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. 42 No. 03 **10th – 16th January 2015**

WER SRI LANKA - 2015

Human Papillomavirus (HPV)

Background

Human papillomavirus (HPV) causes cervical cancer, which is the fourth most common cancer in women, with an estimated 266,000 deaths and 528,000 new cases in 2012. A large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers. These HPV types can also infect the mouth and throat.

Although most infections with HPV cause no symptoms, persistent genital HPV infection can cause cervical cancer in women. Virtually all cervical cancer cases (99%) are linked to genital infection with HPV and it is the most common viral infection of the reproductive tract. HPV can also cause other types of anogenital cancer, head and neck cancers, and genital warts in both men and women. HPV infections are transmitted through sexual contact.

How do people get HPV?

HPV is passed on through genital contact, most often during vaginal and anal sex. HPV may also be passed on during oral sex and genital-to-genital contact. Very rarely, a pregnant woman with genital HPV can pass HPV to her baby during delivery. In these cases, the child can develop recurrent respiratory papillomatosis (RRP), a rare condition in which warts grow in the throat. In children, this is also referred to as juvenile-onset recurrent respiratory papillomatosis (JORRP).

Screening

Cervical cancer is the easiest female cancer to prevent, with regular screening and follow-up. Two tests can help prevent cervical cancer or find it early—The Pap test (or Pap smear) helps find precancers, cell changes on the cervix that might become cervical cancer if they are not treated appropriately. Women should start getting the Pap test at age 21 years, and then every three years after.

The HPV test checks for the virus that can cause these cell changes on the cervix. It may be used to screen for cervical cancer, with the Pap test, in women aged 30 years and older. If both tests are negative, the risk for cervical cancer is very low and women can wait five years before another screening. HPV tests also may be used to provide more information when a Pap test has unclear results.

Treatment

There is no treatment for the virus itself, but there are treatments for the problems that HPV can cause .

How can people prevent HPV?

There are several ways meant for to lower their chances of getting HPV.

HPV Vaccines

Vaccines can protect males and females against some of the most common types of HPV. HPV vaccines are safe and effective. Two types of HPV vaccines, which are Bivalent & Quadriva-

Contents *Page*

lent, are now being marketed in many countries throughout the world. Both vaccines are highly efficacious (overall sero conversion observed is 99-100%) in preventing infection with virus types 16 and 18, which are together responsible for approximately 70% of cervical cancer cases globally. They are also highly efficacious in preventing precancerous cervical lesions caused by these types. One vaccine is also highly efficacious in preventing anogenital warts, a common genital disease which is virtually always caused by infection with HPV types 6 and 11. The primary target group in most of the countries recommending HPV vaccination is young adolescent girls. Data from clinical trials and initial post-marketing surveillance conducted in several continents show both vaccines to be safe.

They are given in three doses intra-muscularly over six months. It is important to get all three doses to get the best protection. The vaccines are most effective when given at the age of 11 or 12 years.

Girls and women: Two vaccines (Cervarix and Gardasil) are available to protect females against the types of HPV that cause most cervical cancers. One of these vaccines (Gardasil) also protects against most genital warts. This vaccine has also been shown to protect against anal, vaginal and vulval cancers. Both vaccines are recommended for 09 to 12 year-old girls, and for females 13 through 26 years of age, who did not get any or all of the doses when they were younger.

Boys and men: One vaccine (Gardasil), is the only vaccine available for males. protects males against most genital warts and anal cancers. This vaccine is recommended for boys aged 11 or 12 years, and for males aged 13 through 21 years of age, who did not get any or all of the three recommended doses when they were younger. Young men, 22 through 26 years of age, may get the vaccine.

The vaccine is also recommended for gay and bisexual men (or any man who has sex with men, and men and women who have compromised immune systems (including people living with HIV/AIDS) through age 26 years, who did not get any or all of the doses when they were younger.

For those who are sexually active, condoms may lower the risk of HPV infection. To be most effective, they should be used with every sex act, from start to finish. Condoms may also lower the risk of developing HPV-related diseases, such as genital warts and cervical cancer. But HPV can infect areas that are not covered by a condom - so condoms may not fully protect against HPV.

People can also lower their chances of getting HPV by being in a faithful relationship with one partner; limiting their number of sex partners; and being with a partner who has had no or few prior sex partners. But even people with only one lifetime sex partner can get HPV. And it may not be possible to determine if a partner who has been sexually active in the past is currently infected. Not having sex is the only sure way to avoid HPV.

HPV vaccines offer the best protection to girls and boys who receive all three vaccine doses and have time to develop an immune response before being sexually active with another person. That's why HPV vaccination is recommended for preteen girls and boys at age 11 or 12 years.

Potential new vaccines in development

To increase the protection conferred by HPV vaccines, a vaccine has been developed in which the number of HPV types is increased to 9 by the addition of types 31, 33, 45, 52 and 58 to the quadrivalent vaccine.

This nonavalent (9-valent) vaccine is currently under regula -tory assessment for possible marketing authorization and is not considered further in this position paper. Several other approaches are also being explored including vaccine based on the HPV L2 viral capsid protein.

