Starting the Conversation

Talking to Patients about the Link between HPV and Cancer

Indiana Cancer Consortium

www.IndianaCancer.org

HPV and Cancer

The Human Papillomavirus (HPV) is the most common sexually transmitted infection (STI). There are more than 40 HPV types that can infect the genital areas of males and females. These HPV types can also infect the mouth and throat. Most people who become infected with HPV do not know they have it. According to the National Cancer Institute (NCI), recent research indicates that, at any point in time, 42.5 percent of women have genital HPV infections, whereas less than 7 percent of adults have oral HPV infections.

According to the Centers for Disease Control and Prevention (CDC), approximately 79 million Americans are currently infected with HPV, and about 14 million people become newly infected each year. HPV is so common, in fact, that nearly all sexually-active men and women will get at least one type of HPV at some point in their lives.

Sexually transmitted HPVs fall into two categories:

1. Low-risk HPVs, which do not cause cancer but can cause skin warts (technically known as condylomata acuminata) on or around the genitals or anus. For example, HPV types 6 and 11 cause 90 percent of all genital warts.
2. High-risk or oncogenic HPVs, which can cause cancer. At least a dozen high-risk HPV types have been identified. Two of these, HPV types 16 and 18, are responsible for the majority of HPV-caused cancers.

The NCI estimates that high-risk HPV infection accounts for approximately 5 percent of all cancers worldwide. 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.

Virtually all cervical cancers are caused by HPV infections, with just two HPV types, 16 and 18, responsible for about 70 percent of all cases. Additional HPV-related cancers include anal cancer, vaginal, vulvar, and penile cancers. Most recently, HPV infections have been found to cause cancer of the oropharynx, which is the middle part of the throat including the soft palate, the base of the tongue, and the tonsils. According to NCI, in the United States, more than half of the cancers diagnosed in the oropharynx are linked to HPV-16.

HPV Vaccination and Recommendations

Two vaccines (Cervarix and Gardasil) are currently available to protect girls and women against the types of HPV that cause most cervical cancers. Both vaccines are given as a three-shot series over six months. Vaccines offer the best protection to girls and boys who receive all three vaccine doses and have time to develop an immune response before becoming sexually active.

Both vaccines are recommended for 11 and 12 year-old girls, and for females 13 through 26 years of age, who did not get any or all of the doses when they were younger. One vaccine (Gardasil) is recommended for boys aged 11 or 12 years, and for males aged 13 through 21 years of age, who did not get any or all of the three recommended doses when they were younger. In addition, the vaccine is also recommended for gay and bisexual men, and men and women who have compromised immune systems (including people living with HIV/AIDS) through age 26 years, who did not get any or all of the doses when they were younger.

Talking with your patients

Having an open and honest conversation with your patient about HPV and HPV-related conditions is very important. As a health care provider, you should provide information about HPV — including information on how

it's spread, and the problems it can cause. Patients (and parents of patients) may need answers to questions about safer sex, Pap tests and pelvic exams, and HPV vaccination.

The CDC encourages providers to recommend the HPV vaccine series the same way other adolescent vaccines are recommended. Parents may be interested in vaccinating, yet still have questions. Taking the time to listen to parents' questions helps you save time and give an effective response. CDC research shows these straightforward messages work with parents when discussing HPV vaccine—and are easy for you or your staff to deliver.

CDC Research Shows: The "HPV vaccine is cancer prevention" message resonates strongly with parents. In addition, studies show that a strong recommendation from you is the single best predictor of vaccination.
Try saying: *HPV vaccine is very important because it prevents cancer. I want your child to be protected from cancer. That's why I'm recommending that your daughter/son receive the first dose of HPV vaccine today.*

CDC Research Shows: Disease prevalence is not understood, and parents are unclear about what the vaccine actually protects against.
Try saying: *HPV can cause cancers of the cervix, vagina, and vulva in women, cancer of the penis in men, and cancers of the anus and the mouth or throat in both women and men. There are about 26,000 of these cancers each year—and most could be prevented with HPV vaccine. There are also many more precancerous conditions requiring treatment that can have lasting effects.*

CDC Research Shows: Parents want a concrete reason to understand the recommendation that 11–12 year olds receive HPV vaccine.
Try saying: *We're vaccinating today so your child will have the best protection possible long before the start of any kind of sexual activity. We vaccinate people well before they are exposed to an infection, as is the case with measles and the other recommended childhood vaccines. Similarly, we want to vaccinate children well before they get exposed to HPV.*

CDC Research Shows: Parents may be concerned that vaccinating may be perceived by the child as permission to have sex.
Try saying: *Research has shown that getting the HPV vaccine does not make kids more likely to be sexually active or start having sex at a younger age.*

