

## WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiological Unit,

Ministry of Healthcare & Nutrition 231, de Saram Place, Colombo 01000, Sri Lanka Tele: (+94-011)2695112, Fax: (+94,011)2696583, E-Mail: epidunit@sltnet.lk Epidemiologist: (+94-011)2681548, E-mail: chepid@sltnet.lk

Vol. 34 No. 15

7<sup>th</sup> - 13<sup>th</sup> April 2007

# **BUILDING HEALTH SECURITY**

Part I of this article on 'International health security' was published in the last issue.

In the modern world, there is a strong will to prevent the international spread of disease. In recent decades, diseases have spread faster than ever before, aided by high-speed travel and the trade in goods and services between countries and continents. This can only be prevented if there is immediate alert and response to disease outbreaks and other incidents that could spark epidemics or spread globally. In this article, we discuss the mechanisms that help build health security to prevent such eventualities.

### Primary health care

Primary health care brings essential health care to every individual at all times, and is anchored at community level. It is considered the most practical way to address the health needs of the community. The components of primary health care include safe water and sanitation, immunization, nutrition, maternal and child health, provision of essential drugs, education and early detection and control of disease.

It provides an approach for early detection, timely response and control of disease, and is considered vital in the context of national and international health security. Primary health care needs a multi-sectoral approach. A sound primary health care programme needs to become the concern also of those outside the health sector.

Although primary health care is widely understood as a responsibility of the State in the South-East Asia Region (SEAR), the role of the

private sector and the community at large have also been identified as vital links.

#### Public health initiative

Public health promotes a social and physical environment that enables healthy behaviours, along with disease prevention, care and treatment. Most of the time, public health gets little attention and a small share of resources. Public health actions go beyond the traditionally described health sector, spanning across virtually all sectors like education, environment, transportation, finance, sports and youth and justice.

The WHO/SEARO Public Health Initiative enables countries to sensitize political leaders in public health, to establish a high level task force for inter-sectoral cooperation on public health and to create opportunities for training, research and policy initiatives.

The Public Health Initiative steps in before illness arrives to ensure that the large majority of the population remains healthy while managing those already ill. It seeks to guarantee the right to health, considering the denial of accessibility to high quality health care a violation of basic human rights.

## International health regulations

International health regulations are the key global legal instrument for protection against the international spread of disease and Public Health Emergencies of International Concern (PHEIC). The scope of the revised regulations is very broad, containing provisions which can apply to public health risks or potential public health emergencies of international concern

Contents	Page
1. Leading Article - Building Health Security	1
2. Surveillance of vaccine preventable diseases & AFP (31 <sup>st</sup> March - 6 <sup>th</sup> April 2007)	3
3. Summary of diseases under special surveillance (31th March - 6th April 2007)	3
4. Summary of newly introduced notifiable diseases (31st March - 6th April 2007)	3
5. Laboratory surveillance of dengue fever (31 <sup>st</sup> March - 6 <sup>th</sup> April 2007)	3
6. Summary of selected notifiable diseases reported (31 <sup>st</sup> March - 6 <sup>th</sup> April 2007)	4

involving biological, chemical or radionuclear agents, public health events in which the agent or disease is unknown and public health events that are naturally-occurring as well as those which may be accidentally or intentionally-caused.

The purpose of these regulations are to prevent, protect against, control and provide a public health response to the international spread of disease whilst avoiding unnecessary interference with international traffic and trade. Under these, states are required to develop, strengthen and maintain core surveillance and response capacities throughout their territories, and to collaborate with each other and WHO on international public health risks and emergencies.

#### Emergency preparedness and response

Natural disasters occur when communities are exposed to and are unable to cope with hazards such as extremes of rainfall, temperature or wind speed, or tectonic movements. The total number of people affected by natural disasters each year has doubled over the last decade. The World Disasters Report 2006 indicates that around 58% of the total number of people killed in natural disasters during the decade 1996-2005 were from countries in SEAR.

Disasters though not inevitable, can be managed and reduced through appropriate development policies and actions. Emergency preparedness can help communities at risk limit the consequences of emergencies through mitigation of risk, awareness of safe practices and capacity building. Emergency preparedness and risk management are critical in reducing the negative impact of hazards and are essential for the attainment and protection of sustainable development.

The level of emergency preparedness in SEAR varies from country to country as do the issues and challenges faced. After the earthquake and Tsunami of 26 December 2004, all countries in SEAR developed certain benchmarks to put in place a comprehensive emergency preparedness and response system in respective countries. There are 12 benchmarks which cover the three broad areas of multi-sectoral coordination, community empowerment and capacity building.

