Human papillomavirus (HPV) is a virus that affects both men and women.

Human papillomavirus is considered a sexually transmitted infection that can be passed on by skin, mouth, and genital contact. It is very common worldwide, and most people have been exposed and infected at some point in their lives. There is no treatment for the infection itself; in most cases, the body clears the virus on its own. However, there are vaccines available to prevent HPV infection (3 available worldwide; 1 currently used in the United States). In the United States, the HPV vaccine is currently recommended for all girls and women and all boys and men aged 9 to 26 years. Since the introduction of the HPV vaccine, the rates of infection have decreased in recent years.

HPV and Cancer

Although HPV infection is common and generally causes no symptoms, it is a unique health concern because it is one of very few infections that can, over time, lead to cancer. There are many different types (strains) of HPV; most are not linked to cancer. Noncancer strains of HPV can cause genital warts. The cancer strains of HPV can cause several different types of cancer, but most people with these HPV strains will never develop any kind of HPV-associated cancer.

In women, HPV can lead to cervical cancer, the fourth most common type of cancer in women worldwide. Nearly all cases of cervical cancer are caused by HPV. In men, it can lead to cancer of the penis. In both men and women, HPV can cause oral cancer as well as anal cancer. Unlike with cervical cancer, not all cases of penile, anal, or oral cancers are due to HPV.

Screening for HPV and HPV-Related Cancers

The US Preventive Services Task Force recommends routine screening of women for cervical cancer and/or cervical HPV infection via Papanicolaou testing (“Pap smears”) along with HPV co-testing when appropriate. This screening test has been a major public health victory in the United States, as rates of and deaths due to cervical cancer have drastically decreased with its routine implementation.

For oral, anal, and penile cancers, screening is sometimes done in higher-risk populations. However, there is no official current recommendation for screening for either HPV infection or cancerous/precancerous lesions in these areas in the absence of symptoms.

Emerging Concerns About Oral HPV Infections and Cancer

Oral HPV infection refers to HPV found in the mouth or throat. It is much less common than genital HPV infection and generally does not cause any symptoms. However, recent data have shown that oral cancers are now the most common type of HPV-associated cancers in the United States, more common than cervical cancer. Among these cases of HPV-positive oral cancers, men are affected about 4 times as often as women. In recent years, the proportion of oral cancers that are HPV positive (as opposed to HPV negative, which are generally linked to tobacco and alcohol use), has been increasing for unclear reasons. Data on transmission are still limited, but oral HPV infection appears to be linked at least in part to oral sex.

Talk to your doctor if you have questions about HPV infection or vaccination.

FOR MORE INFORMATION

Centers for Disease Control and Prevention
www.cdc.gov/hpv/index.html

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