#### American Academy of Pediatrics



**AAP Immunization Resources Pre-teen Immunization:** Addressing Common Concerns

As a parent, you may have questions about vaccines for your pre-teen. Below is the information you need from pediatricians to be confident about your decision to vaccinate.

#### **HPV Vaccine**

#### If my child is not sexually active, why does he/she need HPV vaccine?

While it's difficult to imagine your child engaging in sexual activity, especially since most do wait until they are in the second half of their teen years to have sex, the AAP recommends HPV vaccination at 11-12 years of age for several reasons. HPV is spread by intimate skin-to-skin contact, not just sex. People need all 3 doses of the vaccine before ever coming into contact with the virus in order to be protected. Also, the immune system of an 11-12 year old responds better to the vaccine than that of an older teen.<sup>1,</sup>

One study found that up to 80% of teens or pre-teens contracted HPV within 2-3 years of the first time they engaged in sexual activity,<sup>3</sup> making it important that pre-teens receive the full series of 3 doses before first sexual activity. The Centers for Disease Control and Prevention (CDC) reports that as many as 64% of teen or pre-teen girls may be infected with HPV, and 75% of new cases of HPV are found in persons age 15-24 years.<sup>4</sup> Even if your child waits until he/she is married and/or only has one partner in the future, your child could still be exposed to HPV by that partner.

#### Will receiving HPV vaccine give my child permission to engage in sexual activity?

As pediatricians, we understand this concern - we want teens to be mature before sexual activity and to follow their parents' advice about sexual activity. Studies show that children who receive HPV vaccine do not have sex any earlier than those who only received other teen vaccines. This tells us that children do not see this vaccine as a license to have sex.5

#### Why does my son need HPV vaccine if it protects against cervical cancer?

HPV vaccine prevents cervical cancer, which, of course, only females can get. But HPV vaccine can protect both males and females by preventing genital warts and cancers of the mouth, throat, anus, and genitals.

A pre-teen boy who receives HPV vaccine can also protect his future partner. Men and women infected with HPV often have no symptoms. Women can get cervical cancer screening, but there is no such test for men. Men who are infected and don't know it can spread HPV to a partner.

#### Don't condoms prevent the spread of HPV?

Using condoms can prevent pregnancy and protect against several sexually transmitted infections. Unfortunately, HPV can be spread by intimate skin-to-skin contact and oral sex, not just sexual intercourse. Condoms only cover a limited amount of skin and HPV can be spread even if a condom is used every time a person has sex. For the best protection against HPV, parents should have their children vaccinated.



<sup>&</sup>lt;sup>1</sup> CDC Press Briefing. ACIP recommends all 11-12 year-old males get vaccinated against HPV. Tuesday, October 25, 2011 – 12:45pm ET. Access on April 4, 2013 at: http://www.cdc.gov/media/releases/2011/t1025 hpv 12yroldvaccine.html.

Moscicki AB. HPV infections in adolescents. 207. Disease Markers, 23, 4, 229-34.

Food and Drug Administration. Highlights of prescribing information. Gardasil (human papillomavirus quadrivalent [types 6, 11, 16 and 18]). 2011. Available at http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm111263.pdf Accessed April 5, 2013.

<sup>&</sup>lt;sup>4</sup> Human Papillomavirus. Pink Book. CDC. Available at: <u>http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/hpv.pdf</u>. Accessed April 9, 2013.

<sup>&</sup>lt;sup>5</sup>Bednarczyk RA, Davis R, Ault K, Orenstein W, Omer Saad. Sexual Activity–Related Outcomes After Human Papillomavirus Vaccination of 11- to12-Year-Olds. 2012. Pediatrics. http://pediatrics.aappublications.org/content/early/2012/10/10/peds.2012-1516.abstract (login may be required)

AAP Immunization Resources Pre-teen Immunization: Addressing Common Concerns

#### **All Pre-teen Vaccines**

#### Do adolescent vaccines have serious side effects?

**Pain:** Pediatricians do not like to cause discomfort to children of any age. Even though shots may hurt, getting a vaccine is not as bad as suffering from a serious disease such as meningitis or cancer. Talk with your pediatrician about ways to reduce pain during vaccination. Stroking the skin or applying pressure to the skin before the shot reduces the pain.<sup>6</sup> In some offices, medication to numb the skin may be available.<sup>7</sup>

**Fainting**: Your pediatrician may ask your child to sit for 15 minutes after getting a shot in case your child faints (syncope). Staying seated for 15 minutes reduces the main risk from fainting-- getting hurt from falling.

**Vaccination at sick visits:** Many families are busy and it is hard to find time to visit the pediatrician's office to get a shot. It is smart to get any vaccines that are due when your child is in the pediatrician's office. This will reduce the chance that your child has to miss school, work, or other activities to receive vaccines.

**Safety:** All vaccines routinely recommended for pre-teens have been licensed by the Food and Drug Administration and found to be safe. The safety of each vaccine continues to be checked after it is licensed. Your pediatrician can provide you with a Vaccine Information Statement that explains the mild side effects that can occur after receiving shots.

#### Why is more than one dose of vaccine needed?

**HPV vaccine:** It is recommended that your child receives 3 doses of HPV vaccine at ages 11-12 for full protection. All 3 doses of the HPV vaccine are needed for the body to build up enough immunity to protect against infection. This is also true of many of the vaccines that babies get.

**Meningococcal vaccine**: One dose of meningococcal vaccine protects a person, but immunity may wane over time. A booster dose can "boost" immunity so that your child is still fully protected. Children should receive meningococcal vaccine as pre-teens to be fully protected for a few years and another dose at age 16 to boost immunity levels.

**Tdap**: Recently, there have been several outbreaks of pertussis (whooping cough) throughout the United States. One study has shown that this is due, in part, to waning immunity.<sup>8</sup> It is possible that booster doses of pertussis vaccine (in Tdap) will be recommended in the future. Studies are still underway to determine exactly if and when they will be needed.

## What is the cost of these vaccines? I'm not sure if I can afford them or if my insurance will cover them.

Pediatricians realize that healthcare can be costly for families. The Affordable Care Act (ACA) requires insurance companies to cover the cost of all recommended vaccines, which include those for teens and pre-teens. If your insurance plan has been unchanged since March 23, 2010, it may not have to follow these new rules. If this is the case, your insurance plan may require you to pay part of the vaccination cost or meet your deductible before it will pay for vaccinations. Talk with your pediatrician about options for paying this.

If your child does not have health insurance, has Medicaid or insurance that does not cover vaccines, or is American Indian or Alaskan Native, he/she qualifies to receive vaccines at no cost through the Vaccines for Children (VFC) Program. Most pediatricians provide VFC vaccines. If your pediatrician is not a VFC provider, your child should be able to receive vaccines at your local health department. Speak with your child's pediatrician to learn more about the VFC program or visit: <u>http://www.cdc.gov/vaccines/programs/vfc/parents/qa-detailed.html</u>. To contact your VFC state, city or territory coordinator visit: <u>http://www.cdc.gov/vaccines/programs/vfc/contacts-state.html</u>.

