WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health, Nutrition & Indigenous Medicine

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. 43 No. 14 **26th – 01st April 2016**

WEER SRI LANKA 2016

End Malaria for Good-Can Sri Lanka Prevent Reintroduction?

Malaria is a potentially fatal disease causing severe epidemics. It is endemic in more than 100 countries worldwide causing disease and deaths for millions. According to the latest WHO estimates, released in December 2015, there were 214 million cases of malaria in 2015 and 438 000 deaths.

Every year, on April 25th , people across the world participate to commemorate World Malaria Day. Unfortunately, for half the world, every day is malaria day - a day to keep up the fight against this killer disease. The World Malaria Day theme provides a common forum for countries to discuss their successes and combine various initiatives worldwide. Malaria-endemic countries have made unbelievable gains in malaria in the last decade, however, sustaining them will take extra efforts until the job is finished and malaria is eliminated regionally and globally.

Malaria has been endemic in Sri Lanka for centuries and associated morbidity and mortality has incurred billions of rupees affecting the country's development and economy. Sri Lanka has achieved a remarkable success by eliminating malaria from Sri Lanka. Last Indigenous case of malaria was reported in October 2012. Although indigenous transmission of malaria has been controlled, Sri Lanka still get imported malaria cases mainly from India and African countries. At present Sri Lanka is challenged with maintaining the achieved success as the potential for malaria resurgence is high as in the past due to presence of vector and increased migration to and from Malaria endemic countries. There were 36 imported malaria cases in 2015, which includes 17 cases each of *Plasmodium vivax* and *Plasmodium falciparum* and two cases of *Plasmodium ovale*. In 2016 there were 14 cases of imported malaria up to March 2016.

Clinical Vigilance

Vigilance of Medical community becomes the key determinant in Prevention of reintroduction of Malaria in the current context. Malaria Case investigation analysis revealed that there were several occasions of delayed diagnosis, leading to development of severe malaria, while the patient is being in the health institutions. Missing a malaria diagnosis in a patient can have negative consequences in two ways. Firstly, it can hinder the credibility of our medical profession with regard to accurate diagnosis and delayed treatment and thereby failing to fulfill professional responsibilities towards individual patients. Secondly as citizens, we have a corporate responsibility towards Prevention of reintroduction of Malaria in Sri Lanka.

It is important to ask overseas travel history during the past one year, from all fever patients and exclude possibility of Malaria.

Get the Travel History from all Fever Patients

Contents *Page*

In addition, attention should be focused on risk groups mentioned.

High risk groups for imported Malaria in Sri Lanka

- Armed Force personnel in UN peace-keeping missions /training in malaria endemic countries
- Businessmen frequently travelling to India & other malaria endemic countries
- Gem businessmen travelling to Mozambique & Madagascar
- Travelers (local & foreign) to & from malaria-endemic countries
- Sri Lankan Returnees from South India

Diagnosis

When a person from above mentioned risk group come to contact with the health system, then immediately need to be investigated for Malaria. The gold standard diagnostic method is quality assured microscopy. However Rapid Diagnostic Test kits which provide malaria species diagnosis within 20 minutes, are also available in selected government hospitals and in private sector.

Once Malaria has been diagnosed, treatment should be started as early as possible to prevent development of severe malaria. Laboratory confirmation by microscopic examination of blood smears and/or Rapid Diagnostic Tests (RDT) is mandatory prior to initiation of anti-malarial treatment. Presumptive treatment with antimalarial drugs are no longer recommended. The treatment guideline has been revised in 2014 and is available in Anti Malaria Campaign web site http://www.malariacampaign.gov.lk/

Treating malaria on clinical suspicion without laboratory confirmation should always be avoided.

Malaria treatment depends on the species of the malaria parasite; whether it is mono infection or mixed infection; severity of the disease condition and the physiological state of patients.

For mono infection with *Plasmodium vivax,* the recommended drug is chloroquine followed by primaquine for 14 days to remove liver forms. For *Plasmodium falciparum,* Artemisinin based Combination therapy (ACT) is recommended with single dose of primaquine. For severe malaria intravenous Artesunate is recommended as the first line therapy.