WHO recognizes the importance of cervical cancer and other HPV-related diseases as global public health problems and reiterates its recommendation that HPV vaccines should be included in national immunization programmes, provided that: prevention of cervical cancer and/or other HPV-related diseases constitutes a public health priority; vaccine introduction is programmatically feasible, sustainable financing can be secured, and the cost-effectiveness of vaccination strategies in the country or region is considered.

Sources

http://www.cdc.gov/

http://www.who.int/immunization/diseases/hpv/en/

Immunization Hnadbook-Epidemiology Unit Sri Lanka.

Compiled by Dr. C U D Gunasekara of the Epidemiology Unit.

Table 1: Selected notifiable diseases reported by Medical Officers of Health 03rd – 09th Jan 2015 (02nd Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmaniasis		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	194	476	2	7	0	0	1	1	0	0	4	9	0	0	0	2	0	0	7	8	1	1	0	0	**63**	**38**
Gampaha	50	153	0	1	0	0	0	0	0	0	1	8	0	1	1	2	0	0	0	0	0	1	0	0	**33**	**67**
Kalutara	33	118	1	1	0	1	0	3	1	1	2	19	0	0	0	0	0	0	1	4	0	2	0	0	**54**	**46**
Kandy	20	78	1	11	0	0	1	1	0	0	0	3	4	6	3	13	0	0	2	12	0	2	1	1	**57**	**43**
Matale	9	29	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	**23**	**77**
NuwaraEliya	2	8	5	9	0	0	0	0	0	0	0	0	0	0	2	13	0	0	0	0	1	3	0	0	**54**	**46**
Galle	7	32	2	5	0	0	0	0	1	3	0	10	0	0	0	0	0	0	5	6	0	4	0	0	**55**	**45**
Hambantota	5	11	0	1	0	0	3	3	0	0	7	9	1	2	0	1	0	0	2	3	0	0	5	6	**50**	**50**
Matara	8	27	1	2	0	0	1	1	0	0	5	11	1	3	0	0	0	0	4	11	1	2	3	4	**88**	**12**
Jaffna	114	266	18	29	0	1	8	21	0	0	2	3	73	98	0	2	0	0	2	5	0	0	0	0	**92**	**8**
Kilinochchi	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**100**
Mannar	0	19	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**60**	**40**
Vavuniya	2	4	2	3	0	0	1	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	**50**	**50**
Mullaitivu	8	13	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	**40**	**60**
Batticaloa	20	65	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**	**50**
Ampara	1	3	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10	1	1	0	0	**43**	**57**
Trincomalee	12	28	0	1	0	0	0	1	0	20	4	4	0	0	0	0	0	0	0	3	0	0	0	0	**33**	**67**
Kurunegala	18	94	3	9	1	1	0	0	0	0	3	14	1	3	0	1	0	0	3	9	0	2	0	0	**48**	**52**
Puttalam	11	64	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**15**	**85**
Anuradhapura	12	33	1	2	0	0	0	0	0	0	7	12	0	1	0	0	0	0	2	3	1	3	4	6	**53**	**47**
Polonnaruwa	3	7	0	1	0	0	0	0	0	0	1	7	0	0	0	0	0	0	1	2	0	0	0	0	**29**	**71**
Badulla	2	44	2	10	0	0	1	1	0	0	0	0	1	1	2	5	0	0	0	3	1	3	0	0	**47**	**53**
Monaragala	4	14	4	7	0	0	1	2	0	1	7	19	2	2	1	1	0	0	1	1	0	0	2	2	**64**	**36**
Ratnapura	3	23	1	7	0	0	0	2	0	0	2	3	0	3	2	5	0	0	0	2	0	0	0	0	**56**	**44**
Kegalle	14	32	0	2	0	0	3	8	0	0	1	3	0	2	4	8	0	0	0	3	1	2	0	0	**55**	**45**
Kalmune	35	88	2	9	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0	0	0	0	**54**	**46**
SRILANKA	**587**	**1732**	**50**	**132**	**2**	**3**	**20**	**47**	**2**	**30**	**46**	**137**	**84**	**124**	**15**	**53**	**0**	**0**	**33**	**92**	**7**	**27**	**15**	**19**	**51**	**49**

Source: Weekly Returns of Communicable Diseases (WRCD).

*T=Timeliness refers to returns received on or before 09th January , 2015 Total number of reporting units 337 Number of reporting units data provided for the current week: 174 C**-Completeness

Table 2: Vaccine-Preventable Diseases & AFP

03rd – 09th Jan 2015 (02nd Week)

Disease	No. of Cases by Province									Number of cases during current week in 2015	Number of cases during same week in 2014	Total number of cases to date in 2015	Total number of cases to date in 2014	Difference between the number of cases to date in 2014& 2015
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	00	00	00	01	01	00	00	02	00	04	00	0%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	00	00	00	00	00	00	00	00	00	00	11	09	27	-66.7%
Measles	03	00	04	00	01	00	00	01	00	09	76	27	148	-81.8%
Rubella	00	01	00	00	00	00	00	00	00	01	00	01	00	0%
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	00	00	0%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Japanese Encephalitis	01	00	00	00	00	00	00	00	00	01	03	01	03	-66.7%
Whooping Cough	01	00	00	00	00	00	00	00	01	02	00	02	01	+100%
Tuberculosis	21	29	18	05	06	08	15	08	03	113	192	265	519	-49.1%

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