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. 37 No.50 — 11th – 17th December 2010

WER SRI LANKA - 2010

IMMUNIZATION

Each year, over 1.4 million children die fromdiseases that are preventable with readily available vaccines.

These diseases include measles, meningitis caused by *Haemophilus influenzae* type B (Hib), diphtheria, tetanus, pertussis (whooping cough), yellow fever, polio and hepatitis B. New vaccines against other illnesses, such as pneumonia and diarrhoea caused by rotavirus, have been developed and are now more widely used.

Children who are immunized are protected from these dangerous diseases, which can often lead to disability or death. All children have the right to this protection.

Every girl and boy needs to be fully immunized. Early protection is critical. The immunizations in the child's first year and into the second year are especially important. It is also essential that pregnant women are immunized against tetanus to protect themselves as well as their newborns.

Although there has been progress in the past years in immunizing children, in 2008 nearly 24 million children — almost 20% of children born each year — did not get the routine immunizations scheduled for the first year of life.

Parents or other caregivers need to know why immunization is important, the recommended immunization schedule, and where their children can be immunized. Parents or other caregivers need to know that it is safe to immunize a child who has a minor illness or a disability or is suffering from malnutrition.

Immunization is urgent. Every child should complete the recommended series of immunizations. Early protection is critical; the immunizations in the first year and into the second year are especially important. All parents or other caregivers should follow the advice of a trained health worker on when to complete the required immunizations.

Children must be immunized early in life. It is essential that infants, both girls and boys, get all recommended vaccines at the right time. Some vaccines require multiple doses for full protection. It is important for every child to complete the *full* number of these immunizations.

To protect the child during and beyond the first year of life, the immunizations in the following chart are necessary. These are most effective when given at the ages specified, or as close to those ages as possible.

As new vaccines become available, more vaccines are recommended for all countries. But some vaccines are only needed in countries where certain diseases are present.

Parents and health workers should follow the locally recommended immunization schedule. If a child does not complete the full series of immunizations in the first and into the second year of life, it is extremely important to have the child fully immunized as soon as possible. This can be done during special campaigns.

In some countries, additional vaccine doses, called 'booster shots', are offered after the first year of life. These help to sustain the effectiveness of the vaccine so the child is protected longer.

Immunization protects against several dangerous diseases. A child whois not immunized is more likely to become sick, permanently disabled orundernourished, and could possibly die.

Immunization protects children against some of the most dangerous diseases of childhood. All children, including those who are disabled, need to be vaccinated. A child is immunized by vaccines, which are injected or given by mouth. The vaccines work by building up the child's defences against diseases. Immunization only works if given *before* the disease strikes.

A child who is not immunized is very likely to get measles, whooping cough and many other diseases that can kill. Children who survive these diseases are weakened and may not grow well. They may be permanently disabled. They may die later from malnutrition and other illnesses.

All children need to be immunized with BCG (Bacille Calmette-Guérin) vaccine, which offers partial protection against some forms of tuberculosis and leprosy.

All children need to be immunized against diphtheria, tetanus and pertussis with DTP vaccine (also known as DPT vaccine). Diphtheria causes infection of the upper respiratory tract, which in severe cases may lead to breathing difficulties and death. Tetanus causes rigid muscles and painful muscle spasms and can be deadly. Pertussis, or whooping cough, affects the respiratory tract and can cause a cough that lasts four to eight weeks. The disease is very dangerous in infants.

All pregnant women and infants need to be immunized against tetanus.

Immunizing a woman or adolescent with at least two doses of tetanus toxoid before or during pregnancy protects the newborn for the first few weeks of life and protects the mother.

At 6 weeks old, a baby needs the first dose of tetanus toxoid (the tetanus component of the DTP (DPT) vaccine) to extend the protection received from the mother against tetanus.

