

# What Parents Should Know

*Exploring the Link between HPV and Cancer*



**Indiana Cancer  
Consortium**

[www.IndianaCancer.org](http://www.IndianaCancer.org)

## **What is HPV?**

The Human papillomavirus (HPV) is the most common sexually transmitted infection (STI). An STI is a virus that is spread through the skin-to-skin contact happens during sex. Most people who become infected with HPV do not know they have it. Certain types of HPV can cause cancer in men and women.

According to the Centers for Disease Control and Prevention (CDC), approximately 79 million Americans are currently infected with HPV, and about 14 million become newly infected each year. In most cases the virus goes away on its own and does not lead to any health problems; however, in some people, the virus can cause normal cells to change and become abnormal. Most of the time you cannot see or feel these cell changes.

Nearly all men and women will get at least one type of HPV at some point in their lives. There are more than 40 HPV types that cause infections in the genital areas, mouth and throat for both men and women.

There is no way to know which people infected with HPV will go on to develop cancer or other health problems. People with weakened immune systems, or people who smoke, may be less able to fight off HPV infection. Some conditions, like genital warts, can appear a few months after getting HPV. Others, such as cancer, can take years to develop after the initial infection. HPV infection does not show any symptoms until changes in cells are detected.

Other conditions related to HPV include:

- Genital warts
- Cervical, vaginal and vulvar cancer in women
- Penile cancer in men
- Anal and oropharyngeal (back of the throat, tonsils and mouth) cancers
- Recurrent respiratory papillomatosis (a rare condition where warty growths in the upper airway cause airway obstruction or voice changes).

**The CDC estimates that 21,000 cancer cases could potentially be prevented each year with HPV vaccines.**

## **How can my child get HPV?**

HPV is a virus that spreads through the skin-to-skin contact that happens during oral sex and genital-to-genital contact. The virus can be passed even when the infected partner has no signs or symptoms — even if years have passed since he or she had sexual contact with an infected person. It is also possible to get more than one type of HPV.

## **Can HPV be treated?**

Currently, there is no treatment for the virus itself; however there is treatment for many of the health conditions HPV causes. It is important to diagnose HPV-related cancers early. An HPV test, which can find certain HPV types on a woman's cervix, may also be used with a Pap test for 30 years and older. Currently, there is no approved HPV screening test for men.

## **Can HPV be prevented?**

The HPV vaccine is recommended for boys and girls ages 11-12. The vaccines offer protection against the most common types of HPV that can lead to cancer and other health conditions. Older teens and

young adults through age 26 can also receive the vaccine if they did not receive it earlier in life. The HPV vaccine is given as a three-shot series over six months. Vaccines offer the best protection to girls and boys who receive all three vaccine doses before becoming sexually active. The vaccines are safe for use as young as age 9.

There are currently two HPV vaccines on the market (Cervarix and Gardasil). Gardasil is recommended for both boys and girls, and offers protection against four types of HPV. Two of the HPV types (6 and 11) in the vaccine cause 90 percent of all genital wart cases. The other two types (16 and 18) are responsible for a majority of cervical, anal and other genital cancers. Cervarix is only recommended for use in girls and offers protection against HPV types 16 and 18.

### **Talking with your child about HPV**

As a parent, it is up to you to make informed decisions about your child's health. It may not be easy to talk to your child about HPV, but it is really important. For younger children, you can talk about the HPV vaccination similar to how you would talk about other vaccinations. If your child asks why they are getting the HPV vaccine, the simple answer is to keep them healthy. You can also tell your child it is a vaccine to protect them from some kinds of cancer when they are older.

For children who are old enough to discuss sex, it is important to explain that HPV is a virus passed through sexual contact, and that HPV can cause many health issues. It is also important to let them know that the HPV vaccine does not protect against pregnancy, HIV, and other sexually transmitted diseases. It is important to remember that the HPV vaccination has not increased sexual activity among youth.

### **Talk with your child's doctor about HPV**

Many parents rely on pediatricians to start the conversation about the HPV vaccine, but doctors think parents might be embarrassed or upset if approached about it. As a parent, we encourage you to ask your doctor directly about the HPV vaccine. Having an open and honest conversation with your child's doctor about HPV and HPV-related conditions is very important. Your doctor can give you more information about HPV, how the virus spreads, conditions the virus can cause, and answer any questions you may have about the HPV vaccine.

To make the most of your visit, it's a great idea to make a list of questions ahead of time. Some questions to consider asking include:

- Are HPV-related diseases something to be concerned about at my child's current age?
- Why is it recommended to vaccinate before my child is sexually active?
- How can getting an HPV-related disease affect my child?
- How can I help protect my son or daughter against certain HPV-related diseases?
- When should my daughter start having regular Pap tests?

### **HPV Vaccine FAQ**

#### ***Why are HPV vaccines needed?***

Certain human papillomavirus (HPV) types may cause cancer in addition to other health problems. HPV is a common virus that is spread through the skin-to-skin contact that happens during oral sex and genital-to-genital contact. It is possible to have HPV without knowing it, so it is possible to unknowingly spread HPV to another person.

***How common are the cancers caused by HPV?***

HPV is the main cause of cervical cancer in women. In Indiana, during 2007-2011, there were 1,250 cases of cervical cancer diagnosed, and 423 cervical cancer related deaths. According to the American Cancer Society, an estimated 12,340 cases of invasive cervical cancer were expected to be diagnosed in 2013. In addition, an estimated 4,030 cervical cancer related deaths were expected in 2013. According to the CDC, there are about 21,000 HPV-associated cancers in the United States that may be prevented by vaccines each year.

