

Just What is H P V?

HPV stands for: Human Papilloma Virus, a collection of over 100 types of viruses responsible for various warty lesions in women and men. Even though *all* warty type lesions in humans (anywhere on the body) are HPV, what most people now think of when they hear the term is *genital HPV*.

About 40 subtypes of genital HPV can infect various areas such as the cervix, vagina and vulva (“pubic area”) in women. The most familiar appearance is that of warty lesions of the external genitalia, but this is not the most common type. The current most common type of genital HPV has very few or no symptoms and is usually discovered on a screening Pap smear. These types of the virus are sexually transmitted and condoms are only partially protective. Atypical (slightly suspicious looking) cells on a Pap test are usually sent for testing for HPV DNA, while more serious abnormal Pap smear results are *assumed* to contain the HPV DNA. If the DNA test is negative for HPV, it is considered a negative Pap test result. If it is positive, it means the cervix has evidence of one of fourteen types of the virus associated with abnormal Paps. It is estimated that 60 to 90% of sexually active college age women may have exposure to HPV DNA. **The great majority of young women will clear this virus without treatment within 6 to 36 months.** Some patients will develop *dysplasia* (pre-cancer) of the cervix due to HPV. If the virus is discovered through Pap testing, often a biopsy will be done of the cervix to determine if dysplasia is present. If only *mild or low-grade* dysplasia is present; again, most women will clear this without treatment. If *moderate or severe* (high-grade) dysplasia is present, treatment is usually recommended.

Studies demonstrate that men carry this virus with very few symptoms. Most male sexual partners of women who carry the virus will not have identifiable HPV DNA when tested. This can be frustrating to patients who are often confused and even embarrassed about the transmission of HPV. The virus can lie dormant for some years, making timing of infection difficult or impossible to pinpoint. The good news is that most healthy individuals will not require extensive treatment. For those who do require treatment, there are many simple non-invasive options. Prevention is wise, practicing monogamy; using condoms and having regular gynecologic exams are helpful.

Thankfully, a vaccine known as Gardasil® is now available to help prevent many forms of this virus. It is estimated that the rate of abnormal Pap smears will drop dramatically in the near future because of this vaccine. It has FDA approval to be given to all females age 9-26, but has also been shown to be safe in most age groups, although the vaccine does not treat active disease.

If You Have HPV

If you have been found to have the DNA of HPV subtypes associated with your Pap smear you will need to understand how it is transmitted (usually genital to genital contact), and what are the next steps. If this is a new diagnosis, most clinicians will recommend full STD screening if it has not been done, and may schedule you for a

colposcopic exam, or “colposcopy.” This is a test performed in the office that requires the use of a microscope to check your cervix for suspicious areas. A biopsy may be done to help assess the condition. If the lesion is found to be **low-grade**, most women will not require treatment. Studies show that the immune system can usually combat low-grade lesions over 6 to 36 months. During this time a healthy lifestyle can help your immune system work against the virus. Taking a regular multivitamin (such as One A Day Women’s ®), getting adequate sleep and exercise, good nutrition, and avoidance of smoking and excess alcohol, or other addictive substances are all vital to maximizing your body’s immune system. The HPV vaccine has not been shown to treat existing disease, but it may guard against another exposure as the vaccine offers protection from four different types of HPV. Your Pap smear will be repeated to monitor the progress of the HPV. Once it has resolved, as demonstrated by repeated normal Paps, you will be considered free of the disease.

If your lesion has been found to be **high grade** (moderate or severe), your doctor or practitioner will most likely recommend treatment. Pregnant women can usually be closely monitored until after delivery, but otherwise there are very simple treatments that can be used to eliminate the higher grade lesions. Treatments include what is known as a LEEP procedure; a simple outpatient surgery to remove the cervical surface cells infected with the virus. Laser treatments can also be used to destroy the infected cells. Cryotherapy, an office procedure that uses a cold probe to freeze the cervix can be effective. Your practitioner will make a recommendation for you. These treatments are effective with the majority of lesions, but repeated procedures are sometimes needed for a cure. Once again, the vaccine is not known to be helpful with current infection, but it may be wise to consider it in order to obtain protection from other subtypes.

Vulvar HPV

Some women become infected with HPV in the vulva, the area of the external genitals that includes the labia (the lips of the vagina), the outer vagina, the clitoris, the anus and the surrounding skin and pubic area. The most common type here is a warty variety (“genital warts”) that usually can be treated with topical medicines in the office, or even prescription creams (such as Aldara®).

If the subtype of vulvar HPV is aggressive, it may cause changes linked to vulvar cancer. If an unusual area in your vulvar skin is discovered during your pelvic exam, it may need to be biopsied and if precancerous, will need to be removed. Out patient laser treatments are often used for these types of lesions. These lesions can be present for years and years before being diagnosed, making it very hard to “point the finger” as to how they were transmitted. Once again amplifying your own immune system can help keep these lesions in check. Avoid smoking, take a multivitamin, and get plenty of adequate sleep, good nutrition, and exercise regularly.

