

The HPV or “*Cervical Cancer Vaccine*”: Is it for Me?

Jason D. Adams, M.D., F.A.C.O.G

By now, most of us have either seen, read, or at least heard about the new Human Papillomavirus (HPV) vaccine that is reported to be effective at preventing cervical cancer. As is the case with the release of any new medical treatment, whether it a medication, procedure, or vaccine – there are many questions that television and print advertisements just don’t get around to answering. I hope that this article will clear up some of the confusion surrounding this important medical breakthrough.

What is the HPV vaccine?

The vaccine goes by the trade name *Gardasil*. It is manufactured by *Merck & Comp., Inc.* and is the first vaccine developed to help prevent cervical cancer, pre-cancerous genital disease, and genital warts due to HPV.

What is HPV?

HPV is a virus that is common in the United States and around the world. It is spread through sexual contact, i.e. it is sexually transmitted disease. There are currently 20 million U.S. men and women who are infected with HPV, and there are approximately 6.2 million new infections each year. There are about 100 type of HPV. HPV is the major cause of cervical cancer and is associated with several other types of cancer in both men and women. It is also the cause of pre-cancerous cervical disease and genital warts.

There are no treatments for HPV, but there are treatments for the health problems that HPV can cause.

What is cervical cancer?

The cervix is the lower section of the uterus (or womb) which protrudes into the vagina and dilates during labor to allow the passage of the baby. HPV infects the cervical tissues and disrupts the body’s normal processes of cell growth and division. Over time, this can lead to pre-cancerous changes in the cervix. If left undiagnosed or untreated, the precancerous changes can then lead to cervical cancer. The American Cancer Society estimates that in 2006, over 9700 women will be diagnosed with cervical cancer and 3700 will die from this disease.

Who should get the HPV vaccine?

The Advisory Committee on Immunization Practices (ACIP) recommended routine vaccination for girls 11-12 years of age. The ACIP recommendation also allows for vaccination of girls beginning at nine years old as well as vaccination of girls and women 13-26 years old. Recommendations of the ACIP become Centers for Disease Control (CDC) policy once they are accepted by director of the CDC and the Secretary of Health and Human Resources.

Why is the vaccine only recommended for girls/women ages 9-26?

The vaccine has been extensively tested in 9-26 year-old females so information is only available about vaccine safety and protection for girls/women of this age group. However, studies on the vaccine are now being done in boys/men, as well as in women older than 26 years of age. The FDA will consider licensing the vaccine for these other groups when there is research to show that it is safe and effective in these groups.

Why is the HPV vaccine recommended for girls 11 to 12 years of age?

It is important for girls to get HPV vaccine *before* they become sexually active. The vaccine is most effective for girls/women who get vaccinated before their first sexual contact. It does not work as well for those who were exposed to the virus before getting the vaccine. However, most women will still benefit from getting the vaccine because they will be protected against other virus types contained in the vaccine.

How effective is the vaccine?

The vaccine is highly effective in preventing four types of HPV in young women who have not previously been exposed to HPV. The vaccine targets HPV types that cause up to 70% of all cervical cancers and about 90% of genital warts. The vaccine WILL NOT treat or prevent cervical pre-cancer, cancer or genital warts in those individuals that have already been exposed or infected with HPV.

Is the HPV vaccine safe?

The U.S. Food and Drug Association (FDA) has licensed the vaccine as safe and effective. This vaccine has been tested in thousands of females (9-26 years of age) around the world. These studies have shown no serious side effects. The most common side effect is brief soreness at the injection site. The Centers for Disease Control, working with the FDA, will continue to monitor the safety of the vaccine after it is in general use.

How and when is the vaccine delivered?

The vaccine is given in a series of three injections (shots) over a six-month period. The second and third doses should be given at two and six months (respectively) after the first dose. HPV vaccine may be given at the same time as other vaccines.

How long does the vaccine last? Will a booster shot be needed?

The length of vaccine protection (immunity) is usually not known when a vaccine is first introduced. So far, studies have found that vaccinated persons are protected for five years. More research is being done to find out how long protection will last, and if a booster dose of vaccine will be needed.

Will the girls/women who have been vaccinated still need regular cervical cancer screening (PAP smears)?

YES, for three reasons. First, the vaccine will NOT provide protection against all types of HPV that cause cervical cancer, so women will still be at risk for some cancers. Second, some women may not get all of the required doses of the vaccine (or they may not get them at the right times), so they may not get the vaccine's full benefits. Third, women may also not get the vaccine's full benefits if they have already been exposed to or infected with HPV prior to vaccination.

How much will the HPV vaccine cost and who will pay for it?

The retail price of the vaccine is \$120 per dose (\$360 for full series). Most insurance plans and managed care plans cover recommended vaccines. However, there may be a lag-time after a vaccine is recommended, before it is available and covered by health plans. While some insurance companies may cover the vaccine, others may not. Government sponsored health insurance plans (Medicare, Medicaid) most always follow the recommendations of the CDC, and thus will likely cover the cost of the HPV vaccine.

Additional information may be obtained by visiting these informative websites:

Centers for Disease Control and Prevention (www.cdc.gov)

Merck & Comp., Inc (www.merck.com)

Or visit your health care provider.