



Oregon

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Human Papilloma Virus (HPV) Vaccine Frequently Asked Questions

1. What is HPV?

HPV is a diverse group of viruses that consist of over 100 different serotypes. Approximately 60% of strains are cutaneous and are relatively harmless, causing most common skin warts. The remaining strains are mucosal and can be divided into high and low risk groups. Over 40 types of HPV are transmitted sexually through all types of sexual contact with an infected partner.¹ HPV types 6, 11, 16, and 18 are the most common high risk types.

While most HPV infections resolve without treatment usually within one year, some go on to cause genital warts, precancerous cervical changes that cause abnormal Pap smears, and cervical cancer. Types 16 and 18 are responsible for 70% of cervical cancers and most abnormal Pap smears worldwide, while strains 6 and 11 are responsible for 90% of genital warts as well as 9% to 12% of low-grade abnormal Pap smears.

HPV infections can be asymptomatic or sub-clinical in their manifestation, which means that most people are unaware of their infection and are often under-diagnosed.

¹ HPV can be spread through sexual intercourse (vaginal and anal), genital-to-genital, hand-to-genital, and oral-to genital contact. The infection can cause few or no symptoms, which means that most people don't know if they are infected.

2. What HPV vaccines are available?

Gardasil[®] Quadrivalent vaccine for prevention of HPV types 6, 11, 16, & 18 for Females. Recently FDA approved for prevention of HPV types 6 & 11 for the prevention of genital warts in Males.

Cervarix[®] Bivalent vaccine for prevention of HPV types 16 & 18 in females.

Both HPV vaccines are each administered in a 3-dose schedule. The second dose should be administered 1 to 2 months after the first dose and the third dose should be administered 6 months after the first dose. The HPV vaccines series should be completed with the same HPV vaccine product whenever possible.

Vaccination before onset of sexual activity is best; HPV vaccine can provide some protection for women who have already become sexually active. In clinical trials, women who were already infected with one or more types of HPV the vaccine provides protection from, were found to be protected from clinical disease caused by the remaining HPV vaccine types.

HPV vaccines do not offer 100 percent protection from all of cervical cancers, other cancer prevention measures, such as Pap smears, remain critically important. HPV vaccination is not a treatment for current HPV infections and does not prevent transmission of other sexually transmitted diseases.

3. What are the ACIP recommendations for HPV vaccines?

Gardasil[®] is licensed for all females and males 9 through 26 years of age.
Cervarix[®] is licensed for all females 9 through 26 years of age.

The federal Advisory Committee on Immunization Practices (ACIP) encourages providers to vaccinate females at the routine 11-12 year old pre-adolescent visit with their physician, and 13-26 year old females who have not been previously vaccinated. When possible, providers are encouraged to vaccinate females beginning at age 9. HPV vaccination for males is recommended and is up to providers' discretion.

For more information about the ACIP recommendations and upcoming ACIP meetings, visit www.cdc.gov/nip/acip/

4. What is the impact of HPV in Oregon?

Each year, about 23,000 adult women in the State of Oregon have abnormal Pap smears related to HPV infection of the cervix. Oregon statistics from 2005 reveal that 111 women developed invasive cervical cancer and 41 of these women died of the disease. Nationally, approximately 11,070 women develop invasive cervical cancer and 3,870 die of the disease each year. While some cervical abnormalities lead to cervical cancer, most do not. Currently, abnormal Pap smears require additional medical evaluations and treatments at a national cost of \$4,000,000,000 per year.

In order to prevent any unnecessary deaths from cervical cancer, early administration of HPV vaccine is recommended. The vaccine is most effective when given prior to the first sexual activity. In Oregon, 43% of all high school girls report having had sexual intercourse. Of those, nearly 1 in 7 had their first sexual

intercourse by age 13. The Oregon State Public Health Division strongly encourages providers and families to have young women immunized as early as possible. The Society for Adolescent Medicine strongly supports linking vaccination to preventive health care visits during early, middle and late adolescence. These visits present an important opportunity for young women to be vaccinated against HPV and other vaccine-preventable diseases, as well as allowing time for providers to discuss healthy choices and risk reduction with their parents.

Recent data regarding HPV supports postponing sexual activity as means to reduce cervical cancer risk. For those already sexually active, condom use provides protection against HIV and other sexually transmitted diseases and may offer some protection against HPV infection, abnormal Pap smears and cervical cancer if used regularly. After becoming sexually active, all women—even those vaccinated against HPV—should continue to have routine Pap smears to screen for and treat precursors to cervical cancer.

Cervical cancer in OR women, 2005

- 16th most common cancer among women
- 4th most common cancer among Latina women
- 111 new cases per year
- 41 deaths per year
- 23,000 abnormal Pap smears per year
- ~\$30 million/year