



2008 Immunization Issue Brief

Human Papillomavirus (HPV) Vaccine

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What Is the Connection Between HPV and Cervical Cancer?

The human papillomavirus (HPV) is a very common virus. Most people will get HPV at some point in their lives. All types of HPV can cause mild Pap test abnormalities which do not have serious consequences. Approximately 10 of the 30 identified HPV types can lead to development of cervical cancer. Most women (90%) clear a cervical HPV infection on their own. However, persistent infection with "high-risk" types of HPV occurs in a small proportion of women and is the main risk factor for cervical cancer.

How common is HPV? Approximately 20 million people are currently infected with HPV. At least 50 percent of sexually active men and women acquire HPV infection at some point in their lives. By age 50, at least 80 percent of women will have acquired HPV infection. About 6.2 million Americans get a new HPV infection each year.

What are the signs and symptoms of HPV infection? Most people who have an HPV infection do not know they are infected. The virus lives in the skin or mucous membranes and usually causes no symptoms. Some people get visible genital warts or have pre-cancerous changes in the cervix.

How can HPV be prevented? Women who begin having sex at an early age or who have many sexual partners are at an increased risk. However, a woman may be infected with HPV even if she has only one sexual partner. Importantly, HPV infections are common in healthy women and only rarely result in cervical cancer.

The US Food and Drug Administration (FDA) has approved **Gardasil (Merck)**, the first vaccine developed to prevent the most common HPV infections that cause cervical cancer, for use in females aged 9-26 years. Another vaccine **Cervarix (GlaxoSmithKline)** is currently awaiting approval.

Who should get the HPV vaccine? The HPV vaccine currently available (Gardasil) is recommended for all females between 11 and 12 years of age. The vaccine can be given to females as young as 9 years of age. It is also recommended for all teenage and adult women between 13 and 26 years of age if they did not get the vaccine when they were younger.

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Is there a cure for HPV? There is no "cure" for HPV infection, although in most women the infection goes away on its own. The treatments provided are directed to the changes in the skin or mucous membrane caused by HPV infection, such as warts and pre-cancerous changes in the cervix.

How is HPV detected? A Pap test can detect pre-cancerous and cancerous cells on the cervix. Regular Pap testing and careful medical follow-up, with treatment if necessary, can help ensure that pre-cancerous changes in the cervix caused by HPV infection do not develop into life threatening cervical cancer. The Pap test used in U.S. cervical cancer screening programs is responsible for greatly reducing deaths from cervical cancer.

Do young women who get the HPV vaccine still need to get Pap tests? Yes. Because the HPV vaccine will protect only against HPV types that cause 70% of cervical cancers, women should continue to be screened with routine Pap tests.

Do women who have received the HPV vaccine still need to worry about sexually transmitted infections? Yes. The HPV vaccine does not prevent other sexually transmitted infections such as syphilis, gonorrhea, chlamydia or herpes. Also, the vaccine doesn't protect against all HPV types.

Will the HPV vaccine ever be recommended for males? Even though males do not get cervical cancer, the disease is transmitted through sexual contact. So it is likely that the CDC will eventually recommend it for males as well. Since the initial studies of the HPV vaccine were performed in teenage and young adult women, there isn't much evidence that the vaccine works in males. However, studies in males are underway.



The HPV Vaccine is one of the seven immunizations recommended for West Virginia's adolescents ages 11 – 21 through The West Virginia Adolescent Immunization Project: Take Your Best Shot



For More Information Contact:

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