All children need to be immunized against measles, which can be a major cause of malnutrition, poor mental development, and hearing and visual impairments. The signs that a

Contents	*Page*

child has measles are a fever and rash, together with a cough, a runny nose or red eyes. A child can die from measles.

All children need to be immunized against polio. The signs of polio are a floppy limb or the inability to move. For every 200 children infected, one will be disabled for life.

In countries where hepatitis B is a problem, up to 10 out of every 100 children will harbour the infection for life if they are not immunized with hepatitis B vaccine. Up to one quarter of children infected with hepatitis B may develop serious liver conditions such as cancer when they are older.

In many countries, pneumonia caused by pneumococcus bacteria or *Haemophilus influenzae* type B (Hib) bacteria is common and kills many young children. Either of these bacteria can also cause childhood meningitis and other serious infections. These bacteria are among the most dangerous for children, particularly those under 5 years old. Vaccination with *Haemophilus influenzae* type B vaccine (Hib vaccine) and pneumococcal (conjugate) vaccine (PCV) can prevent these deaths.

A pentavalent vaccine (five vaccines in one), combining the DTP (DPT), hepatitis B and Hib vaccines, is increasingly being used by national immunization programmes.

Diarrhoea caused by rotavirus is common and can be severe. It affects nearly every child under age 5. Severe rotavirus diarrhoea is more common in developing countries where health care can be more difficult to access, resulting in many deaths in children under 5 years old, especially children under 2. Vaccination against rotavirus prevents diarrhoea caused by this virus. However, diarrhoea due to other bacteria or viruses can still occur in children who receive the rotavirus vaccine.

In some countries, yellow fever puts the lives of many young children and adults at risk. Vaccination can prevent the disease.

Japanese encephalitis virus is spread by mosquitoes, mainly in rural areas of Asian countries. It causes a severe illness, killing up to one third of those affected. Many survivors have brain damage. A trained health worker should be consulted for advice and information on national guidelines regarding use of this vaccine.

Breastmilk and colostrum, the thick yellow milk produced during the first few days after a woman gives birth, provide protection against diarrhoea, pneumonia and other diseases. Colostrum is sometimes referred to as a newborn's 'first vaccine', helping to build the child's immunity to disease.

In many countries where vitamin A deficiency is common, high-dose vitamin A capsules (or syrup) are administered to each child aged 6 months to 5 years, every four to six months. Vitamin A is distributed during routine immunization (such as with measles vaccine at 9 months) as well as during special immunization campaigns. Vitamin A is also an important part of measles treatment.

It is safe to immunize a child who has a minor illness or a disability or is malnourished.

Many parents do not take a child to be immunized because the child has a fever, cough, cold, diarrhoea or some other illness. However, it is safe to immunize a child who has a minor illness.

It is also safe to immunize a child who has a disability or is malnourished. If a child is HIV-positive or suspected to be HIV-positive, a trained health worker should be consulted about which vaccines to give the child.

After an injection, the child may cry or develop a fever, a minor rash or a small sore. This is normal and shows that the vaccine is working. Children under 6 months of age should breastfeed frequently; older children should be given plenty of liquids and foods. If the child develops a high fever (over 38 degrees Celsius) the child should be taken to a trained health worker or health centre.

Measles can be extremely dangerous for malnourished children, so they should be immunized against measles, especially if the malnutrition is severe.

All pregnant women and their newborns need to be protected against tetanus. Even if a woman was immunized earlier, she needs to check with a trained health worker for advice on tetanus toxoid immunization.

In many parts of the world, mothers give birth in unhygienic conditions. This puts both the mother and the child at risk of getting tetanus, a major killer of newborn infants.

If a pregnant woman is not immunized against tetanus, and tetanus bacteria or spores enter her body, her life will also be at risk.

Tetanus bacteria or spores grow in dirty cuts. These bacteria can grow if the umbilical cord is cut with an unclean knife or if anything unclean touches the end of the cord. Any tool used to cut the cord should be cleaned, boiled or heated over a flame, and allowed to cool. For the first week after birth, the baby's umbilical stump must be kept clean. No substances should be put on the stump.