***Who should get HPV vaccine?***

The CDC recommends that all 11 or 12 year old girls get vaccinated to protect against cervical cancer. Girls and young women ages 13 through 26 should get an HPV vaccine if they have not received any or all doses when they were younger. In addition, the CDC recommends vaccination for all boys aged 11 or 12 years, and for males aged 13 through 21 years, who did not get any or all of the three recommended doses when they were younger. The vaccine is also recommended for gay and bisexual men, and persons with compromised immune systems (including HIV), through age 26 if they did not get fully vaccinated when they were younger.

***Why is the HPV vaccine recommended at ages 11 or 12 years?***

For the HPV vaccine to work best, it is very important for preteens to get all 3 doses (shots) long before any sexual activity with another person begins. Also, the vaccine produces higher antibody that fights infection when given at this age compared to older ages.

***Are the HPV vaccines safe and effective?***

The United States Food and Drug Administration (FDA) has licensed both brands of the HPV vaccine as safe and effective. As with most vaccines, mild side effects are possible and include pain where the shot was given, fever, headache, and nausea. As with all vaccines, the CDC and the FDA continue to monitor the safety of these vaccines very carefully. These vaccine safety studies continue to show that HPV vaccines are safe.

***Why aren't HPV vaccines recommended for people older than 26?***

Experts indicate that the immune system responds to the vaccine better for individuals under age 26. This is why the vaccine is recommended for preteens.

***Is the HPV vaccine linked to increased sexual activity in teens?***

No. Research indicates that HPV vaccination is not linked to increases in risky sexual behavior. In fact, research shows that sexually active girls who were vaccinated were more likely to always wear a condom than those who were not vaccinated.

***Could HPV-related diseases affect my son too?***

Yes, boys can get HPV too. HPV will infect an estimated 75 percent to 80 percent of all sexually active people during their lifetime. In most cases the virus goes away and it does not lead to any health problems; however, when the virus persists, or does not go away, HPV can cause normal cells to become abnormal and, most of the time you cannot see or feel these cell changes. Some problems, like genital warts, can appear within months after getting HPV. Others, such as cancer, often take years—even decades—to develop after a person gets HPV. There is no certain way to know which people infected with HPV will go on to develop cancer or other health

problems; however, persons with weak immune systems (including persons with HIV) may be less able to fight off HPV and more likely to develop health problems from it.

***How much does the vaccine cost? Will HPV vaccination be covered by health insurance?***

Health insurance plans are required to cover recommended vaccines; however, it is important to check with your insurance provider to see if all costs are covered before going to the doctor. The drug company price for either vaccine is about \$130 per dose. This cost does not include the cost of giving the shots or the doctor's charge.

***How can my child get an HPV vaccine if I don't have insurance?***

The [Vaccines for Children \(VFC\)](#) program helps families of eligible children who might not otherwise have access to vaccines by providing vaccines at no cost to doctors who serve eligible children. Children younger than 19 years of age are eligible for VFC vaccines if they are Medicaid-eligible, American Indian or Alaska Native, or have no health insurance. "Underinsured" children who have health insurance that does not cover vaccination can receive VFC vaccines through [Federally Qualified Health Centers or Rural Health Centers](#). Parents of uninsured or underinsured children who receive vaccines at no cost through the VFC Program should check with their health care providers about possible administration fees that might apply.

**Parent Resources**

- American Cancer Society - <http://www.cancer.org/cancer/cancercauses/othercarcinogens/infectiousagents/hpv/index>
- Centers for Disease Control and Prevention - <http://www.cdc.gov/hpv/>
  - Vaccines for Children Program - <http://www.cdc.gov/vaccines/programs/vfc/index.html>
- Cervical Cancer Free Coalition – Indiana - <http://www.cervicalcancerfreecoalition.org/partners/partner-states/indiana/>
- American Academy of Pediatrics – [www.aap.org](http://www.aap.org)
  - Human Papillomavirus - <http://www2.aap.org/immunization/illnesses/hpv/hpv.html>
- Cervical Cancer Free Coalition - <http://www.cervicalcancerfreecoalition.org>
- The Children's Hospital of Philadelphia, Prevent HPV - <http://www.chop.edu/service/vaccine-education-center/prevent-hpv/index.html>
  - Human Papillomavirus: What you should know - <http://www.chop.edu/export/download/pdfs/articles/vaccine-education-center/hpv.pdf>
  - Virus del papiloma humano: Lo que debe saber - <http://www.chop.edu/export/download/pdfs/articles/vaccine-education-center/hpv-esp.pdf>
- Find a Federally Qualified Health Center - [http://findahealthcenter.hrsa.gov/Search\\_HCC.aspx](http://findahealthcenter.hrsa.gov/Search_HCC.aspx)
- Indiana Breast and Cervical Cancer Program - <http://www.in.gov/isdh/24967.htm>
- Indiana Cancer Consortium Breast and Cervical Cancer Screening Asset Map - <http://indianacancer.org/breast-cancer-screening-asset-map/>
- Indiana Immunization Coalition - [www.vaccinateindiana.org](http://www.vaccinateindiana.org)
- Kristen Forbes EVE Foundation - <http://www.kristeneve.org/home/>
- National Cancer Institute - <http://www.cancer.gov/cancertopics/factsheet/Risk/HPV>