Last updated 7/2013

<sup>&</sup>lt;sup>6</sup> Taddio A, Ilersich AL, Ipp M, Kikuta A, Shah V. 2009. Physical Interventions and Injection Techniques for Reducing Injection Pain During Routine Childhood Immunization: Systematic Review of Randomized Controlled Trials. *Clinical Therapeutics*, *31*, Supplement 2, S48-76.

<sup>&</sup>lt;sup>7</sup> Reis EC, Holubkov R. Vapocoolant Spray Is Equally Effective as EMLA Cream in Reducing Immunization Pain in School-aged Children. 1997. *Pediatrics, 100*, 6, e5. <sup>8</sup> Tartof SY, Lewis M, Kenyon C, White K, Osborn A, Liko J, Zell E, Martin S. Messonnier NE, Clark TA, and Skoff TH. Waning Immunity to Pertussis Following 5 Doses of DTaP. 2013. *Pediatrics, 131*, 4, e1047-52.

# Human Papillomavirus

A Parent's Guide to Preteen and Teen HPV Vaccination

## Why vaccinate against HPV at 11 or 12 years of age?

- The vaccine produces better immunity to fight infection when given at younger ages compared with older ages.
- Vaccination for HPV is much more effective at preventing disease and cancer if all doses in the series are administered before someone's first sexual contact.
- Most American men and women who become sexually active will contract at least one type of HPV virus in their lifetime. Vaccination can reduce their risk of HPV infection.
- Most people who become infected with HPV do not even know it.
- HPV is easily spread by skin-to-skin contact during sexual activity. Even if someone does not have sexual intercourse, they can still get HPV.
- People who choose to have only one lifetime sex partner can still get HPV if their partner has had previous partners who were infected.
- The vaccine has been tested in thousands of people around the world and has been proven to have no serious side effects.
- The vaccine is highly effective against HPV types that cause most cervical cancers and also protects against
   90 percent of HPV-associated genital warts.



# HPV

### What is HPV?

Human papillomavirus (HPV) is a common family of viruses that causes infection of the skin or mucous membranes of various areas of the body. There are over 100 different types of HPV viruses. Different types of HPV infection affect different areas of the body. For instance, some types of HPV cause warts in the genital area and other types can lead to abnormal cells on the cervix, vulva, anus, penis, mouth, and throat, sometimes leading to cancer.

#### How common is HPV?

HPV is very common. According to the Centers for Disease Control and Prevention (CDC), most sexually active American men and women will contract at least one type of HPV virus during their lifetime. HPV is considered the most common sexually transmitted infection in the United States. It is the cause of almost all cervical cancers in women and has been linked to the rise of oral cancers in young people in the United States.

#### How serious is HPV?

HPV is extremely serious. Approximately 79 million Americans are currently infected with HPV, and about 14 million more become infected each year. In the United States, there are nearly 13,000 new cervical cancer cases diagnosed annually, and more than 4,000 women die from cervical cancer every year. Men are affected too. An estimated 11,500 HPV-associated cancer cases occur in American men each year.

#### How is HPV spread?

The most common ways to get an HPV infection is from vaginal or anal sex with an infected person; however, this is NOT the only way to get HPV. Infection can also be acquired from oral sex and any skin-to-skin contact with areas infected by HPV. It is possible to have HPV and not know it, so a person can unknowingly spread HPV to another person.

CONTINUED ON NEXT PAGE

Technical content reviewed by the Centers for Disease Control and Prevention

**IMMUNIZATION ACTION COALITION** Saint Paul, Minnesota • 651-647-9009 • www.vaccineinformation.org • www.immunize.org

#### **Resources for more information**

- Your healthcare provider or local health department
- CDC's information on vaccines and immunization: www.cdc.gov/ vaccines
- Immunization Action Coalition's vaccine information website: www.vaccineinformation.org
- Vaccine Education Center at the Children's Hospital of Philadelphia: www.chop.edu/vaccine
- CDC's Vaccines For Children (VFC) program: www.cdc.gov/vaccines/ programs/vfc/index.html

#### SOURCES

American College of Obstetricians and Gynecologists (ACOG) Committee on Adolescent Health Care. Fact Sheet: Human Papillomavirus.

Centers for Disease Control and Prevention (CDC). National Center for Chronic Disease Prevention and Health Promotion. HPV and Cancer. www.cdc.gov/hpv/parents/cancer.html

CDC. National Center for Emerging and Zoonotic Infectious Diseases. Vaccine Safety: Human Papillomavirus Vaccine. ■ www.cdc.gov/vaccine safety/Vaccines/HPV-vaccine.html

CDC. National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Genital HPV Infection Fact Sheet. ■ www.cdc.gov/std/HPV/ STDFact-HPV.htm

CDC. National Center for Immunization and Respiratory Diseases. HPV Vaccine-Questions and Answers. ■ www.cdc.gov/hpv/parents/ questions-answers.html

CDC. National Center for Immunization and Respiratory Diseases. Preteens and Teens Need Vaccines Too! ■ www.cdc.gov/Features/Preteen Vaccines/index.html

Reduction in human papillomavirus (HPV) prevalence among young women following HPV vaccine introduction in the United States, National Health and Nutrition Examination Surveys, 2003-2010. J Infect Dis. 2013 Aug 1; 208(3):385-93.

Talk to your healthcare provider today about protecting your son or daughter from HPV infection!

#### Can HPV infection be treated?

There is no treatment for HPV infection; there are only treatments available for the health problems that HPV can cause, such as genital warts, cervical changes, and cancer. In some cases, the body fights off the virus naturally. In cases where the virus cannot be fought off naturally, the person is at risk for serious complications, including cancer.

#### What is HPV vaccine?

Gardasil 9 is the only HPV vaccine currently being distributed in the United States. Gardasil 9 protects against cervical cancers in women and also against genital warts and cancers of the anus, penis, vagina, vulva, mouth, and throat. For preteens, HPV vaccine is given in two shots, separated by 6 to 12 months. It is important to get all the recommended doses to get the best protection.

#### At what age should my son or daughter get HPV vaccine?

Routine vaccination with HPV vaccine is recommended for all 11- and 12-year-old boys and girls. The vaccine can be given as early as 9 years of age. If your son or daughter did not receive the two doses of vaccine at the recommended age, they should still start or complete their HPV vaccine series. Your son can be given the vaccine through the age of 21 (and also certain males through age 26 years), and your daughter can be given the vaccine through the age of 26. If the vaccine series is started at age 15 years or older or, if the person has problems with their immune system, three doses are necessary. Check with your healthcare provider to make sure your child is up to date with HPV vaccination.

For HPV vaccine to work best, it is very important for preteens to get all the recommended doses before any sexual activity begins. It is possible to get infected with HPV the very first time they have sexual contact with another person, even if they do not have intercourse. Also, the vaccine produces better immunity to fight infection when given at the younger ages compared to the older ages.

