

Human Papilloma Virus

FAST FACTS

- There are over 100 HPV strains which cause human disease.
- HPV strains 16 and 18 are the most likely to cause cancer.
- HPV strains 6 and 11 are the most likely to cause genital warts and cervical dysplasia.
- Other types cause common body, hand, and foot warts.
- HPV is extremely prevalent: in the United States, ~79 million people are infected with HPV.
- In the United States, there are ~14 million new cases every year, with ~7 million occurring in persons between 15-24 years.
- HPV is linked to cervical cancer, anal cancer, head/neck cancers, penile cancers, among others.
- While most cases of HPV infection will be cleared by a person's immune system, there is no cure for a persistent HPV infection.

HPV and CANCER

- In the US, there are ~10,000 new cases and ~4,000 deaths caused by cervical cancer every year.
- Approximately 35% of cervical cancers occur in women between 20-44 years.
- Approximately 70% of oral, throat, and neck cancers are caused by HPV.
- Each year, ~2000 men will get penile cancer from HPV and 350 will die from it.
- Some types of skin cancer have been linked to HPV.

HPV VACCINATION - GARDASIL

- Gardasil protects a person from 9 different strains of HPV, including 6, 11, 16, and 18.
- Gardasil is recommended for girls and boys between 9-15 years in a 2-dose series with the second dose given at least 6 months after the first. It is also recommended for women and men between 16-45 years with the second dose given 2 months and the third dose 6 months after the first.
- The body produces a much better immune response between 9-13 years than when vaccinated at an older age.
- Vaccination is maximized before first sexual contact (~6% of 13-year olds admit to being sexually active and ~20% of all 9th graders admit to being sexually active).

SAFETY

- Immunization with Gardasil does NOT increase the risk of death, seizures, paralysis, or any other serious medical condition.
- The most common side effects are pain, redness, swelling, and fainting (which is common with all adolescent immunizations).
- Because it is an inactive immunization, it cannot cause an HPV infection.
- Immunization with Gardasil does NOT increase sexual activity.

EFFECTIVENESS

- Immunization with Gardasil is almost 100% effective against the strains included in the immunization.
- Gardasil induces life-long immunity if immunized according to guidelines.
- Current community effectiveness studies show a ~90% reduction of genital warts and a ~50% reduction of cervical dysplasia.
- In Australia, cervical cancer is expected to be eliminated by 2028 due to their high immunization rates.
- Every year during which the US has an HPV immunization rate below 80%, 4,400 more girls will develop cervical cancer in their life, of which 1/3 may die from it.

BOTTOM LINE

- Prevention of HPV by immunizing adolescents with an HPV immunization is overwhelmingly SAFE and EFFECTIVE.
- The HPV immunization is LIFE-SAVING.
- HPV immunization is STRONGLY recommended by the American Academy of Pediatrics, the Centers for Disease Control, all 70 cancer centers in the US, and all of your doctors and nurse practitioners here at PCPeds.