CDC Research Shows: Parents might believe their child won't be exposed to HPV because they aren't sexually active or may not be for a long time.
Try saying: *HPV is so common that almost everyone will be infected at some point. It is estimated that 79 million Americans are currently infected with 14 million new HPV infections each year. Most people infected will never know. So even if your son/daughter waits until marriage to have sex, or only has one partner in the future, he/she could still be exposed if their partner has been exposed.*

CDC Research Shows: Emphasizing your personal belief in the importance of HPV vaccine helps parents feel secure in their decision.
Try saying: *I strongly believe in the importance of this cancer-preventing vaccine, and I have given HPV vaccine to my son/daughter/grandchild/ niece/nephew/friend's children. Experts (like the American Academy of Pediatrics, cancer doctors, and the CDC) also agree that this vaccine is very important for your child.*

CDC Research Shows: Understanding that the side effects are minor and emphasizing the extensive research that vaccines must undergo can help parents feel reassured.
Try saying: *HPV vaccine has been carefully studied by medical and scientific experts. HPV vaccine has been shown to be very effective and very safe. Like other shots, most side effects are mild, primarily pain or redness in the arm. This should go away quickly, and HPV vaccine has not been associated with any long-term side effects. Since 2006, about 57 million doses of HPV vaccine have been distributed in the U.S., and in the years of HPV vaccine safety studies and monitoring, no serious safety concerns have been identified.*

CDC Research Shows: Parents want to know that HPV vaccine is effective.
Try saying: *In clinical trials of boys and girls, the vaccine was shown to be extremely effective. In addition, studies in the U.S. and other countries that have introduced HPV vaccine have shown a significant reduction in infections caused by the HPV types targeted by the vaccine.*

CDC Research Shows: Many parents do not know that the full vaccine series requires 3 shots. Your reminder will help them to complete the series.
Try saying: *I want to make sure that your son/daughter receives all 3 shots of HPV vaccine to give them the best possible protection from cancer caused by HPV. Please make sure to make appointments on the way out, and put those appointments on your calendar before you leave the office today!*

Provider 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
    - Vaccine Information for Clinicians Fact Sheet - http://www.cdc.gov/std/hpv/STDFact-HPV-vaccine-hcp.htm
    - HPV Vaccination - http://www.cdc.gov/vaccines/vpd-vac/hpv/default.htm#recs
- Cervical Cancer Free Coalition – Indiana - http://www.cervicalcancerfreecoalition.org/partners/partner-states/indiana/
- Cervical Cancer Free Coalition - http://www.cervicalcancerfreeamerica.org/
- Find a Federally Qualified Health Center - 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/
- Kristen Forbes EVE Foundation - http://www.kristeneve.org/home/
- National Cancer Institute - http://www.cancer.gov/cancertopics/factsheet/Risk/HPV

Resources and Articles

- **Beliefs, Behaviors and HPV Vaccine: Correcting the Myths and the Misinformation** (Preventive Medicine. 2013) — www.sciencedirect.com/science/article/pii/S009174351300176X
- **CDC Information Webpage on HPV Vaccine** — www.cdc.gov/vaccines/vpd-vac/hpv/default.htm#ref
- **HPV Vaccination and Sexual Behavior in a Community College** (Journal of Community Health. 2013) — www.professorkinseth.com/uploads/1/9/1/2/19124971/hpv_and_risky_sexual_behavior.pdf
- **Monitoring the Safety of Quadrivalent Human Papillomavirus Vaccine: Findings from the Vaccine Safety Datalink** (Vaccine. 2011) — www.sciencedirect.com/science/article/pii/S0264410X11013831
- **Safety of Quadrivalent Human Papillomavirus Vaccine Administered Routinely to Females** (Archives of Pediatric and Adolescent Medicine. 2012) — www.ncbi.nlm.nih.gov/m/pubmed/23027469/

- **Surveillance of Autoimmune Conditions Following Routine Use of Quadrivalent Human Papillomavirus Vaccine** (Journal of Internal Medicine. 2012) — www.ncbi.nlm.nih.gov/m/pubmed/21973261/
- **Tips and Timesavers for Talking with Parents about HPV Vaccine** — www.cdc.gov/vaccines/who/teens/for-hcp-tipsheet-hpv.html
- **Vaccine Recommendations of the Advisory Committee for Immunization Practices (AICP)** — www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html
- **Vaccine Safety: Human Papillomavirus Vaccine** — www.cdc.gov/vaccinesafety/Vaccines/HPV/Index.html