Did You Know Human Papillomavirus (HPV) Vaccine Prevents Cancer?
Learn more about getting this life-saving vaccine for your child

What is HPV and how does it affect the body?

HPV is a very common virus that causes genital, oral and skin infections. There are many types of HPV. Most of them are harmless and do not cause infections or symptoms. However, some types of HPV can cause cancer of the cervix, vagina, vulva, penis, anus and throat. Other types of HPV can cause genital warts.

Who can get HPV?

In the United States, about 80 percent of people will get HPV at some time in their lives. About 79 million Americans are currently infected with HPV, and another 14 million become newly infected each year. People of all genders can get HPV and spread it to others without realizing they have the virus. HPV infection is most common in the late teens and early 20s. People can get HPV from an infected person during sexual activity. Most people who have HPV do not have symptoms. They can easily spread the virus to others without knowing it. Sometimes a pregnant woman with HPV can pass it to her baby during delivery. In these cases, the child can develop recurrent respiratory papillomatosis (RRP), a rare condition where warts caused by HPV grow in the throat.

What is the link between HPV and cancer?

In general, HPV is thought to be responsible for more than 90% of anal and cervical cancers, about 70% of vaginal and vulvar cancers and more than 60% of penile cancers.

Numbers of Cancers and Genital Warts in the US caused by HPV

![Diagram showing the numbers of cancers and genital warts in the US caused by HPV]

- Genital Warts: 160,000 (180,000 includes Males and Females)
- Cervix: 11,500
- Oropharynx: 5,900
- Anus: 1,600
- Vulva: 1,600
- Juvenile-Onset RRP: 820
- Vagina: 500
- Penis: 400

Source: President’s Cancer Panel Annual Report (2014)

How can HPV infection be prevented?
The HPV vaccines offer by far the best protection if given before sexual activity starts. The HPV vaccine can prevent infections from some of the most common and serious types of HPV that cause cancers and genital warts. The HPV vaccine works extremely well. In the four years after the vaccine was recommended in 2006, the amount of HPV infections in teen girls decreased by 56%.

**What HPV vaccines are available?**

- **Gardasil 9 (9-valent HPV)** – for use in all genders. Protects against nine different types of HPV: seven that cause cancer and two that cause genital warts.

**Who should get the vaccine and when should they get it?**

All children ages 11-12 years old should get the HPV vaccine, though it may be given as young as 9 years. The vaccine is more effective, and the immune system responds more strongly, when given at this age.

Two doses of the vaccine are needed for those who start the series between ages 9-14 and have a healthy immune system. Those who start at age 15 through 26 need three doses. It is recommended that children ages 9-14 with compromised immune systems should get three doses of the HPV vaccine.

Kids under age 19 can get HPV vaccine for free in Washington State.

**Are HPV vaccines safe?**

Yes. Prior to licensing, all vaccines go through safety tests. After licensing, vaccines go through intensive monitoring to check for side effects. Approximately 79 million doses of HPV vaccine have been distributed since the vaccine was introduced, and no serious side effects have been linked to HPV vaccination. Like any medicine, vaccines can have side effects. In most cases, vaccines cause no side effects, or only mild reactions such as fever or soreness at the injection site. Very rarely, people experience more serious problems, such as an allergic reaction. HPV vaccination is typically not associated with any serious side effects. The benefits of HPV vaccination far outweigh any potential risk of side effects.

Vaccines reduce the risk of infection by working with the body's natural defenses to help it safely develop immunity to disease, because they only give an “imitation” infection, which does not cause illness. Minor symptoms such as fever mean your body is building immunity to the disease.

Be sure to tell your health care provider about health problems or known severe, life-threatening allergies to medications or specific products before you or your child receives a vaccine.

This summary is provided by Lessli Putney, MD, pediatrician with PeaceHealth Medical Group-Bellingham, Wash. Information was obtained from multiple sources including the Washington Department of Health, Washington Chapter of the American Academy of Pediatrics and the Centers for Disease Control and Prevention at the links listed below.

https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HumanPapillomavirusHPV/HumanPapillomavirusFAQ

https://wcaap.org/improving-rates-of-hpv-immunizations/

https://www.cdc.gov/std/hpv/stdfact-hpv.htm