All pregnant women should make sure they have been immunized against tetanus. This protects both mothers and newborns.

It is safe for a pregnant woman to be immunized against tetanus. She should be immunized according to this schedule:

- **First dose : As soon as she knows she is pregnant.**
- **Second dose : One month after the first dose, and no later than two weeks before her due date.**
- **Third dose : Six months to one year after the second dose, or during the next pregnancy.**
- **Fourth dose : One year after the third dose, or during a sub sequent pregnancy.**
- **Fifth dose : One year after the fourth dose, or during a subsequent pregnancy.**

After five properly spaced doses, the mother is protected for life and her children are protected for the first few weeks of life.

A new syringe must be used for every person being immunized. People should demand a new syringe for every vaccination.

Sharing syringes and needles, even among family members, can spread life threatening diseases. A new syringe should be used for every person.

All immunizations in any setting, including emergencies, should be given with auto-disable syringes – syringes that can be used only once.

Parents and other caregivers should demand a new syringe for every vaccination. Health workers must discard the syringes and any other waste by-products safely.

Disease can spread quickly when people are crowded together. All children living in congested conditions, particularly in refugee or disaster situations, should be immunized immediately, especially against measles.

Emergencies that make people flee their homes often lead to the spread of communicable diseases. Therefore, all displaced children under 15 years of age should be immediately immunized, especially for measles, at the first point of contact or settlement.

Measles is even more serious when children are malnourished or living in conditions of poor sanitation.

Diseases like measles spread very quickly. A child with measles needs to be kept away from other children, be examined by a trained health worker and be given a high dose of vitamin A.

When there is an outbreak of measles in an area, children should be immunized. Neighbouring areas should be alerted and children immunized.

If routine child immunization has been disrupted, a trained health worker should be consulted to complete the immunizations according to national guidelines. If the child's vaccination record is lost and the parents do not remember which vaccines the child has received, it is safe to repeat doses.

The vaccination card of a child (or an adult) should be presented to the health worker before every immunization.

It is important to follow the vaccination schedule in accordance with national guidelines. Children should be immunized at the recommended ages and should receive subsequent doses at recommended intervals.

When a child is immunized, the health worker should record the vaccine, which dose it is (first, second, etc.) and the date on an immunization or health card given to the parents or other caregiver. The immunizations should also be recorded and kept at the health clinic. It is important for the parents or other caregiver to keep the immunization card and bring it with them the next time the child is vaccinated. With it, the health worker can record which vaccines the child has received and the date they were given. The health worker can also provide information to the parents or other caregiver on vaccines that are missing or remaining.

Source : Path for Life (4th Edition)

Table 1: Vaccine-preventable Diseases & AFP

04th – 10th December 2010(49th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2010	Number of cases during same week in 2009	Total number of cases to date in 2010	Total number of cases to date in 2009	Difference between the number of cases to date in 2010 & 2009
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	00	00	00	00	00	00	00	00	00	00	03	77	71	+ 08.4 %
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	-
Measles	00	00	00	00	00	02	00	00	00	02	00	86	169	- 49.1 %
Tetanus	00	00	00	00	00	00	00	00	00	00	01	20	29	- 31.0 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	02	28	63	- 55.5 %
Tuberculosis	143	05	103	03	16	09	01	16	05	301	52	9736	9823	-0.9 %

Table 2: Newly Introduced Notifiable Disease

04th – 10th December 2010(49th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2010	Number of cases during same week in 2009	Total number of cases to date in 2010	Total number of cases to date in 2009	Difference between the number of cases to date in 2010 & 2009
	W	C	S	N	E	NW	NC	U	Sab					
Chickenpox	11	04	04	00	02	04	03	05	08	41	63	3224	14131	- 77.2 %
Meningitis	01 GM=1	02 MT=2	02 GL=2	00	00	05 KR=5	03 AP=3	01 BD=1	03 KG=3	17	76	1509	1664	+ 09.3 %
Mumps	05	02	00	01	00	12	01	02	04	27	19	1181	1664	- 29.0 %
Leishmaniasis	00	00	01 HB=1	00	00	01 KR=1	05 AP=5	01 RP=1	00	08	12	390	655	- 40.45 %

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

Check the roof gutters regularly for water collection where dengue mosquitoes could breed.

