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. 17 — 18th April– 25th April 2009

SRI LANKA - 2009

WER

Sanitation, hygiene and disease surveillance in camps for Internally Displaced Population in Vavuniya

Since January 2009, thousands of Internally Displaced People (IDP) have been turning up from the No Fire Zone to the areas under control of the Sri Lankan army. The continuous influx of people en masse within a short period of time has given rise to multitudes of acute problems including health related issues. Temporary shelters were started to be put up for these people and by 22nd April 2009, there were 16 IDP camp sites providing shelter to 71,681 IDP in the Vavuniya district according to statistics from the Regional Director of Health Services.

There were many transit camps closer to the newly liberated areas accommodating returnees and from there , they were directed to resettlement camps in the Vavunuya district. Free movements of these inhabitants have been restricted obviously due to security reasons. Visitors to the camps have also been limited barring those who obtained prior permission from the Ministry of Defense. Management of the IDP camps is done by a committee which consists of the Medical Officer of Health (MOH) , the civil coordinator (a person from the IDP camp), Additional Divisional Secretary and representatives from Non Governmental Organizations (NGO) working in camps . The committee sits every week to monitor the services provided in IDP camps.

Encountering such a massive influx was a novel experience for authorities. The magnitude of the problem was completely different in many aspects to what was faced by the government in the Tsunami in 2004. An influx of over hundred thousand human beings within a short period of time exerts a huge pressure on resources and creates myriads of problems to the authorities. There were acute as well as chronic problems related to the situation since many of these people had been displaced from their original abodes several months ago. Thus while countering all these shortcomings, providing needs of IDPs was a challenge to the government and health authorities. This was compounded by already stretched limited resources in Vavuniya.

Solutions for acute problems as well as strategic planning for long term needs are of utmost importance. Though internally displaced persons do not demand much from the authorities, it was certain that the felt needs ranged from having a cup of water to restoring the reputation which they held in high esteem once. Thus, it was certain that the task ahead us was not only the responsibility of wise planning but also providing their basic needs, healing their souls and ultimately helping eradicate the causes of terrorism.

The task of health personnel in this situation is to maintain and sustain optimal health in IDP camps. The major focus in this situation would be prevention of epidemics of communicable diseases. The weight of control or if possible prevention of communicable diseases acquires great importance particularly in a mass disaster of this caliber. Any disease condition in such a situation would be a major burden to the health sector as well as to the economy of the country. Therefore, active surveillance of diseases in these areas would provide many important data which would be useful in determining the magnitude of the problem, providing suggestions to the health authorities in improving the living conditions of the IDP as well as early implementation of preventive strategies and properly conducting disease control programmes . Surveillance of diseases also provides information on the efficiency of the health infrastructure and helps assessing its adequacy in managing the situation with limited resources. This in turn will help improving the inefficient areas that need intensified focus.

Contents — **Page**

1.Leading Article - Sanitation, hygiene and disease surveillance in camps for Internally Displaced Population in Vavunia — 1
2. Surveillance of vaccine preventable diseases & AFP (11th April - 17th April 2009) — 3
3. Summary of newly introduced notifiable diseases (11th April - 17th April 2009) — 3
4. Laboratory surveillance of dengue fever (11th April - 17th April 2009) — 3
5. Summary of selected notifiable diseases reported (11th April - 17th April 2009) — 4

This also presents an opportunity to observe whether the national health programmes like the National Immunization Programme are being carried out within the community. If there are any shortcomings the reasons can be identified with a view to correcting them. The information generated in surveillance process conducted in a special situation of this nature would enable sharing useful lessons learnt with the global community where war victims are concentrated en masse in limited spaces.

Basic health infrastructure

The Regional Director of Health Services is found to be the topmost health authority responsible for the IDP camp sites in the hierarchy. Medical Officers from the RDHS office, and also volunteer MOO visit the IDP camps regularly. A public health unit has been established in the IDP camps and it is manned by the area PHI, other PHII, and health volunteers. Some camps are supported by PHMM, and other public health staff.

Some of these officers are internally displaced and found among the IDP themselves.

There is an OPD which functions during the day time for the IDP with routine OPD treatment by Medical Officers. Where necessary, patients are transferred for further specialized management. An ambulance has been provided to the IDP camp site for this purpose.

