WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health
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. 39 No.21 **19th – 25th May 2012**

WER SRI LANKA - 2012

Effective Vaccine Management (Part IV)

This is the last in a series of four articles on effective vaccine management. Part I & II of this series were on the Storage of vaccines and safe injection equipment and Part III was mainly focused on Transport of vaccines and safe injection equipment. This article is mainly on Estimating vaccine and safe injection needs .

How to freeze ice-packs

It takes 24-48 hours to freeze an ice-pack.
The proper freezing and use of ice-packs is essential to maintain good quality of the vaccines. Make sure that the ice-packs you have correspond (sizes and number) to the cold boxes and carriers you are using.

To freeze an ice-pack:
Fill with water leaving a little air space at the top, and put the cap on tightly. Hold each ice-pack upside down and squeeze it to make sure it does not leak. Put the ice-packs upright or on their sides in the freezer so that the surface of each ice- pack is touching the evaporator plate.

Ice-lined refrigerators with a freezing compartment can freeze up to six large or 12 small ice packs per day. More packs will take longer to freeze. After the session put the ice-packs back in the freezer.

Keep extra unfrozen ice-packs that do not fit in the freezer on the bottom part of the main refrigerator compartment to keep this section cold in case of a power failure. When you put these ice-packs into the freezer they will freeze relatively quickly because the water inside already is cold. However, do not store already frozen ice-packs in the refrigerator compartment as this will increase the risk of freezing the vaccine.

Maintaining the correct temperature in cold boxes and vaccine carriers

Remember: In order to maintain the temperature in cold boxes and vaccine carriers:

- Place adequate number of conditioned ice packs in the cold box or vaccine carrier.
- Keep the cold box or vaccine carrier in the shade.
- Keep the lid tightly closed.
- Use the foam pad to hold vials during immunization sessions.

Estimating vaccine and safe injection equipment needs

The availability of an adequate supply of vaccines, diluents and safe-injection equipment of assured quality is critical to every immunization service. Effective management and storage of supplies can help save on programme costs, prevent high wastage rates and stock-outs and improve the safety of immunization.
There are two methods that are commonly used to estimate vaccine and safe-injection equipment needs at the provincial level.

1) Estimating vaccine and injection equipment needs based on the target population.

2) Estimating vaccine and injection equipment needs based on the previous consumption.
Whichever method is used, the accuracy will depend on the quality of the data used and the

Contents	Page

1. *Leading Article – Effective Vaccine Management (Part IV)*	1
2. *Surveillance of vaccine preventable diseases & AFP (12th – 18th May 2012)*	3
3. *Summary of newly introduced notifiable diseases (12th – 18th May 2012)*	3
4. *Summary of selected notifiable diseases reported (12th – 18th May 2012)*	4

knowledge of the person doing the calculations.

Estimating vaccine and safe injection equipment needs based on previous consumption

Each parameter relative to previous consumption can be affected by many factors, especially programme performance, during the supply period in question.

Estimating needs based on previous consumption may, therefore, not be as reliable as the method based on target population. But this is the method that is used in Sri Lanka and it is fairly accurate as the programme is functioning smoothly (with high coverage and equal level of performance throughout the year).
In most areas, vaccine and safe-injection equipment are supplied regularly –for example, once in every month to the MOH offices

Consider the following measurements when estimating vaccine and safe injection equipment needs based on previous consumption:

- Initial stock (vaccine and safe injection equipment) at the beginning of the given period
- Stock received during the period
- Stock at the end of the period

Other issues to consider include stock wasted during the same period (i.e. unopened vials that have expired or been frozen, broken or gone missing). If a substantial number of unopened vials have been wasted during the previous period, they need to be replaced. Any additional special activities planned for the forthcoming supply period should also be considered.
Maximum stock that can be kept at the MOH office should not exceed 2 months requirement and the minimum should not fall below one month's requirement.

Multi-dose vial policy:

Multi-dose vials of DTP, OPV, TT, DT, and liquid aTD from which one or more doses of vaccine have been removed during an immunization session may be used again within **four weeks** if all of the following conditions are met:

- The expiry date has not passed
- The vaccines are stored under appropriate cold chain conditions at all times
- The vaccine vial has not been submerged in water
- Sterile technique has been used to withdraw all doses
- The VVM, if attached, has not reached the discard point.

This policy does not change the recommended procedures for handling vaccines that must be reconstituted; for example BCG vaccine, measles, Rubella, MR and MMR. Once a vial of any of these vaccines is reconstituted, it must be **discarded at the end of each immunization session or at the end of six hours, whichever comes first**.

Compiled by Dr. Sudath Peiris-Assistant Epidemiologist

Source-Cold chain, vaccines and safe-injection equipment management-

Available from
whqlibdoc.who.int/hq/2008/WHOIVB08.01eng.pdf

Table 3 : Water Quality Surveillance
Number of microbiological water samples - April / 2012

District	MOH areas	No: Expected *	No: Received
Colombo	12	72	NR
Gampaha	15	90	0
Kalutara	12	72	NR
Kandy	23	138	12
Matale	12	72	NR
Nuwara Eliya	13	78	NR
Galle	19	114	NR
Matara	17	102	0
Hambantota	12	72	8
Jaffna	11	66	NR
Kilinochchi	4	24	NR
Manner	5	30	NR
Vavuniya	4	24	NR
Mullatvu	4	24	NR
Batticaloa	14	84	10
Ampara	7	42	NR
Trincomalee	11	66	NR
Kurunegala	23	138	79
Puttalam	9	84	NR
Anuradhapura	19	114	0
Polonnaruwa	7	42	0
Badulla	15	90	NR
Moneragala	11	66	NR
Rathnapura	18	108	NR
Kegalle	11	66	NR
Kalmunai	13	78	NR

