HPV-Related Cancers

Most HPV infections do not lead to cancer. These infections are referred to as low-risk HPVs and cause skin warts. High-risk HPVs can cause cancer.  

Other risk factors such as smoking, having a weakened immune system, giving birth to three or more children, oral contraceptive use for five years or more and poor oral hygiene can increase your risk of developing cancer following a high-risk HPV infection.  

According to CDC, HPV is thought to be responsible for 90% of anal and cervical cancers, 70% of vaginal and vulvar cancers, 70% of head and neck cancers, and more than 60% of cancer in the penis.  

In a study assessing the burden of HPV-related cancers in Appalachia, the magnitude of all HPV-related cancers was higher in Appalachia compared to non-Appalachian regions.

What is HPV?

Human Papillomavirus (HPV) is the most common sexually transmitted infection (STI). It is so common that nearly all sexually active men and women get it at some point in their lives. More than 150 types of HPV — more than 40 different strains — are spread through direct skin-to-skin contact and affect the genital area.

How do you get HPV?

You can get HPV by having oral, vaginal, or anal sex with someone who has the virus. Anyone who is sexually active can get HPV, even if you have had sex with only one person. Exposure to genital HPV can happen with any kind of adolescent experimentation that involves genital contact with someone who has HPV – intercourse isn’t necessary. Symptoms can develop years after you have sex with someone who is infected making it hard to know when you first became infected.

How is HPV discovered?

For women, a Pap test or Pap smear looks for cell changes on the cervix that could become cervical cancer if not treated appropriately. The HPV test looks for the virus that can cause these cell changes.  

The U.S. Preventive Services Task Force (USPSTF) recommends screening for cervical cancer in women ages 21 to 65 years with cytology (Pap smear) every 3 years, or for women age 30 to 65 years, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years. The WV Breast and Cervical Cancer Screening Program (WVBCCSP) may cover the cost for women who are uninsured or underinsured.

Currently, there is no approved test for HPV in men.

West Virginia HPV-Associated Cancer Incidence

West Virginia Cancer Registry 2008-2012

<table>
<thead>
<tr>
<th>Anatomical Site</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth &amp; Throat</td>
<td>1424</td>
</tr>
<tr>
<td>Cervix</td>
<td>511</td>
</tr>
<tr>
<td>Anus</td>
<td>209</td>
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<tr>
<td>Vulva</td>
<td>188</td>
</tr>
<tr>
<td>Penis</td>
<td>60</td>
</tr>
<tr>
<td>Vagina</td>
<td>47</td>
</tr>
</tbody>
</table>
Can HPV be prevented?

The most reliable way to prevent infection with either low or high-risk HPV infection is to avoid any skin-to-skin oral, anal, or genital contact with another person. The use of condoms can reduce the spread of HPV between sexual partners but does not prevent it completely. As of July 2015, there are two HPV vaccines, Cervarix and Gardasil. Either HPV vaccine can prevent cervical cancer in girls and young women. Gardasil protects against genital warts and anal cancer in both females and males. Boys should get this HPV vaccine to prevent anal cancer and genital warts. Girls should get this vaccine to prevent cervical cancer, anal cancer, and genital warts.

CALL TO ACTION

The West Virginia Bureau for Public Health and eleven other health care organizations in the State call on health care providers around West Virginia to increase use of vaccines known to prevent certain cancers caused by HPV. The CDC’s National Immunization Survey (NIS) provides data on vaccination coverage which is used to identify groups at risk of vaccine-preventable diseases and to evaluate the effectiveness of programs designed to increase coverage.

To prevent infection, the HPV vaccine is recommended at age 11 or 12, before the child has contact with HPV viruses. NIS data show that among those who initiated the first dose, the number of adolescents receiving the complete three dose series is higher in West Virginia than in the United States as a whole.

Estimated Vaccination Coverage Among Adolescents Aged 13-17 Completing the Three Dose HPV Series Among Those Who Initiated the First HPV Vaccine Dose

81% 70% 66% 48%

Female Male

WV US

References