Communicable disease reporting system in the IDP camps and health institutions

There is a simplified form developed in consultation with the Epidemiologist to notify communicable diseases detected within the camp site. This *daily situation report* should be sent to the RDHS office by 3.00pm from each IDP camp and a summary of the received reports is then prepared and would be ready by the following day based on information received from all IDP camps in Vavuniya. Daily situation report contains the diagnosis of disease conditions written by the Medical Officers on the prescription chit at the OPD of camps by volunteers. While appreciating the usefulness of this main source of notification of communicable diseases, it is essential to highlight some deficiencies that were observed in the system.

The daily situation report covers information from only around 1/3rd of the camps while the balance goes unnoticed. Since some prescriptions do not contain a proper and clear diagnosis, it would be impossible to quantify the exact burden of the communicable diseases even within the reported cases and a significant number of diagnosed cases are missed while information is transferred from prescription chits to the daily report by the volunteers.

In addition, there is no notification from the OPD patients of main hospitals. One advantage is that comparatively a small number of IDP is treated from the OPDs of main hospitals. However routine notification of inward patients is carried out in all hospitals . But non availability of an infection control nurse/ unit to expedite the notification process due to the shortage of staff is a weakness.

Identified problems related to Sanitary facilities

IDP camp site consists of many types of shelters, class rooms with cemented floor, enclosures sheltered with cadjan or galvanized corrugated sheets, galvanized corrugated sheet walls, cemented floor; typical polythene huts with or without cover for the floor. Some of these shelters had mosquito nets, water containers, mattresses and pillows. However it was readily evident that the space inside the shelters was insufficient for healthy living and in particular , ventilation was poor . Lack of maintaining proper personal hygiene in majority of people was evident and that was primarily due to lack of adequate water for washing and cleaning clothes.

The main water source for the camps were the water supplied from the Water Board. However tube wells, protected wells and other natural water sources also provide a significant portion of water required for consumption. Water is stored in containers by the people for their personal use and when required water is drunk without prior boiling. Lack of safe, potable drinking water was a major issue and the level of chlorination was not found to be up to the required standard. Several places around the IDP camps were stagnant with waste water enabling mosquito and fly breeding. This is a health hazard that can be easily got rid of.

As far as safe disposal of excreta is concerned, several NGOs have assisted in construction of toilets. The responsibility of maintenance of toilets is entrusted upon them. There were permanent toilets and temporary toilets which were guaranteed only for three months. Intermediate toilets placed in the site are emptied frequently by gully suckers provided by the local authorities. However the number of toilets available to these people was not adequate according to the norms and the maintenance of toilets was found to be poor with several of them overflowing. The implication of such a situation is that the disposal of excreta by the people becomes insanitary in IDP sites.This will pose a threat to faeco-oral spread of communicable diseases.

Cooking within sites is done by groups of inhabitants on rotational basis. There are several common kitchens in one IDP camp to prepare three meals a day. One observation in this regard was difficulty in ensuring optimal hygiene in food preparation. Most kitchen areas do not have permanent shelters or cemented floors. The waste water, refused food stuff are collected in open unprotected pits around the site providing breeding sites for flies and mosquitoes.

While appreciating the enormity of the task of catering to such a large crowd of IDP in one place and the efficiency with which multi stakeholders have risen to the challenge, it is essential to further improve sanitation and hygiene in camps. The way this is handled is looked upon by the whole world. This remains the biggest challenge shouldered by the health sector in Sri Lanka in the annals of its recorded history so far.

This article is based on a report submitted by Consultant Epidemiologist, Dr. Anura Jayasinghe on the situation of sanitation and hygiene at IDP camp sites. Editor wishes to thank Dr. Upekha Seneviratne, Research Assistant, Epidemiology Unit for the preparation of this article.

Table 1: Vaccine-preventable Diseases & AFP

11th April – 17th April 2009 (16th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2009	Number of cases during same week in 2008	Total number of cases to date in 2009	Total number of cases to date in 2008	Difference between the number of cases to date in 2009 & 2008
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	00	00	00	00	00	01 PU=1	01 AP=1	00	00	02	03	23	25	-8.0%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	-
Measles	00	00	00	00	00	00	00	00	00	00	00	44	40	+10.0%
Tetanus	00	00	00	00	00	00	00	00	00	00	00	09	12	-25.0%
Whooping Cough	00	00	01 GL=1	00	00	01 KR=1	00	00	00	02	00	22	11	+100%
Tuberculosis	00	00	00	00	00	00	00	00	00	00	84	2407	2763	-12.9%