#### Are HPV vaccines safe?

HPV vaccine has been shown to be very safe. Every vaccine used in the United States is required to go through rigorous safety testing before licensure by the FDA. The HPV vaccine has been extensively tested in clinical trials with more than 28,000 male and female participants. Since the first HPV vaccine was licensed for use in 2006, more than 50 million doses of HPV vaccine have been distributed in the United States. Now in routine use, the vaccine is continually monitored for safety.

In the years of HPV vaccine safety monitoring, no serious safety concerns have been identified. Like other vaccinations, most side effects from HPV vaccination are mild, including fever, headache, and pain and redness in the arm where the shot was given.

#### Is HPV vaccine effective?

The vaccine has been shown to be highly effective in protecting against the HPV types targeted by the vaccine. A study looking at HPV infections in girls and women before and after the introduction of HPV vaccines shows a significant reduction in vaccine-type HPV in U.S. teens since the vaccine was introduced.

Adapted from a publication developed by the Michigan Department of Community Health, Division of Immunization

## **HPV** is a serious disease... Make sure your child is protected!

What is HPV?	Human papillomavirus (HPV) is the most con transmitted infection in the U.S. HPV can lead cancer in women, as well as other oral and ger cancers in men and women. HPV also can cau	to cervical nital (sex organ)
How do you catch HPV?	A person can get the HPV virus during sexual contact without knowing it.	
Is HPV serious?	Yes. HPV is the main cause of cervical cancer. In the U.S., about 13,000 women get cervical cancer every year, and about 4,000 die from it. It can also lead to cancers of the vagina, vulva, penis, anus, hroat, and mouth.	
Is my child at risk?	If and when your child ever begins sexual activity, then they are at risk. At least half of sexually active people get infected with HPV at some point in their lives.	
How can I protect my child from HPV?	a person becomes sexually active.	Ask your child's Ithcare provider f your child is to date for all vaccines!
	Both girls and boys should start the HPV vacci at age 11–12 years. All older teens and young a complete the HPV vaccine series if they haven't	dults should also

#### ► For more information, visit www.vaccineinformation.org

For other vaccine handouts in this series, visit www.immunize.org/vaccine-summaries



Technical content reviewed by the Centers for Disease Control and Prevention Saint Paul, Minnesota • www.immunize.org www.immunize.org/catg.d/p4310.pdf • Item #P4310 (1/17)

### **Genital HPV Infection - CDC Fact Sheet**



#### Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States. Some health effects caused by HPV can be prevented by the HPV vaccines.

#### What is HPV?

HPV is the most common sexually transmitted infection (STI). HPV is a different virus than HIV and HSV (herpes). 79 million Americans, most in their late teens and early 20s, are infected with HPV. There are many different types of HPV. Some types can cause health problems including genital warts and cancers. But there is a vaccine that can stop these health problems from happening.

#### How is HPV spread?

You can get HPV by having vaginal, anal, or oral sex with someone who has the virus. It is most commonly spread during vaginal or anal sex. HPV can be passed even when an infected person has no signs or symptoms.

Anyone who is sexually active can get HPV, even if you have had sex with only one person. You also can develop symptoms years after you have sex with someone who is infected. This makes it hard to know when you first became infected.

#### **Does HPV cause health problems?**

In most cases, HPV goes away on its own and does not cause any health problems. But when HPV does not go away, it can cause health problems like genital warts and cancer.

Genital warts usually appear as a small bump or group of bumps in the genital area. They can be small or large, raised or flat, or shaped like a cauliflower. A healthcare provider can usually diagnose warts by looking at the genital area.

#### **Does HPV cause cancer?**

HPV can cause cervical and other cancers including cancer of the vulva, vagina, penis, or anus. It can also cause cancer in the back of the throat, including the base of the tongue and tonsils (called oropharyngeal cancer).

Cancer often takes years, even decades, to develop after a person gets HPV. The types of HPV that can cause genital warts are not the same as the types of HPV that can cause cancers.

There is no way to know which people who have HPV will develop cancer or other health problems. People with weak immune systems (including those with HIV/AIDS) may be less able to fight off HPV. They may also be more likely to develop health problems from HPV.



#### How can I avoid HPV and the health problems it can cause?

You can do several things to lower your chances of getting HPV.

Get vaccinated. The HPV vaccine is safe and effective. It can protect against diseases (including cancers) caused by HPV when given in the recommended age groups. (See "Who should get vaccinated?" below) CDC recommends 11 to 12 year olds get two doses of HPV vaccine to protect against cancers caused by HPV. For more information on the recommendations, please see: <a href="https://www.cdc.gov/vaccines/vpd/hpv/public/index.html">https://www.cdc.gov/vaccines/vpd/hpv/public/index.html</a>

Get screened for cervical cancer. Routine screening for women aged 21 to 65 years old can prevent cervical cancer.

If you are sexually active

- Use latex condoms the right way every time you have sex. This can lower your chances of getting HPV. But HPV can infect areas not covered by a condom so condoms may not fully protect against getting HPV;
- Be in a mutually monogamous relationship or have sex only with someone who only has sex with you.

#### Who should get vaccinated?

All boys and girls ages 11 or 12 years should get vaccinated.

Catch-up vaccines are recommended for boys and men through age 21 and for girls and women through age 26, if they did not get vaccinated when they were younger.

The vaccine is also recommended for gay and bisexual men (or any man who has sex with a man) through age 26. It is also recommended for men and women with compromised immune systems (including those living with HIV/AIDS) through age 26, if they did not get fully vaccinated when they were younger.

#### How do I know if I have HPV?

There is no test to find out a person's "HPV status." Also, there is no approved HPV test to find HPV in the mouth or throat.

There are HPV tests that can be used to screen for cervical cancer. These tests are only recommended for screening in women aged 30 years and older. HPV tests are not recommended to screen men, adolescents, or women under the age of 30 years.

Most people with HPV do not know they are infected and never develop symptoms or health problems from it. Some people find out they have HPV when they get genital warts. Women may find out they have HPV when they get an abnormal Pap test result (during cervical cancer screening). Others may only find out once they've developed more serious problems from HPV, such as cancers.

#### How common is HPV and the health problems caused by HPV?

HPV (the virus): About 79 million Americans are currently infected with HPV. About 14 million people become newly infected each year. HPV is so common that almost every person who is sexually-active will get HPV at some time in their life if they don't get the HPV vaccine.

Health problems related to HPV include genital warts and cervical cancer.

**Genital warts:** Before HPV vaccines were introduced, roughly 340,000 to 360,000 women and men were affected by genital warts caused by HPV every year.\* Also, about one in 100 sexually active adults in the U.S. has genital warts at any given time.

**Cervical cancer:** Every year, nearly 12,000 women living in the U.S. will be diagnosed with cervical cancer, and more than 4,000 women die from cervical cancer—even with screening and treatment.

There are other conditions and cancers caused by HPV that occur in people living in the United States. Every year, approximately 19,400 women and 12,100 men are affected by cancers caused by HPV.

\*These figures only look at the number of people who sought care for genital warts. This could be an underestimate of the actual number of people who get genital warts.