## Strengthening health systems

Functioning national health systems are the bedrock of inter-

national health security. Their objective is to provide the highest level of protection and care possible across the population. They are also the first line of surveillance for diseases, both infectious and chronic. Most diseases do not cause a 'public health emergency of international concern'. But when a disease emerges which does pose such a threat, the alert and

response required to prevent spread depend on an adequately resourced and staffed health system.

In 2003, a new highly infectious disease took hold in parts of Asia and spread throughout the world in a matter of days. SARS did not gradually fade away. It was deliberately driven out of its new human host before it had a chance to become permanently established through vigorous and coordinated public health efforts, an unprecedented achievement for public health on a global scale.

Emerging diseases put great stress on any health system. The response to SARS demonstrated how effective public health measures can be in responding to new threats. However, not every country has the resources or the public health system required to mount such an effective response. Some countries would find it difficult to confront threats to health security effectively. This could be because they lack the resources needed, because their health infrastructure has collapsed as a consequence of under-investment and shortages of trained health workers, or because the infrastructure has been damaged or destroyed by armed conflict or natural disaster.

#### Conclusion

When health threats challenge a country's infrastructure and health system, and threaten that of its neighbours, only a global vision of health shared by all countries can build trust and improve international health security. Each nation's capacity to prevent and manage public health emergencies and to take part in joint initiatives with other countries is vital to decreasing vulnerability to health threats, increasing international health security, broadening partnerships and building diplomatic relations. In this way, approaching public health within a context of collective global solidarity enhances the security of all nations.

The way to health is not through building national fortresses. Strengthening health systems globally is an altruistic act directed towards those in need that also serves national interests of reducing domestic vulnerability to international health risks. If all stakeholders — countries, international organizations, civil society and the private sector — work together effectively to address global public health challenges, the world can become a safer and healthier place.

Current Phase of	Current Phase of Alert in the WHO Global Influenza Preparedness Plan													
Inter-pandemic phase	Low risk of human cases	1												
New virus in animals, no human cases	Higher risk of human cases	2												
Pandemic alert	No or very limited human-to-human transmission	3												
New virus causes human cases	Evidence of increased human-to- human transmission	4												
	Evidence of significant human-to- human transmission	5												
Pandemic	Efficient and sustained human- to-human transmission	6												

Table 1: Vaccine-preventable diseases & AFP

31st March - 6th April 2007 (14th Week)

Disease			No. o	f Cases	by Prov	/ince	Number of cases during current	Number of cases during same	Total number of cases to date in	Total number of cases to date in	Difference between the number of cases to date between 2007 & 2006		
	W	С	S	NE	NW	NC	week in 2007	week in 2006	2007	2006			
Acute Flaccid Paralysis	00	01 KD=1	00	00	02 KR=1 PU=1	00	00	00	03	01	26	42	-38.1%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00.0%
Measles	00	00	00	00	01 KR=1	00	00	01 KG=1	02	00	19	06	+216.7%
Tetanus	00	00	00	00	01 PU=1	00	00	00	01	02	10	13	-23.1%
Whooping Cough	00	00	00	00	00	00	00	00	00	00	13	22	-40.1%
Tuberculosis	146	00	02	11	00	00	14	00	173	224	2550	2914	-12.5%

Table 2: Diseases under Special Surveillance

31st March - 6th April 2007 (14th Week)

Disease			No. c	f Cases	by Prov	vince	Number of cases during current week in	Number of cases during same week in	Total number of cases to date in	Total number of cases to date in	Difference between the number of cases to date between		
	W	С	S	NE	NW	NC	U	Sab	2007	2006	2007	2006	2007 & 2006
DF/DHF*	17	07	03	00	07	02	01	01	38	75	1528	2863	-46.6%
Encephalitis	00	00	00	01 BT=1	00	00	00	00	01	04	67	36	+86.1%
Human Rabies	00	00	00	00	00	00	00	00	00	00	21	18	+16.7%

Table 3: Newly introduced Notifiable Diseases

31st March - 6th April 2007 (14th Week)

Disease			No. o	of Cases	by Prov	vince		Number of cases during	Total num- ber of cases to	*DF / DHF refers to Dengue Fever / Dengue Haemorrhagic Fever. NA= Not Available. Sources: Weekly Return of Communicable			
	W	С	S	NE	NW NC U Sab current date in 2007		<b>Diseases:</b> Diphtheria, Measles, Tetanus, Whooping Cough, Human Rabies, Dengue Haemorrhagic Fever,						
Chickenpox	21	80	05	04	06	01	01	10	56	900	Japanese Encephalitis, Chickenpox, Meningitis, Mumps.		
Meningitis	00	00	00	00	00	00	00	00	00	49	Special Surveillance: Acute Flaccid Paralysis. National Control Program for Tu-		
Mumps	12	00	01	04	03	00	02	01	23	288	berculosis and Chest Diseases: Tuberculosis. Details by districts are given in Table 5.		

