Human Papillomavirus (HPV) is a common sexually transmitted infection (STI). It is estimated that because the virus is easily transmitted by skin-to-skin genital contact (most commonly through vaginal and anal sex), 80% of sexually active young adults will become infected with HPV.

The good news is that for most people, HPV infection occurs without symptoms or complications, and most (9 out of 10) HPV infections are cleared by the body’s own immune system within two years (much as your immune system clears a common cold).

However, in some people, the viral infection persists and can cause problems such as genital warts and cancer.

Risks associated with infection

Over 40 different subtypes of HPV (including over 150 strains) infect the human genitalia. These are divided into two main groups, low-risk and high-risk. In this case, “risk” refers to the likelihood that the virus will predispose someone to developing pre-cancerous changes within the infected tissues.

Low-risk HPV subtypes (6 and 11 are most common) tend to infect the scrotum, penis, anal area, and vulva. If these subtypes cause symptoms, they are typically in the form of genital warts or “papillomas,” which are non-cancerous tumors. The warts are fleshy, painless growths that may be small or large, single or multiple. Warts are not dangerous, but they can be potentially uncomfortable and/or unsightly. Warts can appear weeks to months following a sexual encounter, and rarely lead to cancer.

High-risk HPV subtypes (16 and 18 are most common) tend to infect the cervix and occasionally the anal area. If not cleared by the body’s immune system, they can cause pre-cancerous changes of these tissues. Usually, the infected person has no symptoms at all, so regular check-ups are important. If left undetected, changes within the cells can cause cancer. 90% of cervical cancers are caused by HPV, as are most cancers of the vulva, vagina, anus, penis and oropharynx (which includes the back of the throat, base of the tongue, and tonsils).

Detection

Because most sexually active people will become infected with at least one strain of HPV at some point and not experience any problems as a result, routine testing for the presence of HPV is not recommended.

Treatment

Genital warts can be treated by a variety of methods, including the application of a prescription cream, or freezing. These treatments are available at Cornell Health and can be discussed with your clinician during an appointment.

Cervical changes from HPV may require more frequent monitoring with Pap tests and at times colposcopy. Colposcopy is a way to more thoroughly evaluate the cervix by looking at it through a magnifier and with the possibility of taking a small tissue sample for closer analysis.

Safer sex practices

Because HPV is transmitted by skin-to-skin contact of the genitals and not exclusively through penetration, prevention can be challenging.
Condom use can significantly decrease the likelihood of infection of the cervix or anus, but it does not fully protect other genital areas (e.g., the labia, scrotum, perineum, etc.) that may experience skin-to-skin contact. Condom use may reduce your risk of acquiring additional types of HPV.

**Vaccination**

Gardasil-9 is a vaccine that protects against nine different strains of HPV, including the strains most likely to cause cancer and genital warts. The U.S. Centers for Disease Control and Prevention (CDC) has stated unequivocally that Gardasil-9 is effective and safe.

**Who should be vaccinated?**

Many U.S. students will have already been vaccinated against HPV. Other students should consider getting vaccinated while at Cornell. While the HPV vaccine is commonly known to prevent cervical, vaginal, and vulvar cancers, it also protects against oral and anal cancers, as well as genital warts. As a result, everyone can benefit from its protection, regardless of their sex assigned at birth and their gender identity, and the sex /gender of their partners.

HPV does not discriminate, and vaccination is a safe and effective way to protect yourself, as well as your current and future partners.

**How to get vaccinated:**

Gardasil-9 is available to all students at Cornell Health, and is given in a 3-shot regimen over 6 months. Cornell Health holds HPV vaccination clinics each year (visit our website and search “HPV”). Students may also schedule an appointment online through myCornellHealth (accessibile from any page of our website) or by calling 607-255-5155.

**Cost of vaccination:**

Cornell’s student health plan (SHP, SHP+) covers the cost of vaccination for those 45 years of age and younger. Most private insurance plans cover the HPV vaccine as well. Contact your insurance provider to be certain of your coverage.