#### I'm pregnant. Will having HPV affect my pregnancy?

If you are pregnant and have HPV, you can get genital warts or develop abnormal cell changes on your cervix. Abnormal cell changes can be found with routine cervical cancer screening. You should get routine cervical cancer screening even when you are pregnant.

#### Can I be treated for HPV or health problems caused by HPV?

There is no treatment for the virus itself. However, there are treatments for the health problems that HPV can cause:

- 1. **Genital warts** can be treated by your healthcare provider or with prescription medication. If left untreated, genital warts may go away, stay the same, or grow in size or number.
- 2. **Cervical precancer** can be treated. Women who get routine Pap tests and follow up as needed can identify problems before cancer develops. Prevention is always better than treatment. For more information visit <u>www.cancer.org.</u>
- 3. **Other HPV-related cancers** are also more treatable when diagnosed and treated early. For more information visit <u>www.cancer.org</u>

## Where can I get more information?

HPV Topic Page www.cdc.gov/hpv/index.html

HPV Vaccination <u>www.cdc.gov/vaccines/vpd/</u> <u>hpv/index.html</u>

Cancer Prevention and Control <u>www.cdc.gov/cancer/</u>

Cervical Cancer – What Should I Know About Screening? <u>www.cdc.gov/cancer/cervical/</u> <u>basic\_info/screening.htm</u>

CDC's National Breast and Cervical Cancer Early Detection Program www.cdc.gov/cancer/nbccedp/

Division of STD Prevention (DSTDP) Centers for Disease Control and Prevention <u>www.cdc.gov/std</u>

CDC-INFO Contact Center 1-800-CDC-INFO (1-800-232-4636) wwwn.cdc.gov/dcs/ContactUs/ Form

CDC National Prevention Information Network (NPIN) <u>npin.cdc.gov/disease/stds</u> P.O. Box 6003 Rockville, MD 20849-6003 E-mail: <u>npin-info@cdc.gov</u>

American Sexual Health Association (ASHA) P. O. Box 13827 Research Triangle Park, NC 27709-3827 1-800-783-9877 As parents, you do everything you can to protect your children's health for now and for the future. Today, there is a strong weapon to prevent several types of cancer in our kids: the HPV vaccine.

#### **HPV and Cancer**

HPV is short for Human Papillomavirus, a common virus. In the United States each year, there are about 17,500 women and 9,300 men affected by HPV-related cancers. Many of these cancers **could be prevented with vaccination.** In both women and men, HPV can cause anal cancer and mouth/throat (oropharyngeal) cancer. It can also cause cancers of the cervix, vulva and vagina in women; and cancer of the penis in men.

For women, screening is available to detect most cases of cervical cancer with a Pap smear. Unfortunately, there is no routine screening for other HPV-related cancers for women or men, and these cancers can cause pain, suffering, or even death. **That is why a vaccine that prevents most of these types of cancers is so important.** 

#### More about HPV

HPV is a virus passed from one person to another during skin-to-skin sexual contact, including vaginal, oral, and anal sex. HPV is most common in people in their late teens and early 20s. Almost all sexually active people will get HPV at some time in their lives, though most will never even know it.

Most of the time, the body naturally fights off HPV, before HPV causes any health problems. But in some cases, the body does not fight off HPV, and HPV can cause health problems, like cancer and genital warts. Genital warts are not a life-threatening disease, but they can cause emotional stress, and their treatment can be very uncomfortable. About 1 in 100 sexually active adults in the United States have genital warts at any given time.

#### HPV vaccination is recommended for preteen girls and boys at age 11 or 12 years

All preteens need HPV vaccination so they can be protected from HPV infections that cause cancer. Teens and young adults who didn't start or finish the HPV vaccine series also need HPV vaccination. Young women can get HPV vaccine until they are 27 years old and young men can get HPV vaccine until they are 22 years old. Young men who have sex with other men or who have weakened immune systems can also get HPV vaccine until they are 27.

HPV vaccination is a series of shots given over several months. The best way to remember to get your child all of the shots they need is to make an appointment for the remaining shots before you leave the doctor's office or clinic.

### Is the HPV vaccine safe?

Yes. HPV vaccination has been studied very carefully and continues to be monitored by CDC and the Food and Drug Administration (FDA). No serious safety concerns have been linked to HPV vaccination. **These studies continue to show that HPV vaccines are safe.** 

The most common side effects reported after HPV vaccination are mild. They include pain and redness in the area of the arm where the shot

was given, fever, dizziness, and nausea. Some preteens and teens may faint after getting a shot or any other medical procedure. Sitting or lying down for about 15 minutes after getting shots can help prevent injuries that could happen if your child were to fall while fainting.

#### Why does my child need this now?

HPV vaccines offer the best protection to girls and boys who complete the series and have time to develop an immune response **before** they begin sexual activity with another person. This is not to say that your preteen is ready to have sex. In fact, it's just the opposite—it's important to get your child protected before you or your child have to think about this issue. The immune response to this vaccine is better in preteens, and this could mean better protection for your child.



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Serious side effects from HPV vaccination are rare. Children with severe allergies to yeast or latex shouldn't get certain HPV vaccines. Be sure to tell the doctor or nurse if your child has any severe allergies.

#### Help paying for vaccines

The Vaccines for Children (VFC) program provides vaccines for children ages 18 years and younger who are uninsured, Medicaid-eligible, or American Indian/Alaska Native. Learn more about the VFC program at

#### www.cdc.gov/Features/VFCprogram/

Whether you have insurance, or your child is VFC-eligible, some doctors' offices may also charge a fee to give the vaccines.

#### Jacquelyn's story: "I was healthy-and got cervical cancer."

When I was in my late 20's and early 30's, in the years before my daughter was born, I had some abnormal Pap smears and had to have further testing. I was told I had the kind of HPV that can cause cancer and mild dysplasia.

For three more years, I had normal tests. But when I got my first Pap test after my son was born, they told me I needed a biopsy. The results came back as cancer, and my doctor sent me to an oncologist. Fortunately, the cancer was at an early stage. My lymph nodes were clear, and I didn't need radiation. But I did need to have a total hysterectomy.

My husband and I have been together for 15 years, and we were planning to have more children. We are so grateful for our two wonderful children, but we were hoping for more which is not going to happen now. The bottom line is they caught the cancer early, but the complications continue to impact my life and my family. For the next few years, I have to get pelvic exams and Pap smears every few months, the doctors measure tumor markers, and I have to have regular x-rays and ultrasounds, just in case. I have so many medical appointments that are taking time away from my family, my friends, and my job.

#### Worse, every time the phone rings, and I know it's my oncologist calling, I hold my breath until I get the results. I'm hopeful I can live a full and healthy life, but cancer is always in the back of my mind.

In a short period of time, I went from being healthy and planning more children to all of a sudden having a radical hysterectomy and trying to make sure I don't have cancer again. It's kind of overwhelming. And I am one of the lucky ones!

Ultimately I need to make sure I'm healthy and there for my children. I want to be around to see their children grow up.

I will do everything to keep my son and daughter from going through this. I will get them both the HPV vaccine as soon as they turn 11. I tell everyone—my friends, my family—to get their children the HPV vaccine series to protect them from this kind of cancer.

