------|--------------------|----|-----|--|---|---|---|--|--------|-------|-------|------------|------|--------|
| Disease                    | se W C S N E NW NC | U  | Sab | of cases<br>during<br>current<br>week in<br>2009 | of cases<br>during<br>same<br>week in<br>2008 | Total<br>number<br>of cases<br>to date in<br>2009 | Total<br>number<br>of cases<br>to date in<br>2008 | between the<br>number of<br>cases to<br>date in 2009<br>& 2008 |        |       |       |            |      |        |
| Acute Flaccid<br>Paralysis | 01                 | 00 | 00  | 00   | 00  | 01  | 00  | 00   | 00     | 02    | 02    | 41         | 51   | -19.6% |
| Diphtheria                 | 00                 | 00 | 00  | 00   | 00  | 00  | 00  | 00   | 00     | 00    | 00    | 00         | 00   | -      |
| Measles                    | 00                 | 00 | 00  | 00   | 01  | 00  | 00  | 00   | 00     | 01    | 01    | 65         | 60   | +08.3% |
| Tetanus                    | 00                 | 00 | 00  | 01<br>MN=1                                       | 00  | 00  | 00  | 00   | 00     | 01    | 00    | 15         | 19   | -21.0% |
| Whooping<br>Cough          | 00                 | 00 | 00  | 00   | 00  | 00  | 00  | 00   | 00     | 00    | 01    | 30         | 21   | +42.8% |
| Tuberculosis               | 12                 | 05 | 00  | 35   | 04  | 42  | 00  | 07   | 53     | 158   | 262   | 4901       | 4342 | +12.9% |

## Table 2: Newly Introduced Notifiable Disease

20th – 26th June 2009 (26th Week)

|               |            |    | N          | o. of Ca | ises by    | Provin | се                 | Neurolean  | Neurolean  |  |   | Difference  |   |  |
|---------------|------------|----|------------|----------|------------|--------|--------------------|------------|------------|--|---|---|---|--|
| Disease       | W          | С  | S          | N        | E          | NW     | NC                 | U          | Sab        | Number<br>of cases<br>during<br>current<br>week in<br>2009 | Number<br>of cases<br>during<br>same<br>week in<br>2008 | Total<br>number<br>of cases<br>to date in<br>2009 | Total<br>number<br>of cases<br>to date in<br>2008 | Difference<br>between the<br>number of<br>cases to<br>date in 2009<br>& 2008 |
| Chickenpox    | 08         | 07 | 11         | 70       | 08         | 02     | 10                 | 05         | 07         | 128  | 81  | 10197   | 2934  | +247.5%  |
| Meningitis    | 01<br>CB=1 | 00 | 00         | 00       | 01<br>AM=1 | 00     | 06<br>PO=6         | 01<br>BD=1 | 01<br>RP=1 | 10   | 13 521  |   | 770 -32.3%  |  |
| Mumps         | 02         | 03 | 01         | 00       | 12         | 00     | 05                 | 07         | 03         | 33   | 59  | 973   | 1330  | -26.8%   |
| Leishmaniasis | 00         | 00 | 04<br>MT=4 | 00       | 00         | 00     | 04<br>PO=1<br>AP=3 | 00         | 00         | 08   | Not<br>available*                                       | 444   | Not<br>available*                                 | -  |

#### 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.

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

DPDHS Divisions: 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.

Leishmaniasis is notifiable only after the General Circular No: 02/102/2008 issued on 23 September 2008.

#### Table 4: Surveillance of Communicable diseases among IDP's

20th – 26th June 2009 (26th Week)

| Area Disease | Dysentery | Enteric fever | Viral<br>Hepatitis | Tuberculosis | Chicken Pox | Watery Diar-<br>rhoea |
|--------------|-----------|---------------|--------------------|--------------|-------------|-----------------------|
| Vavunia      | 1         | 1             | 23                 | 3            | 63          | -                     |
| Chendikulam  | 251       | 69            | 471                | 0            | 312         | 1429                  |
| Total        | 252       | 70            | 494                | 3            | 375         | 1429                  |

27<sup>th</sup> June- 03<sup>rd</sup> July 2009

## Table 4: Selected notifiable diseases reported by Medical Officers of Health

20th - 26th June 2009 (26th Week)