Once a suspected case of imported malaria has been identified, the AMC conduct series of activities to prevent onward transmission leading to resurgence. These activities include, confirming the diagnosis; providing information & necessary drugs; contact tracing & screening for asymptomatic carriers; entomological investigation to investigate possibility of onward transmission through vector mosquitoes, etc. Prompt notification to Anti Malaria Campaign (AMC) is vital as these activities are needed to be conducted within one-two weeks of identification of a case to prevent a possible outbreak. Please inform AMC via 24-hour hot line **0117-626 626 or 071-2841767**

Summary of Specific Treatment schedules for Malaria

- Mono-infection with *P. vivax* : CQ & PQ (14d)
- Mono-infection with *P. falciparum* : ACT & PQ (single dose)
- Uncomplicated mixed infections with *P. falciparum* and *P.vivax* : ACT & PQ (14d)
- Severe Malaria: IV Artesunate

Inform All Suspected Malaria cases to AMC hot line immediately

0117 626 626
071 284 1767

Prevention

For persons plan to visit a malaria endemic country, should be armed with necessary information on risk for malaria and malaria chemo-prophylactic drugs as necessary. These persons should be referred to AMC/ Regional Malarial officers at least one week before leaving the country. Once referred, the risk is analyzed for contracting malaria during his/ her overseas stay, the necessary information and services will be delivered free of charge. Weekly doses of chloroquine or mefloquine is recommended as malaria prophylaxis depending on the country of visit. These prophylactic drugs should be started one week before leaving Sri Lanka and should be taken throughout the stay in the malaria endemic country and 4 weeks after returning to Sri Lanka.

Any fever up to one year after returning to Sri Lanka, from a malaria endemic country, should always be considered as malaria until proven otherwise.

Sri Lanka is applying for WHO certification as a malaria free country in 2016. Contribution of clinicians by early diagnosis, correct treatment and notifying malaria cases to Anti Malaria Campaign is crucial for this process.

- **Prevent mosquito bites when traveling in malaria endemic countries**
- **Get chemoprophylaxis from AMC**