#### What about boys?

HPV vaccine is for boys too! This vaccine can help prevent boys from getting infected with the types of HPV that can cause cancers of the mouth/throat, penis and anus. The vaccine can also help prevent genital warts. HPV vaccination of males is also likely to benefit females by reducing the spread of HPV viruses.

Learn more about HPV and HPV vaccine at www.cdc.gov/hpv

For more information about the vaccines recommended for preteens and teens: 800-CDC-INFO (800-232-4636) www.cdc.gov/vaccines/teens

### Screening won't protect your patients from most HPV cancers.

protect your preteen patients today with HPV vaccine.

### **Cervical Cancer** Just the tip of the iceberg.

Even with screening, HPV causes

**10,800** cases of cervical cancer each year in the U.S.

Source: https://www.cdc.gov/cancer/hpv/statistics/cases.htm

Cervical cancer is the only type of HPV cancer for which there is a recommended screening test.

## **Cervical Precancers**

While cervical precancers are routinely screened for, these precancers may require invasive testing and treatment.

Sources: Habbema D, et al. Int J Cancer. 2017 Mar 1;140(5):1215-1222.

**Cases Every Year** 

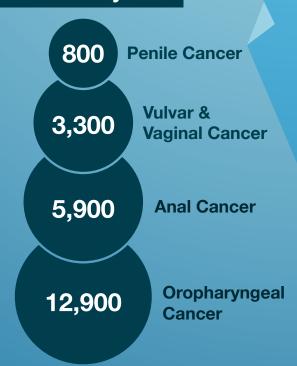
 $(\cdot)$ 

~300,000

High Grade Cervical Lesions

## **Other HPV Cancers**

**Cases Every Year** 



Recommended cancer screening tests are not available yet for these cancers. These cancers may not be detected until they cause health problems.

### **OVER 90%** of HPV cancers are preventable through HPV vaccination.

Source: https://www.cdc.gov/cancer/hpv/statistics/cases.htm Last updated AUGUST 2018.

**HPV VACCINE** 

IS CANCER PREVENTION

PN300538

#### Don't rely on screening to catch it later. Protect them now with HPV vaccination.

https://www.cdc.gov/hpv/hcp/more-than-screening/index.html



## HPV Vaccine Information for Clinicians



## HPV VACCINE IS CANCER PREVENTION

CDC recommends HPV vaccination for girls and boys at ages 11 or 12 years to protect against cancers caused by HPV infections. CDC encourages clinicians to recommend HPV vaccination the same way and same day they recommend other routine adolescent vaccines.

Background	Human papillomaviruses (HPV) are a very common family of viruses that infect epithelial tissue of males and females. More than 150 HPV types have been identified. Most HPV types infect cutaneous
	epithelial cells and cause common warts, such as those that occur on the hands and feet. Approximately 40
	HPV types can infect mucosal epithelial cells, such as those on the genitals, mouth, and throat. Although mos
	HPV infections are asymptomatic and resolve spontaneously or become undetectable, some HPV infections
	can persist and lead to cancer.
	Persistent infections with high-risk (oncogenic) HPV types can cause:
	• cervical, vaginal, and vulvar cancers in women;
	• penile cancers in men;
	<ul> <li>and oropharyngeal and anal cancers in both men and women.</li> </ul>
	High-risk types HPV 16 and 18 account for 80% of cancers caused by HPV. Infection with low-risk HPV types car
	cause genital warts and, rarely, laryngeal papillomas. These types can also cause benign or low-grade cervical ce
	abnormalities. Almost all genital warts and papillomas are caused by common low-risk types HPV 6 and 11.
HPV Infection and Disease	Almost every person will acquire an HPV infection at some time in his or her life. Currently, about 79
	million Americans are infected with genital HPV. Approximately 14 million people become newly infected each year, mostly teens and young adults.
	Every year in the United States, an estimated 32,500 men and women are diagnosed with a cancer caused
	by HPV infection. Although cervical cancer is the most well-known of the cancers caused by HPV, HPV also
	causes approximately 20,000 non-cervical cancers every year in the United States. Around 10,100 men in the United States are diagnosed with oropharyngeal cancer caused by HPV infection each year.
	Even with screening and treatment, roughly 12,000 women are diagnosed with cervical cancer every year in
	the United States; subsequently, more than 4,000 women die every year from cervical cancer in the country.
HPV Cancer Screening	Cervical cancer is the only HPV cancer doctors routinely screen for, and the others may not be
	detected until they cause health problems. Therefore, preventing infections is a priority. Cervical cancer screening is recommended for women, beginning at age 21 years and continuing through age 65
	years. Women who have received HPV vaccine should still be screened for cervical cancer beginning at age
	21 years, in accordance with currently published cervical cancer screening guidelines.
	ב ד years, ווד מכנסו עמווכב שונוד כעודבו זגץ איטוואויבע כבו שנאו כמו נכו ונכו אברופו ווויץ שנועפווויפא.

#### **HPV Vaccines**

The 9-valent HPV (9vHPV) vaccine is the only HPV vaccine currently used in the United States. Three HPV vaccines were licensed by the U.S. Food and Drug Administration (FDA) by 2014: bivalent (2vHPV), quadrivalent (4vHPV), and 9-valent HPV vaccines. Since late 2016, only 9-valent HPV vaccine is available for distribution in the United States. The 9-valent HPV vaccine protects against nine HPV types, including seven types that can cause cancer. Of the 32,500 cancers that HPV has caused every year, 30,000 are caused by strains that could have been prevented by the 9-valent HPV vaccine.

#### HPV Vaccine Recommendations

CDC recommends routine HPV vaccination for adolescents at age 11 or 12 years. Vaccination can be started as early as age 9 years.

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For people who did not start or complete vaccination when they were younger, vaccination is also recommended for:

- males ages 13 through 21 years,
- females ages 13 through 26 years,
- gay, bisexual, and other men who have sex with men, transgender people,
- and persons with certain immunocompromising conditions ages 22 through 26 years

Ideally, people should be vaccinated as adolescents, before they are exposed to HPV. However, people who have already been infected with one or more HPV types can still get protection from other HPV types covered by the vaccine.



#### HPV vaccines can safely be given to...

- People with minor acute illnesses, such as diarrhea or mild upper respiratory tract infections, with or without fever.
- Women who have had an unclear or abnormal Pap test, a positive HPV test, or genital warts. However, these women should be advised that the vaccine may not have any therapeutic effect on existing Pap test abnormalities, HPV infection, or genital warts.
- People with immunocompromising conditions, including certain diseases or medications. However, the immune response to vaccination and effectiveness of the vaccine might be less than in people with a normally functioning immune system.
- Women who are breastfeeding.