* No of samples expected (6 / MOH area / Month)
NR = Return not received

Table 1: Vaccine-preventable Diseases & AFP

12th – 18th April 2012 (20th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2012	Number of cases during same week in 2011	Total number of cases to date in 2012	Total number of cases to date in 2011	Difference between the number of cases to date in 2012 & 2011
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	01	00	00	00	00	00	00	00	00	01	00	33	30	+ 10.0 %
Diphtheria	00	00	00	00	00	00	00	00	00	-	-	-	-	-
Measles	00	00	00	00	00	00	00	00	00	00	03	20	56	- 42.4 %
Tetanus	00	00	00	00	00	00	00	00	00	00	00	04	08	- 33.3 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	00	32	15	+ 166.6 %
Tuberculosis	38	17	12	04	37	56	43	11	25	206	88	3402	3169	+ 06.1 %

Table 2: Newly Introduced Notifiable Disease

12th – 18th April 2012 (20th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2012	Number of cases during same week in 2011	Total number of cases to date in 2012	Total number of cases to date in 2011	Difference between the number of cases to date in 2012 & 2011
	W	C	S	N	E	NW	NC	U	Sab					
Chickenpox	01	00	01	00	00	01	00	00	01	04	67	1953	2022	+ 12.2 %
Meningitis	00	00	00	00	00	00	00	00	00	00	19	235	363	- 28.8 %
Mumps	00	00	01	00	02	00	01	00	01	05	29	1889	924	+ 160.8 %
Leishmaniasis	00	00	00	00	00	00	00	00	00	00	03	236	271	+ 02.2 %

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.

Dengue Prevention and Control Health Messages

You have a duty and a responsibility in preventing dengue fever. Make sure that your environment is free from water collections where the dengue mosquito could breed.

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

12th – 18th April 2012 (20th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns Received
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	64	2907	0	45	0	5	2	82	0	24	2	60	0	2	1	23	0	1	**08**
Gampaha	0	2197	0	31	0	5	0	32	0	13	0	77	0	6	0	101	0	0	**00**
Kalutara	0	788	0	35	0	2	0	17	0	3	0	92	0	2	0	9	0	1	**00**
Kandy	5	683	0	33	0	1	0	11	0	11	0	25	0	62	0	12	0	0	**04**
Matale	0	174	0	37	0	4	0	7	0	4	0	18	0	2	1	9	0	0	**08**
Nuwara	0	124	0	56	0	1	0	17	0	1	0	12	0	29	0	8	0	0	**00**
Galle	1	449	0	36	0	3	0	6	0	10	0	59	0	21	0	1	0	0	**11**
Hambantota	0	201	0	18	0	1	0	2	0	7	0	25	0	21	0	5	0	0	**00**
Matara	0	558	0	29	0	4	0	9	0	15	0	63	0	35	0	48	0	0	**00**
Jaffna	0	196	1	81	0	6	0	168	0	18	0	2	0	232	0	2	0	0	**17**
Kilinochchi	0	20	0	6	0	1	0	18	0	39	0	3	1	26	0	4	0	1	**25**
Mannar	0	69	0	10	0	2	0	13	0	13	0	15	0	35	0	1	0	0	**00**
Vavuniya	0	25	0	6	0	17	0	3	0	4	0	14	0	0	0	1	0	0	**25**
Mullaitivu	0	5	0	8	0	1	0	4	0	1	0	2	0	5	0	0	0	0	**25**
Batticaloa	7	525	0	50	0	1	0	10	0	25	0	4	0	0	0	4	0	1	**36**
Ampara	0	35	0	39	0	0	0	3	0	5	0	16	0	0	0	1	0	0	**00**
Trincomalee	0	80	0	66	0	1	0	15	0	1	0	22	0	3	0	2	0	0	**00**
Kurunegala	1	503	0	50	0	6	0	41	0	9	0	59	0	15	0	27	0	2	**09**
Puttalam	0	330	0	23	0	4	0	5	0	1	0	19	0	8	0	1	0	0	**00**
Anuradhapu	0	138	0	27	0	1	0	3	0	1	0	45	0	18	0	29	0	1	**05**
Polonnaruw	0	80	0	11	0	0	0	1	0	0	0	17	0	2	0	26	0	1	**00**
Badulla	0	87	0	30	0	2	0	14	0	2	0	16	0	24	0	18	0	0	**00**
Monaragala	0	72	0	28	0	4	0	9	0	0	0	36	0	37	0	86	0	0	**00**
Ratnapura	6	623	0	87	0	23	0	26	0	2	0	115	0	18	0	48	0	1	**22**
Kegalle	4	555	0	27	0	6	0	12	0	5	0	48	0	23	0	200	0	0	**09**
Kalmune	0	123	0	79	0	1	0	5	0	23	0	2	0	0	0	0	0	1	**08**
SRI LANKA	**88**	**11547**	**01**	**948**	**00**	**102**	**02**	**533**	**00**	**236**	**02**	**866**	**01**	**626**	**02**	**672**	**00**	**10**	**07**

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 18th May, 2012 Total number of reporting units 329. Number of reporting units data provided for the current week: 24
A = Cases reported during the current week. **B** = Cumulative cases for the year.

PRINTING OF THIS PUBLICATION IS FUNDED BY THE WORLD HEALTH ORGANIZATION (WHO).

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
CHIEF EPIDEMIOLOGIST
EPIDEMIOLOGY UNIT
231, DE SARAM PLACE
COLOMBO 10