Table 2: Newly Introduced Notifiable Disease

11th April – 17th April 2009 (16th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2009	Number of cases during same week in 2008	Total number of cases to date in 2009	Total number of cases to date in 2008	Difference between the number of cases to date in 2009 & 2008
	W	C	S	N	E	NW	NC	U	Sab					
Chickenpox	15	18	15	385	01	06	10	07	12	469	52	5451	1895	+187.6%
Meningitis	02 CB=2	02 NE=2	03 GL=1 MT=2	00	03 BT=3	00	00	01 BD=1	02 KG=2	13	15	329	541	-39.2%
Mumps	01	01	04	04	00	04	00	01	08	21	30	587	763	-23.1%
Leishmaniasis	00	00	00	00	00	00	01 AP=1	00	00	01	Not available*	353	Not 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.

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.

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

Table 3: Laboratory Surveillance of Dengue Fever

11th April – 17th April 2009 (16th Week)

Samples	Number tested	Number positive	Serotypes *				
			D1	D2	D3	D4	Negative
Number for current week	02	01	01	00	00	00	00
Total number to date in 2009	32	04	01	00	03	00	00

Sources: Genetic Laboratory, Asiri Surgical Hospital

* Not all positives are subjected to serotyping.

NA= Not Available.

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

11th April – 17th April 2009 (16th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns Received Timely**
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	31	631	2	55	0	5	2	67	1	27	6	159	0	2	1	28	0	3	**77**
Gampaha	9	328	0	45	0	6	2	21	0	9	3	96	0	3	1	28	0	2	**71**
Kalutara	6	176	0	96	0	3	0	26	0	11	0	58	0	0	0	4	0	1	**92**
Kandy	9	610	6	121	0	1	0	13	0	52	0	69	0	44	0	15	0	0	**84**
Matale	11	219	0	30	0	0	1	15	0	5	4	160	0	2	0	2	0	2	**100**
Nuwara Eliya	0	23	6	128	0	0	2	70	0	20	1	17	0	22	0	22	0	0	**92**
Galle	1	37	1	61	0	7	0	0	0	5	3	60	0	2	0	6	0	3	**84**
Hambantota	3	46	1	28	0	6	0	2	0	5	1	20	0	29	0	7	0	0	**91**
Matara	1	180	7	113	0	2	0	4	0	4	1	64	2	57	1	6	0	0	**100**
Jaffna	0	8	4	40	0	3	2	77	0	20	0	0	1	87	1	12	0	2	**63**
Kilinochchi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Mannar	0	3	0	13	1	1	0	56	0	4	0	0	0	0	0	14	0	0	**50**
Vavuniya	0	4	6	87	0	1	1	7	0	2	0	2	0	0	0	0	0	0	**50**
Mullaitivu	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**0**
Batticaloa	27	237	2	46	0	9	0	5	0	5	1	4	0	0	0	2	0	1	**82**
Ampara	2	27	0	12	0	0	0	5	0	4	0	6	0	0	0	4	0	0	**71**
Trincomalee	6	125	0	31	0	1	0	2	0	0	0	1	10	5	0	4	0	0	**90**
Kurunegala	5	247	2	56	0	4	2	23	0	1	0	37	0	42	2	22	0	5	**79**
Puttalam	1	53	2	48	0	5	0	36	0	0	2	40	0	20	0	6	0	1	**89**
Anuradhapura	27	143	0	28	0	3	0	3	0	2	0	64	0	22	0	4	0	0	**74**
Polonnaruwa	0	22	1	13	0	2	0	11	0	6	2	38	0	0	0	4	0	0	**71**
Badulla	4	29	3	80	0	2	3	19	0	13	0	33	2	28	2	86	0	0	**100**
Monaragala	0	10	0	16	0	0	0	8	0	7	0	6	0	30	0	14	0	0	**91**
Ratnapura	2	84	2	204	0	14	0	25	0	2	0	34	1	15	0	6	0	1	**61**
Kegalle	21	339	2	43	0	4	1	14	4	5	3	39	0	10	0	57	0	2	**91**
Kalmunai	1	73	1	47	0	1	0	5	0	1	0	2	0	1	1	5	0	0	**54**
SRI LANKA	**167**	**3654**	**48**	**1443**	**1**	**80**	**16**	**515**	**5**	**210**	**27**	**1009**	**8**	**421**	**9**	**358**	**0**	**23**	**79**

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 17 April, 2009 Total number of reporting units =311. Number of reporting units data provided for the current week: 246
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