#### HPV vaccines should not be given to...

- People with a history of allergies to any vaccine component.
   9-valent HPV vaccine is not recommended for people with immediate hypersensitivity to yeast.
- Patients with moderate or severe acute illnesses. In these cases, patients should wait until the illness improves before getting vaccinated.
- Pregnant women. However, HPV vaccines have not been shown to cause any adverse pregnancy outcomes or adverse events for the mother or her developing fetus. If a woman is found to be pregnant after starting the HPV vaccine series, any remaining doses should be delayed, and given after she is no longer pregnant.
  - Pregnancy testing is not needed before vaccination. If a pregnant woman does receive HPV vaccine, no intervention is needed.
  - Exposure to 9vHPV vaccine during pregnancy can be reported to the manufacturer.

#### HPV Vaccine Dosing Schedules

 If the first dose of HPV vaccine is given before the 15th birthday, vaccination should be completed according to a 2-dose schedule. In a 2-dose series, the second dose is recommended 6–12 months after the first dose (0, 6–12 month schedule).

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- In a 2-dose schedule of HPV vaccine, the minimum interval is 5 months between the first and second dose.
   If the second dose is administered at a shorter interval, a third dose should be administered 6-12 months after the first dose and a minimum of 12 weeks after the second dose.
- If the first dose of any HPV vaccine is given on or after the 15th birthday, vaccination should be completed according to a 3-dose schedule. In a 3-dose series, the second dose is recommended 1–2 months after the first dose, and the third dose is recommended 6 months after the first dose (0, 1–2, 6 month schedule).
- In a 3-dose schedule of HPV vaccine, the minimum intervals are 4 weeks between the first and second dose, 12 weeks between the second and third dose, and 5 months between the first and third dose. If a vaccine dose is administered at a shorter interval, it should be re-administered after another minimum interval has been met since the most recent dose. If the third was administered on or before December 16, 2016, the minimum interval between the 1st and 3rd dose is 16 weeks.

Although minimum intervals are stated in the dosing schedule, there is no maximum interval. There is no reason to restart the vaccine series if the HPV vaccine schedule is interrupted; patients who have exceeded the minimum interval for the next dose by months or even years, may be given the next dose needed.

9-valent HPV vaccine may be used to continue or complete a vaccination series started with quadrivalent or bivalent HPV vaccines. There is no ACIP recommendation regarding additional 9-valent HPV vaccine doses for people who have completed the vaccine series with bivalent or quadrivalent HPV vaccine.

HPV vaccine can be administered safely at the same visit as other vaccines recommended for adolescents at ages 11 or 12 years, such as tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccine; quadrivalent meningococcal conjugate (MenACWY) vaccine; and influenza vaccine. Administering all indicated vaccines at a single visit increases the likelihood that adolescents receive their vaccinations on schedule at ages 11 or 12 years.

Patients should be observed for 15 minutes after receiving any vaccine, including HPV vaccine.

#### **HPV Vaccine Safety**

**HPV vaccine is very safe.** All vaccines used in the United States, including HPV vaccine, are required to go through years of extensive safety testing before they are licensed by the U.S. Food and Drug Administration (FDA). During clinical trials conducted before they were licensed:



9-valent HPV vaccine was studied in more than 15,000 males and females



Quadrivalent HPV vaccine was studied in more than 29,000 males and females



Bivalent HPV vaccine was studied in more than 30,000 females



Each of these HPV vaccines was found to be safe and effective

As with all approved vaccines, CDC and the FDA closely monitor the safety of HPV vaccines after they are licensed. With over 100 million doses distributed in the United States, HPV vaccine has a reassuring safety record backed by 10 years of monitoring and research.

HPV Vaccine Safety (cont.)	Like any vaccine or medicine, HPV vaccination can cause side effects. The most common side effects are mild and include pain, redness, or swelling in the arm where the shot was given; dizziness, fainting, nausea, and headache. Fainting (syncope) after any vaccine, including HPV vaccine, is more common among adolescents.
	To prevent fainting and injuries related to fainting, adolescents should be seated or lying down during vaccination and remain in that position for 15 minutes after the vaccine is given. Scientific research shows the benefits of HPV vaccination far outweigh any potential risk of side effects.
HPV Vaccine Effectiveness	<b>HPV vaccine works extremely well.</b> HPV vaccine was first recommended in the United States in 2006, and by 2014, HPV infections responsible for the majority of HPV cancers and genital warts decreased by 71% in teen girls and 61% among young women. Research has also shown that genital warts and cervical dysplasias are decreasing in teens and women in their early 20s since HPV vaccines have been in use. Decreases in vaccine-type prevalence, genital warts, and cervical dysplasia also have been observed in other countries with HPV vaccination programs.
	There is no data to suggest HPV vaccine will treat existing diseases or conditions caused by HPV. However, people who already have HPV-associated diseases or conditions can still get protection from other HPV types covered by the vaccine.
Duration of Vaccine Protection	Studies suggest that HPV vaccine offers long-lasting protection against HPV infection and disease caused by HPV infection. Studies have followed vaccinated individuals for about ten years, and so far no evidence of protection decreasing over time has been found. Duration of protection provided by HPV vaccination will continue to be studied.
Paying for HPV Vaccine	As with all vaccines recommended by the Advisory Committee on Immunization Practices (ACIP), HPV vaccines are covered by health insurance. For families who need assistance paying for HPV vaccine, the Vaccines for Children (VFC) program may be able to help. VFC provides vaccines for children ages 18 years and younger who are uninsured, Medicaid-eligible, or American Indian/Alaska Native. Learn more about the VFC program at <u>www.cdc.gov/Features/VFCprogram</u> .
Related Resources	Petrosky E, Bocchini JA, Jr., Hariri S, Chesson H, Curtis CR, Saraiya M, et al. <u>Use of 9-valent human papillomavirus (HPV) vaccine:</u> updated HPV vaccination recommendations of the advisory committee on immunization practices. MMWR Morb Mortal Wkly Rep.

2015 Mar 27;64(11):300-4. 304. Print version [24 pages]

Markowitz LE, Dunne EF, Saraiya M, Chesson HW, Curtis CR, Gee J, Bocchini JA Jr, Unger ER. Human papillomavirus vaccination: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2014;63(RR-05):1-30.

Food and Drug Administration. Prescribing information [Package insert]. Gardasil 9 [Human Papillomavirus 9-valent Vaccine, Recombinant], Merck & Co., Inc. Silver Spring, MD: U.S. Department of Health and Human Services, Food and Drug Administration; 2016; Available from: <u>http://www.fda.gov/downloads/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM426457.pdf</u>.

Meites E, Kempe A, Markowitz LE. Use of a 2-Dose Schedule for Human Papillomavirus Vaccination — Updated Recommendations of the Advisory Committee on Immunization Practices. MMWR Morb Mortal Wkly Rep 2016;65: 1405–1408. http://dx.doi.org/10.15585/mmwr.mm6549a5.

Standing orders for other vaccines are available at www.immunize.org/standing-orders. NOTE: This standing orders template may be adapted per a practice's discretion without obtaining permission from IAC. As a courtesy, please acknowledge IAC as its source.

#### STANDING ORDERS FOR Administering Human Papillomavirus Vaccine to Children and Teens

#### **Purpose**

To reduce morbidity and mortality from human papillomavirus (HPV) infection by vaccinating all children and teens who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP).