Provinces:

W=Western, C=Central, S=Southern, NE=North & 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.

Table 4: Laboratory Surveillance of Dengue Fever 31st March - 6th April 2007 (14th Week)

Samples	Number tested	Number positive *	Serotypes								
	icsicu	positive	$D_1$	$D_2$	$D_3$	D <sub>4</sub>	Negative				
Number for current week	04	00	00	00	00	00	00				
Total number to date in 2007	234	11	00	03	02	00	05				

Source: Genetech Molecular Diagnostics & School of Gene Technology, Colombo.

\* Not all positives are subjected to serotyping

Table 5: Selected notifiable diseases reported by Medical Officers of Health 31st March - 6th April 2007 (14th Week)

DPDHS Division	Dengue Fever / DHF*		entery	y Encephalitis		Enteric Fever		Food Poisoning		Leptos- pirosis		Typhus Fever		Viral Hepatitis		Returns Re- ceived Timely**	
	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	%
Colombo	10	439	04	67	00	03	01	27	02	42	01	39	00	01	01	12	92
Gampaha	02	167	04	63	00	08	00	22	00	27	07	90	00	06	01	34	64
Kalutara	05	115	04	73	00	01	00	16	00	11	04	42	00	01	01	29	82
Kandy	07	189	00	46	00	03	02	23	00	05	00	33	02	27	05	95	68
Matale	00	50	01	62	00	03	00	05	00	03	00	13	00	03	11	64	50
Nuwara Eliya	00	18	05	52	00	00	01	25	00	366	00	06	01	19	03	78	71
Galle	00	43	02	39	00	05	00	04	00	03	01	20	00	16	00	08	88
Hambantota	03	20	00	22	00	02	00	80	03	07	00	15	00	17	00	07	73
Matara	00	54	01	70	00	02	01	17	00	04	02	54	03	97	00	10	100
Jaffna	00	07	00	32	00	02	00	229	00	00	00	00	00	76	00	07	00
Kilinochchi	00	00	00	00	00	00	00	02	00	00	00	00	00	02	00	02	00
Mannar	00	07	00	11	00	00	00	35	00	00	00	00	00	00	00	04	50
Vavuniya	00	10	01	17	00	02	00	08	00	06	00	02	00	00	00	03	100
Mullaitivu	00	00	00	05	00	03	00	10	00	00	00	00	00	00	00	00	40
Batticaloa	00	09	02	59	01	04	00	12	00	02	00	00	00	00	01	124	55
Ampara	00	01	00	31	00	00	00	03	00	00	00	00	00	00	00	08	43
Trincomalee	00	28	04	34	00	01	00	10	00	17	00	01	00	01	03	20	67
Kurunegala	06	126	03	72	00	00	04	23	00	04	00	10	00	23	01	11	61
Puttalam	01	61	00	25	00	09	00	23	00	00	02	07	00	00	05	46	78
Anuradhapura	01	20	00	26	00	07	01	15	00	03	01	10	00	12	00	19	58
Polonnaruwa	01	21	00	41	00	02	00	03	01	01	02	14	00	00	00	03	71
Badulla	01	14	10	122	00	00	01	27	00	08	01	17	06	39	03	76	80
Monaragala	00	06	09	63	00	00	01	15	00	00	02	18	00	20	01	07	90
Ratnapura	00	58	12	198	00	07	00	25	00	06	01	19	00	05	00	27	63
Kegalle	01	63	02	51	00	03	03	18	00	03	03	35	01	10	00	19	55
Kalmunai	00	02	00	31	00	00	00	05	00	00	00	00	00	02	01	66	62
SRI LANKA	38	1528	64	1312	01	67	15	610	06	518	27	445	13	377	37	779	66

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 E-mail to chepid@sltnet.lk.

## ON STATE SERVICE

Dr. M. R. N. ABEYSINGHE EPIDEMIOLOGIST EPIDEMIOLOGICAL 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 14 Apr. 2007. Total number of reporting units = 290. Number of reporting units data provided for the current week: 192. A = Cases reported during the current week. B = Cumulative cases for the year.