Vaginal HPV

Lesions that are warty prefer the cervix to the vagina, but many women battle vaginal HPV as well. The most common types are nearly invisible to the naked eye and can usually only be detected with a pelvic exam using a speculum or a vaginal Pap smear in women who have had hysterectomy. Fortunately most of these lesions are low-grade, and will not progress to cancer. If they are high grade or worrisome, or if they are extensive, treatments may include laser to the vagina, or less commonly, the use of certain topical creams or ointments.

Hope for a Cure

While there is no cure for HPV at the present time, most women will be *free* of the disease with help from treatments and their immune system. A few (5% or so) will continue to carry this virus long term, but with *close observation* it will rarely progress beyond low grade lesions (more of a nuisance than a health threat). Higher grade lesions must be treated and cleared. The hope currently lies in the vaccine approach. Current feedback on the available vaccine (Gardasil) is very positive, and there are more varieties of this vaccine on the horizon. The true success with a battle against HPV begins with knowledge and understanding. Regular gynecologic exams and Pap smear testing are paramount to prevention of this disease and its spread.

F A Qs with HPV:

1. My partner and I have been together for years so how did I get genital HPV?

While the virus is transmitted through direct genital skin-to-skin contact, it can lie dormant for years and become obvious or cause symptoms even years after exposure. This makes it difficult to explain to couples if they should be tested for other STDs, or to explain the “who, what, and where” aspects of such a common virus. The best approach is to simply focus on the follow up or treatment strategies.

2. Am I contagious if I have HPV?

If you have active disease you should be considered contagious. If there are no visible lesions and after observation you have two negative Pap smears 6 months apart, you may consider your self not contagious. The only catch is that the virus may lie dormant and there is no scientific determination as to how contagious a dormant HPV infection really is.

3. Is my HPV curable?

HPV is better thought of as *treatable* than as curable because it may lie dormant for many years. This being said, most women will clear the virus with observation or treatment and the assistance of a healthy immune system. Clearing the virus can be called a cure. Women who have no visible lesions and two sequential (back to back) negative Pap smears 6 months apart can consider themselves free of the disease and not contagious. Those with visible warts can be considered not contagious a year after the last visible lesion is gone.

4. Will I get cervix cancer from my HPV?

The goal of early detection and treatment of genital HPV is to avoid cancer. If your HPV is detected in a timely fashion it should be very treatable and you should be able to avoid the cell changes that can lead to cancer. Some subtypes are more aggressive than others and can lead to more rapid cell changes called “**high-grade**”. While the progress of change is not completely predictable, most experts believe that low-grade lesions (the most common type), do not change to high-grade lesions, and may never progress to cancer.

5. Will HPV affect my fertility?

HPV does not affect fertility. It does not “move” up to the uterus, ovaries, or fallopian tubes. Treatments may slightly change the cervix, but lessening of fertility is a very rare result of treatment for HPV. Many pregnant women have a history of abnormal Pap smears most of which were caused by HPV in the past. As explained above, most of these women are free of the disease with the help of their own immune system and time.

6. Will my HPV spread to my baby if I have it during my pregnancy?

No, HPV cannot spread to a baby during the *pregnancy*. Genital HPV is not considered a reason to perform Cesarean delivery (C-section). Reports of spread to an infant through vaginal delivery are extremely rare.

7. If I have genital HPV should I get the HPV vaccine?

The HPV vaccine is not considered effective treatment in cases of established genital HPV. It does not harm a woman who has HPV, and offers protection against four different subtypes. It is currently recommended as a preventative vaccine for women ages 9-26. It appears safe for women with a history of HPV, and may offer protection from other subtypes in women not known to have infection with all four of the types covered by the vaccine.

8. How can I help my body rid itself of the HPV?

A healthy lifestyle that includes a daily multivitamin, good eating habits, adequate sleep, avoidance of tobacco and excess toxins, adequate exercise, and stress management can help maximize your immune system and help overcome the mild or low-grade forms of HPV.

9. If I have HPV found on my Pap smear am I going to someday have visible warts?

A Pap smear or a DNA test detects the most common types of genital HPV that can negatively affect the healthy cells in the genital areas. Most of these (but not all) are *not* visible to the naked eye. Typically if you have been diagnosed with an invisible variety of genital HPV it will not *change* into a variety that causes visible warty lesions. Some women may be exposed to more than one subtype of genital HPV and develop both visible and invisible lesions.

10. What do I need to tell my partner if I have been diagnosed with HPV?

Most women will talk to their sexual partners about the diagnosis once it has been confirmed that they have genital HPV. Some partners will want to have an exam through their primary care clinician, or a urologist. Most male partners of infected women will not have clear evidence of the disease. Men tend to carry the virus in areas more difficult to treat and diagnose. Those that have visible warty lesions will need treatment and generally, a urologist is the preferred specialist.