#### Policy

Where allowed by state law, standing orders enable eligible nurses and other healthcare professionals (e.g., pharmacists) to assess the need for and vaccinate children and teens who meet any of the criteria below.

#### Procedure

- 1 Assess children and teens for need of vaccination against human papillomavirus infection based on the following criteria:
  - Age 11 years and older who have not completed an HPV vaccination series
  - Age 9 years and older with any history of sexual abuse or assault
  - Age 9 through 10 years, without a specific risk factor, whose parent/guardian wishes to have them vaccinated

#### 2 Screen for contraindications and precautions

#### Contraindication

Do not give HPV vaccine to an child or teen who has experienced a serious systemic or anaphylactic reaction to a prior dose of HPV vaccine or to any of its components (e.g., yeast). For information on vaccine components, refer to the manufacturers' package insert (www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

#### Precaution

- Moderate or severe acute illness with or without fever
- Pregnancy; delay vaccination until after completion of the pregnancy

#### **3** Provide Vaccine Information Statements

Provide all patients (or, in the case of minors, their parent, or legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). Provide non-English speaking patients with a copy of the VIS in their native language, if one is available and desired; these can be found at www.immunize.org/vis. (For information about how to document that the VIS was given, see section 6 titled "Document Vaccination.")

#### 4 Prepare to Administer Vaccine

Choose the needle gauge, needle length, and injection site according to the following chart:

GENDER AND WEIGHT OF PATIENT	NEEDLE GAUGE	NEEDLE LENGTH	INJECTION SITE
Female or male less than 130 lbs	22–25	5/8*-1"	Deltoid muscle of arm
Female or male 130–152 lbs	22–25	1"	Deltoid muscle of arm
Female 153-200 lbs	22–25	1–11⁄2"	Deltoid muscle of arm
Male 153–260 lbs	22–25	1–11⁄2"	Deltoid muscle of arm
Female 200+ lbs	22–25	11⁄2"	Deltoid muscle of arm
Male 260+ lbs	22–25	11⁄2"	Deltoid muscle of arm

\* A 5%" needle may be used in patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin is stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90° angle to the skin.

continued on the next page  $\blacktriangleright$ 

Technical content reviewed by the Centers for Disease Control and Prevention

#### **IMMUNIZATION ACTION COALITION** Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org

www.immunize.org/catg.d/p3090.pdf • Item #P3090 (1/17)

## **5** Administer HPV vaccine, 0.5 mL, via the intramuscular (IM) route, according to the following tables: *Schedule for routine vaccination*

TYPE OF VACCINE	AGE WHEN INITIAL DOSE IS ADMINISTERED <sup>1,2</sup>	DOSE	SCHEDULE <sup>2</sup>
HPV (Gardasil, Gardasil 9)	9 through 14 years	0.5 mL	Two doses, 6–12 months apart <sup>2</sup>
	15 years or older	0.5 mL	Three doses at 0, 1–2, and 6 months

*Note:* For individuals who failed to complete either the 2-dose or 3-dose schedule as stated above, do not start over. Simply follow the schedule below.

#### Schedule for catch-up vaccination

HISTORY OF PREVIOUS HPV VACCINATION	SCHEDULE FOR ADMINISTRATION OF HPV VACCINE
0 documented doses, or none known	Follow schedule as per above table.
1 previous dose when younger than age 15 years	Give dose #2 with minimum interval of 5 months <sup>2</sup>
2 previous doses given less than 5 months apart and dose #1 given when younger than age 15 years	Give dose #3 with minimum interval of 12 weeks after dose #2 and at least 5 months after dose #1.
1 previous dose when age 15 or older	Give dose #2 at least 4 weeks after dose #1, then give dose #3 at least 12 weeks after dose #2 and at least 5 months after dose #1.
2 previous doses when age 15 or older	Give dose #3 at least 12 weeks after dose #2 and at least 5 months after dose #1.

<sup>1</sup> Only two doses are recommended for anyone who begins the 2-dose schedule before the 15th birthday, regardless of age at series completion.

<sup>2</sup>Immununocompromised persons, including those with HIV infection, should receive a 3-dose series at 0, 1–2, and 6 months, regardless of age at vaccine initiation.

#### **6** Document Vaccination

Document each patient's vaccine administration information and follow-up in the following places:

*Medical record:* Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. You must also document, in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient. If vaccine was not administered, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).

**Personal immunization record card:** Record the date of vaccination and the name/location of the administering clinic. **Immunization Information System (IIS) or "registry":** Report the vaccination to the appropriate state/local IIS, if available.

#### 7 Be Prepared to Manage Medical Emergencies

Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications. For IAC's "Medical Management of Vaccine Reactions in Children and Teens," go to www.immunize.org/catg.d/p3082a.pdf. For "Medical Management of Vaccine Reactions in Adult Patients," go to www.immunize.org/catg.d/p.3082.pdf. To prevent syncope, vaccinate patients while they are seated or lying down and consider observing them for 15 minutes after receipt of the vaccine.

#### 8 Report Adverse Events to VAERS

Report all adverse events following the administration of HPV vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov. Forms are available on the website or by calling (800) 822-7967.

#### **Standing Orders Authorization**

This policy and procedure shall remain in effec	NAME OF PRACTICE OR	CLINIC
until rescinded or until		
Medical Director's signature	Signature date	Effective date

## **Top 10 Tips for HPV Vaccination Success**

Attain and Maintain High HPV Vaccination Rates



## HPV VACCINE is cancer prevention

1	Appreciate the significance of achieving high HPV vaccination rates.	By boosting HPV vaccination rates among your patients, you will be preventing cancer.
2	Acknowledge the importance your recommendation has when it comes to parents choosing to get their children vaccinated.	Clinician recommendation is the number one reason parents decide to vaccinate. This is especially important for HPV vaccination.
3	Use an effective approach by bundling your vaccine recommendation.	Recommend the HPV vaccine the same day and the same way you recommend all other vaccines. For example, "Now that Danny is 11, he is due for vaccinations to help protect against meningitis, HPV cancers, and whooping cough. We'll give those shots during today's visit. Do you have any questions about these vaccines?"
4	Motivate your team and encourage their immunization conversations with parents.	Starting with your front office, ensure each team member is aware of HPV vaccine's importance and is educated on proper vaccination practices and recommendations, ready to answer parents' questions, and/or regularly remind and recall parents. Be sure staff regularly check immunization records, place calls to remind families about getting vaccines, and let you know if parents have additional questions.
5	Implement systems to ensure you never miss an opportunity to vaccinate.	Establish a policy to vaccinate at every visit. Create a system to check immunization status ahead of all visits. Before seeing the patient, staff should indicate if the patient is due for immunization, with special consideration to HPV vaccination. Use standing orders.
6	Use your local health department's resources.	Use the resources of the local health department to achieve your goals of protecting your patients.
7	Know your rates of vaccination and refusal.	Deputize your staff to assist you with knowing your actual vaccination rates and learning more about why some patients are behind on their vaccines. They can also help you facilitate solutions on how to bring these patients in and get or keep immunization rates up.
8	Maintain strong doctor-patient relationships to help with challenging immunization conversations.	It is extremely gratifying when parents who initially questioned immunization agree to get their child vaccinated on time. It's always nice to hear: "Okay, that makes sense and I trust you!"
9	Learn how to answer some of parents' most common questions about HPV vaccine.	Be prepared to answer parents' questions succinctly, accurately, and empathetically by using terms that they understand. A parent will often accept your explanations if presented with their children's best interests in mind.
0	Use personal examples of how you choose to vaccinate children in your family.	Providing personal examples shows you believe in the importance of immunizations, especially HPV vaccine. These examples—combined with an effective recommendation—can help parents better understand the benefits of HPV vaccination for cancer prevention.