Let's keep Sri Lanka Malaria free

Table 1: Selected notifiable diseases reported by Medical Officers of Health 19th – 25th March 2016 (13th Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmani-asis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	174	4578	0	36	0	0	2	17	1	7	2	51	0	2	0	13	0	0	8	136	1	12	0	0	**88**	**100**
Gampaha	34	1647	7	22	0	4	1	11	0	2	8	84	0	5	1	14	0	0	7	139	0	18	1	3	**60**	**87**
Kalutara	21	789	1	24	0	2	0	12	0	7	8	162	0	4	0	10	0	0	2	79	2	23	0	0	**71**	**86**
Kandy	9	610	1	31	0	9	1	9	3	17	1	57	3	26	1	26	0	0	2	38	0	13	2	6	**78**	**100**
Matale	4	120	0	10	0	1	1	5	0	2	1	40	0	10	0	10	0	0	0	12	7	34	0	12	**46**	**85**
NuwaraEliya	2	84	1	14	0	1	0	16	0	8	0	14	3	17	2	8	0	0	4	44	1	10	0	0	**85**	**92**
Galle	19	517	1	18	0	3	0	1	0	2	5	100	2	32	0	4	0	0	5	84	1	19	0	1	**75**	**100**
Hambantota	1	219	0	12	0	1	0	0	0	35	2	50	0	29	1	12	0	0	2	79	0	4	3	119	**67**	**92**
Matara	5	274	4	21	1	2	0	4	0	30	5	52	1	19	0	11	0	0	5	67	2	5	2	87	**100**	**100**
Jaffna	32	1074	4	73	0	1	5	38	3	17	0	7	9	473	0	4	0	0	4	85	2	11	0	1	**100**	**100**
Kilinochchi	0	33	0	14	0	0	0	15	0	0	0	7	0	16	0	0	0	0	0	2	0	4	0	0	**25**	**75**
Mannar	0	62	0	3	0	4	0	10	0	1	0	8	0	33	0	0	0	0	2	6	0	1	0	0	**60**	**100**
Vavuniya	1	108	0	2	0	0	0	7	0	8	0	10	0	6	0	3	0	0	0	14	0	1	0	2	**50**	**100**
Mullaitivu	1	60	0	6	0	0	0	11	0	4	0	8	0	4	0	0	0	0	0	1	0	2	0	4	**40**	**100**
Batticaloa	4	218	3	84	0	0	0	7	0	83	0	17	0	4	0	4	0	0	0	22	0	3	0	1	**64**	**86**
Ampara	2	62	2	7	0	0	0	0	0	13	0	12	0	0	0	4	0	0	1	24	0	0	0	3	**29**	**71**
Trincomalee	8	195	0	15	0	0	1	7	5	8	0	3	0	6	2	24	0	1	1	55	2	5	0	1	**67**	**83**
Kurunegala	14	499	1	56	1	5	0	1	0	5	2	51	0	6	1	14	0	1	4	86	4	13	4	32	**76**	**93**
Puttalam	2	420	0	17	0	1	0	3	0	0	2	23	1	51	0	0	0	0	0	26	0	11	0	0	**54**	**77**
Anuradhapura	7	187	0	24	0	1	0	1	0	20	0	129	0	12	0	10	0	0	4	65	1	13	2	61	**53**	**89**
Polonnaruwa	3	125	2	11	0	2	0	8	0	5	1	46	0	1	0	2	0	0	0	30	0	5	4	47	**71**	**86**
Badulla	13	171	1	26	0	7	0	2	1	3	2	42	5	27	2	44	0	0	6	53	2	66	0	0	**71**	**88**
Monaragala	0	110	0	13	0	1	0	2	0	0	8	105	3	38	5	50	0	1	0	19	0	11	2	10	**82**	**100**
Ratnapura	12	490	6	69	0	12	0	11	0	14	3	101	0	9	0	53	0	0	2	54	0	39	0	0	**56**	**89**
Kegalle	2	404	1	15	1	8	0	14	0	10	0	62	0	6	0	9	0	0	6	116	1	16	0	0	**64**	**91**
Kalmune	4	283	1	22	0	2	0	3	0	5	0	6	0	0	0	0	0	4	0	23	0	7	0	0	**46**	**92**
SRILANKA	**374**	**13339**	**36**	**645**	**3**	**67**	**11**	**215**	**13**	**306**	**50**	**1247**	**27**	**836**	**15**	**329**	**0**	**7**	**65**	**1359**	**26**	**346**	**20**	**390**	**68**	**92**

Source: Weekly Returns of Communicable Diseases (WRCD).

*T=Timeliness refers to returns received on or before 25th March, 2016 Total number of reporting units 339 Number of reporting units data provided for the current week: 315 C**-Completeness

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

Table 2: Vaccine-Preventable Diseases & AFP

19th – 25th March 2016 (13th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2016	Number of cases during same week in 2015	Total number of cases to date in 2016	Total number of cases to date in 2015	Difference between the number of cases to date in 20156& 2015
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	00	00	00	00	00	00	01	01	02	14	20	-30%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	01	01	03	00	00	00	00	00	00	05	04	106	94	+13.1%
Measles	03	01	05	00	01	04	00	00	00	14	27	200	482	-58.5%
Rubella	00	00	00	00	00	00	00	00	00	00	00	05	04	+25%
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Tetanus	00	00	00	00	00	00	00	00	00	00	00	02	03	-33.3%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	00	00	06	-100%
Whooping Cough	00	00	01	00	00	00	00	00	00	01	02	22	26	-15.3%
Tuberculosis	57	44	17	08	04	04	02	02	18	156	122	2274	2427	-6.3%

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.

RDHS 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, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS =**Congenital Rubella Syndrome

AFP and all clinically confirmed Vaccine Preventable Diseases except Tuberculosis and Mumps should be investigated by the MOH

Dengue Prevention and Control Health Messages

Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them

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. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

ON STATE SERVICE

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