| DPDHS<br>Division |      | ue Fe-<br>DHF* | Dysentery |      | Encephali Enteric<br>tis Fever |     | Food<br>Poisoning |     | Leptospiros<br>is |      | Typhus<br>Fever |      | Viral<br>Hepatitis |     | Human<br>Rabies |      | Returns<br>Received<br>Timely** |    |     |
|-------------------|------|----------------|-----------|------|--------------------------------|-----|-------------------|-----|-------------------|------|-----------------|------|--------------------|-----|-----------------|------|---------------------------------|----|-----|
|                   | A    | В              | А         | В    | Α                              | В   | А                 | В   | Α                 | В    | А               | В    | Α                  | В   | Α               | В    | А                               | В  | %   |
| Colombo           | 288  | 2048           | 4         | 102  | 0                              | 7   | 6                 | 102 | 0                 | 38   | 13              | 306  | 0                  | 4   | 3               | 45   | 0                               | 4  | 100 |
| Gampaha           | 158  | 1759           | 6         | 93   | 1                              | 17  | 3                 | 29  | 0                 | 9    | 02              | 157  | 0                  | 7   | 3               | 46   | 0                               | 2  | 67  |
| Kalutara          | 33   | 667            | 7         | 160  | 1                              | 9   | 3                 | 40  | 11                | 22   | 4               | 131  | 0                  | 1   | 3               | 16   | 0                               | 2  | 75  |
| Kandy             | 183  | 2200           | 3         | 180  | 0                              | 5   | 1                 | 17  | 0                 | 54   | 2               | 133  | 4                  | 103 | 0               | 31   | 0                               | 0  | 91  |
| Matale            | 95   | 685            | 6         | 61   | 0                              | 2   | 1                 | 23  | 0                 | 6    | 7               | 236  | 0                  | 3   | 0               | 8    | 0                               | 2  | 92  |
| Nuwara Eliya      | 17   | 114            | 10        | 265  | 0                              | 1   | 1                 | 129 | 0                 | 770  | 0               | 25   | 1                  | 39  | 2               | 39   | 0                               | 0  | 85  |
| Galle             | 32   | 216            | 9         | 111  | 0                              | 9   | 1                 | 2   | 0                 | 20   | 1               | 93   | 0                  | 4   | 2               | 9    | 0                               | 3  | 84  |
| Hambantota        | 29   | 526            | 1         | 51   | 0                              | 6   | 0                 | 5   | 2                 | 7    | 0               | 49   | 0                  | 44  | 1               | 15   | 0                               | 0  | 82  |
| Matara            | 36   | 591            | 7         | 167  | 0                              | 3   | 0                 | 4   | 0                 | 15   | 3               | 93   | 0                  | 74  | 3               | 17   | 0                               | 1  | 88  |
| Jaffna            | 0    | 9              | 1         | 71   | 0                              | 3   | 0                 | 148 | 0                 | 28   | 0               | 0    | 0                  | 122 | 0               | 86   | 0                               | 2  | 13  |
| Kilinochchi       | 0    | 0              | 0         | 0    | 0                              | 0   | 0                 | 0   | 0                 | 0    | 0               | 0    | 0                  | 0   | 0               | 0    | 0                               | 0  | 0   |
| Mannar            | 0    | 4              | 13        | 48   | 0                              | 1   | 2                 | 78  | 0                 | 4    | 0               | 0    | 0                  | 0   | 2               | 35   | 0                               | 0  | 75  |
| Vavuniya          | 1    | 11             | 1         | 1216 | 1                              | 3   | 2                 | 87  | 0                 | 2    | 0               | 2    | 0                  | 1   | 2               | 2453 | 0                               | 0  | 50  |
| Mullaitivu        | 0    | 0              | 0         | 2    | 0                              | 0   | 0                 | 1   | 0                 | 0    | 0               | 0    | 0                  | 0   | 27              | 0    | 0                               | 0  | 0   |
| Batticaloa        | 15   | 369            | 3         | 163  | 1                              | 12  | 0                 | 7   | 0                 | 41   | 0               | 8    | 1                  | 2   | 0               | 8    | 0                               | 1  | 45  |
| Ampara            | 24   | 127            | 0         | 30   | 0                              | 0   | 0                 | 5   | 0                 | 5    | 0               | 8    | 0                  | 0   | 0               | 6    | 0                               | 0  | 100 |
| Trincomalee       | 15   | 268            | 1         | 58   | 0                              | 2   | 1                 | 4   | 0                 | 0    | 1               | 16   | 2                  | 14  | 0               | 7    | 0                               | 1  | 90  |
| Kurunegala        | 105  | 1281           | 4         | 102  | 0                              | 8   | 1                 | 40  | 0                 | 5    | 1               | 55   | 0                  | 51  | 5               | 44   | 0                               | 4  | 68  |
| Puttalam          | 41   | 260            | 5         | 83   | 0                              | 7   | 0                 | 56  | 0                 | 0    | 1               | 44   | 0                  | 26  | 1               | 7    | 0                               | 1  | 78  |
| Anuradhapur       | 28   | 351            | 3         | 69   | 0                              | 4   | 0                 | 4   | 0                 | 3    | 0               | 74   | 0                  | 26  | 4               | 27   | 0                               | 1  | 68  |
| Polonnaruwa       | 21   | 80             | 1         | 22   | 0                              | 2   | 2                 | 16  | 0                 | 6    | 7               | 48   | 0                  | 0   | 8               | 20   | 0                               | 0  | 86  |
| Badulla           | 18   | 148            | 10        | 151  | 0                              | 2   | 1                 | 27  | 0                 | 18   | 3               | 52   | 0                  | 58  | 5               | 199  | 0                               | 1  | 93  |
| Monaragala        | 14   | 73             | 2         | 34   | 0                              | 0   | 0                 | 15  | 0                 | 7    | 1               | 12   | 1                  | 43  | 2               | 35   | 0                               | 0  | 100 |
| Ratnapura         | 76   | 828            | 3         | 319  | 0                              | 15  | 2                 | 36  | 0                 | 5    | 4               | 92   | 0                  | 22  | 3               | 52   | 0                               | 1  | 72  |
| Kegalle           | 107  | 2013           | 1         | 87   | 0                              | 4   | 0                 | 20  | 0                 | 6    | 0               | 100  | 1                  | 18  | 9               | 106  | 0                               | 1  | 64  |
| Kalmunai          | 4    | 122            | 0         | 64   | 0                              | 1   | 0                 | 8   | 0                 | 1    | 0               | 2    | 0                  | 2   | 0               | 11   | 0                               | 0  | 54  |
| SRI LANKA         | 1340 | 14750          | 101       | 3709 | 4                              | 123 | 27                | 903 | 14                | 1072 | 50              | 1736 | 10                 | 664 | 83              | 3322 | 0                               | 27 | 75  |

Source: Weekly Returns of Communicable Diseases WRCD).

\*Dengue Fever / DHF refers to Dengue Fever / Dengue Haemorrhagic Fever.

\*\*Timely refers to returns received on or before 26<sup>th</sup> June, 2009 Total number of reporting units =311. Number of reporting units data provided for the current week: 233

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

#### 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 E-mail to chepid@sltnet.lk.

## **ON STATE SERVICE**

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