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

04th – 10th December 2010(49th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns re-
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	35	5840	10	308	0	16	11	202	0	49	24	588	0	9	2	70	0	1	**92**
Gampaha	11	3905	9	190	0	28	0	65	3	24	13	578	0	17	4	129	0	6	**73**
Kalutara	5	1803	7	253	0	15	0	41	1	77	6	427	0	5	0	41	0	3	**75**
Kandy	1	1636	14	344	0	6	0	34	0	16	8	182	4	143	2	153	0	1	**91**
Matale	8	626	2	312	0	8	0	36	0	81	16	128	0	7	0	54	0	1	**92**
Nuwara	1	224	3	348	0	1	0	120	0	89	1	34	0	67	0	52	0	0	**69**
Galle	1	1107	1	251	1	10	0	14	0	59	7	173	1	26	2	24	0	5	**79**
Hambantota	4	804	0	93	0	7	0	4	0	16	4	109	0	92	0	20	0	0	**73**
Matara	0	610	3	169	0	8	1	15	0	53	4	377	0	135	0	19	1	1	**94**
Jaffna	20	2927	1	297	1	8	10	618	0	10	0	1	6	149	1	87	0	2	**75**
Kilinochc	1	49	3	21	0	0	1	11	0	1	0	3	0	0	0	1	0	1	**100**
Mannar	0	564	0	48	0	2	1	48	0	10	1	1	0	1	1	18	0	1	**50**
0Vavuniya	0	575	1	60	0	3	0	45	0	13	0	2	0	1	0	13	0	2	**75**
Mullaitivu	0	20	0	8	0	0	1	4	0	0	0	0	0	0	0	1	0	1	**50**
Batticaloa	4	1238	5	206	1	5	0	40	1	39	0	13	0	4	0	8	0	4	**79**
Ampara	5	165	0	119	0	1	0	9	0	65	0	33	0	1	0	15	0	0	**29**
Trincomalee	2	976	2	162	0	14	0	7	0	15	0	41	0	21	1	18	1	2	**91**
Kurunegala	5	1413	9	376	0	20	4	63	0	35	5	373	0	59	0	127	0	4	**90**
Puttalam	1	1021	16	250	0	8	0	57	1	240	0	77	2	11	0	24	0	1	**67**
Anuradhapu	7	1085	6	161	0	11	0	16	0	46	6	103	2	32	1	54	0	4	**68**
Polonnaruw	2	397	2	114	0	2	0	8	0	10	2	90	0	2	0	47	0	0	**100**
Badulla	8	1314	4	222	0	1	4	102	4	33	0	91	2	122	0	112	0	0	**73**
Monaragala	4	1057	0	184	0	2	1	47	3	10	5	47	3	94	1	100	0	3	**73**
Ratnapura	6	2786	4	482	0	8	1	25	0	27	2	412	0	63	0	104	0	3	**61**
Kegalle	9	907	2	163	0	18	1	81	0	29	12	409	1	33	0	134	0	0	**91**
Kalmunai	1	550	5	320	0	**3**	0	14	0	9	0	3	0	0	0	13	0	1	**69**
SRI LANKA	**141**	**33599**	**109**	**5461**	**03**	**205**	**36**	**1726**	**13**	**1056**	**116**	**4295**	**21**	**1094**	**15**	**1438**	**02**	**47**	**78**

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 10th December, 2010 Total number of reporting units =320. Number of reporting units data provided for the current week: 251
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