#### For more info visit: www.cdc.gov/hpv

Adapted with Permission from: Khatib, B. (2015) The 10 Immunization Success Factors: Practical Strategies for Providers. Unpublished manuscript.

| ADOLESCENT VACCINE SAFETY | INFORMATION FOR PARENTS



## What Parents Should Know About HPV Vaccine Safety and Effectiveness

Last updated JUNE 2014

#### **HPV** vaccines prevent cancer

About 14 million people, including teens, become infected with human papillomavirus (HPV) each year. When HPV infections persist, people are at risk for cancer. Every year, approximately 17,600 women and 9,300 men are affected by cancers caused by HPV. HPV vaccination could prevent many of these cancers.

#### **HPV vaccines are safe**

All vaccines used in the United States are required to go through extensive safety testing before they are licensed by FDA. Once in use, they are continuously monitored for safety and effectiveness.

Numerous research studies have been conducted to make sure HPV vaccines were safe both before and after the vaccines were licensed. No serious safety concerns have been confirmed in the large safety studies that have been done since HPV vaccine became available in 2006. CDC and FDA have reviewed the safety information available to them for both HPV vaccines and have determined that they are both safe.

The HPV vaccine is made from one protein from the HPV virus that is not infectious (cannot cause HPV infection) and non-oncogenic (does not cause cancer).

#### **HPV vaccines work**

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%. Research has also shown that fewer teens are getting genital warts since HPV vaccines have been in use. In other countries such as Australia, research shows that HPV vaccine has already decreased the amount of pre-cancer of the cervix in women, and genital warts have decreased dramatically in both young women and men.

#### HPV vaccines provide long-lasting protection

Data from clinical trials and ongoing research tell us that the protection provided by HPV vaccine is long-lasting. Currently, it is known that HPV vaccine works in the body for at least 10 years without becoming less effective. Data suggest that the protection provided by the vaccine will continue beyond 10 years.

#### HPV vaccine is recommended and safe for boys

HPV vaccination can help prevent boys from getting infected with the HPV-types that can cause cancers of the mouth/throat, penis and anus as well as genital warts.

## Like any vaccine or medicine, HPV vaccines might cause side effects

HPV vaccines occasionally cause adverse reactions. The most commonly reported symptoms among females and males are similar, including injection-site reactions (such as pain, redness, or swelling in the area of the upper arm where the vaccine is given), dizziness, fainting, nausea, and headache.

Brief fainting spells and related symptoms can happen after many medical procedures, including vaccination. Fainting after getting a shot is more common among adolescents. Sitting or lying down for about 15 minutes after a vaccination can help prevent fainting and injuries that can be caused by falls.

When fainting was found to happen after vaccination, FDA changed prescribing information to include information about preventing falls and possible injuries from fainting after vaccination. CDC consistently reminds doctors and nurses to share this information with all their patients. Tell the doctor or nurse if your child feels dizzy, faint, or light-headed.

#### HPV vaccines don't negatively affect fertility

There is no evidence to suggest that HPV vaccine causes fertility problems. However, not getting HPV vaccine leaves people vulnerable to HPV cancers. If persistent high-risk HPV infection in a woman leads to cervical cancer, the treatment of cervical cancer (hysterectomy, chemotherapy, or radiation, for example) could leave a woman unable to have children. Treatment for cervical pre-cancer could put a woman at risk for problems with her cervix, which could cause preterm delivery or other problems.

#### How can I get help paying for these vaccines?

The Vaccines for Children (VFC) program provides vaccines for children ages 18 years and younger, who are uninsured, Medicaid-eligible, American Indian or Alaska Native. You can find out more about the VFC program by going online to <u>www.cdc.gov</u> and typing VFC in the search box.



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## **HPV Vaccine for Preteens and Teens**

## What is HPV disease?

HPV is short for Human Papillomavirus, a common virus. In the United States each year, there are about 17,000 women and 9,000 men affected by HPV-related cancers. Many of these cancers could be prevented by vaccination.

#### Why does my child need HPV vaccine?

This vaccine is for protection from most of the cancers caused by HPV infection. HPV is a very common virus that spreads between people when they have sexual contact with another person. About 14 million people, including teens, become infected with HPV each year. HPV can cause cervical cancer in women and penile cancer in men. HPV can also cause anal cancer, throat cancer, and genital warts in both men and women.

#### When should my child be vaccinated?

The HPV vaccine is recommended for preteen boys and girls at 11 or 12 years so they are protected before ever being exposed to the virus. If your teen hasn't gotten the vaccine yet, talk to their doctor about getting it for them as soon as possible. The HPV vaccine is given in 3 shots. The second shot is given 1 or 2 months after the first shot. Then a third shot is given 6 months after the first shot. Be sure that your child gets all 3 shots for full protection.

#### If a dose of HPV vaccine is delayed, do I need to start the series over?

No, do not restart the series. Just pick up where your child left off and complete the series.

#### Is the HPV vaccine safe?

Yes. HPV vaccines were studied in tens of thousands of people around the world. More than 57 million doses have been distributed and serious side effects from the HPV vaccine are rare. Vaccine safety continues to be monitored by the Centers for Disease Control and Prevention (CDC) and Food and Drug Administration (FDA). The most common side effects reported are mild. They include: pain in the arm where the shot was given, dizziness, fever, and nausea. Some preteens and teens might faint after the HPV vaccine or any shot. Be sure that your child eats something before going to get the vaccine. Preteens and teens should sit or lie down when they get a shot and stay like that for 15 minutes after the shot. This can help prevent fainting and any injury that could happen while fainting.

#### How can I get help paying for these vaccines?

The Vaccines for Children (VFC) program provides vaccines for children ages 18 years and younger, who are not insured or under-insured, Medicaid-eligible, or American Indian/ Alaska Native.

#### Where can my child get vaccinated?

Your child can visit their doctor or healthcare provider to get their HPV vaccine. Local Health Departments also offer HPV vaccine. To find a Health Department near you visit: dph.georgia.gov/public-health-districts.

For more information about HPV vaccines and the other vaccines for preteens and teens, talk to your child's healthcare provider. Information is also available on the Georgia Department of Public Health, Immunization Office website dph.georgia.gov/immunization-section or CDC's website www.cdc.gov/vaccines/who/teens/index.html

Have questions?

Talk with your Healthcare Provider.

http://dph.georgia.gov/immunization-section