HPV Vaccine for Preteens and Teens

Why does my child need HPV vaccine?
This vaccine is for protection from most of the cancers caused by human papillomavirus (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 infection can cause cervical, vaginal, and vulvar cancers 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 age 11 or 12 so they are protected before ever being exposed to the virus. HPV vaccine also produces a higher immune response in preteens than in older adolescents. If your teen hasn’t gotten the vaccine yet, talk to their doctor about getting it for them as soon as possible.

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.

What else should I know about HPV vaccine?
Girls need HPV vaccination to prevent HPV infections that can cause cancers of the anus, cervix, vagina, vulva, and the mouth/throat area. Boys need HPV vaccination to prevent HPV infections that can cause cancers of the anus, penis, and the mouth/throat area. HPV vaccination can also prevent genital warts.

HPV vaccines have been studied very carefully. These studies showed no serious safety concerns. Common, mild adverse events (side effects) reported during these studies include pain in the arm where the shot was given, fever, dizziness and nausea.

Some preteens and teens might faint after getting the HPV vaccine or any shot. Preteens and teens should sit or lie down when they get a shot and stay like that for about 15 minutes after the shot. This can help prevent fainting and any injury that could happen while fainting.

Serious side effects from the HPV vaccine are rare. It is important to tell the doctor or nurse if your child has any severe allergies, including an allergy to latex or yeast. HPV vaccine is not recommended for anyone who is pregnant.

HPV vaccination is recommended by the Centers for Disease Control and Prevention (CDC), the American Academy of Family Physicians, the American Academy of Pediatrics, and the Society for Adolescent Health and Medicine.

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, Medicaid-eligible, American Indian or Alaska Native. You can find out more about the VFC program by going online to www.cdc.gov and typing VFC in the search box.

Where can I learn more?
For more information about HPV vaccines and the other vaccines for preteens and teens, talk to your child’s doctor or nurse. More information is also available on CDC’s Vaccines for Preteens and Teens website at www.cdc.gov/vaccines/teens.
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 receive all three vaccine doses 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.
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) http://www.cdc.gov/vaccines/teens
La vacuna contra el VPH para preadolescentes y adolescentes

¿Por qué mi hijo/hija necesita la vacuna VPH?
Esta vacuna protege contra la mayoría de los cánceres causados por la infección del virus del papiloma humano (VPH o HPV, por sus siglas en inglés). El VPH es un virus muy común que se contagia entre las personas cuando tienen contacto sexual con otra persona. Cada año, alrededor de 14 millones de personas, incluyendo a los adolescentes, se infectan con el VPH. La infección por el VPH puede causar cánceres del cuello del útero, de vagina y de vulva en las mujeres y cáncer del pene en los hombres. El VPH también puede causar cáncer anal, cáncer de la garganta y verrugas genitales tanto en los hombres como en las mujeres.

¿Cuándo se debe vacunar mi hijo/hija?
Se recomienda que los preadolescentes, tanto varones como mujeres, se pongan la vacuna contra el VPH a la edad de 11 o 12 años de modo que queden protegidos antes de que se expongan al virus. La vacuna contra el VPH puede causar cánceres del cuello del útero, de vagina y de vulva en las mujeres y cáncer del pene en los hombres. El VPH también puede causar cáncer anal, cáncer de la garganta y verrugas genitales tanto en los hombres como en las mujeres.

¿Qué más debo saber sobre la vacuna contra el VPH?
Hay dos vacunas contra el VPH. Las niñas entre 11 o 12 años de edad) y las mujeres jóvenes entre 13 y 26 años se deben poner cualquiera de ellas para prevenir el cáncer del cuello del útero. Una de las vacunas también protege contra las verrugas genitales y el cáncer anal tanto en las mujeres como en los hombres. Los niños deben ponerse esta vacuna VPH para prevenir el cáncer anal y las verrugas genitales. Las niñas se pueden poner esta vacuna para prevenir el cáncer del cuello del útero, el cáncer anal y las verrugas genitales.

Se ha realizado estudios muy cuidadosos de ambas vacunas contra el VPH y dichos estudios han mostrado que no existe ninguna preocupación grave de seguridad con ellas. Algunos efectos secundarios que se han notificado en estos estudios incluyen dolor en el brazo, en el sitio que se ha puesto la inyección, fiebre, mareos y náusea.

Algunos preadolescentes y adolescentes se pueden desmayar luego de recibir la vacuna contra el VPH o cualquier otra vacuna. Los preadolescentes y los adolescentes se deben sentar o recostar cuando se les pone la vacuna y quedarse así por alrededor de 15 minutos después de recibir la inyección. Esto puede ayudar a prevenir los desmayos o cualquier otra lesión que les podría ocurrir al desmayarse.

Los efectos secundarios graves de la vacuna contra el VPH son raros. Es importante decírle al doctor o el enfermero de su hijo si tiene alguna alergia severa, entre ellas, alergia contra el látex o la levadura. No se recomienda poner la vacuna contra el VPH a las mujeres que están embarazadas.

Los Centros para el Control y la Prevención de Enfermedades (CDC, por sus siglas en inglés), la Academia Estadounidense de Médicos de Familia, la Academia Americana de Pediatría y la Sociedad de Salud y Medicina para Adolescentes recomiendan vacunas contra el VPH.

¿Cómo puedo obtener ayuda para pagar por estas vacunas?
El programa de Vacunas para Niños (VFC, por sus siglas en inglés) proporciona vacunas para niños de hasta 18 años que no tengan seguro, que cumplan con los requisitos para recibir Medicaid o que sean indioamericanos o nativos de Alaska. Puede averiguar más sobre el programa VFC en Internet en www.cdc.gov/spanish/especialesCDC/ProgramaVacunas.

¿Dónde puedo obtener más información?
Para obtener más información sobre las vacunas HPV y las demás vacunas para los preadolescentes y los adolescentes hable con el médico o el enfermero de su hijo. Usted también puede obtener más información disponible en el sitio web “Vacunas para Preadolescentes y Adolescentes” de los CDC en la siguiente dirección: http://www.cdc.gov/spanish/especialesCDC_VacunasPreadolescentes/.
Cómo padres, ustedes hacen todo lo posible para proteger la salud de sus hijos en el presente y el futuro. En la actualidad, existe un arma poderosa para prevenir diferentes tipos de cáncer en nuestros hijos: la vacuna contra el VPH.

VPH y cáncer

VPH son las iniciales de virus del papiloma humano, un virus común. En los Estados Unidos, distintos tipos de cáncer relacionados con el VPH afectan aproximadamente a 17,500 mujeres y 9,300 hombres cada año. Estos tipos de cáncer se podrían prevenir con vacunas. En hombres y mujeres, el VPH puede causar cáncer de ano y cáncer de boca y garganta (de orofaringe). También puede causar cáncer de cuello de útero, vulva y vagina en mujeres y cáncer de pene en hombres.

En el caso de las mujeres, hay disponible pruebas para detectar la mayoría de los cánceres de cuello de útero con un examen de Papanicolaou. Lamentablemente, no existe una prueba de detección de rutina para otros cánceres relacionados con el VPH que afectan a mujeres y hombres. Estos cánceres pueden causar dolor, sufrimiento e incluso la muerte. Por eso es tan importante una vacuna que prevenga la mayoría de estos tipos de cáncer.

Más información acerca del VPH

El VPH es un virus que se transmite de una persona a otra durante el contacto sexual de piel con piel, incluidas las relaciones sexuales vaginales, orales y anales. El VPH es muy común en personas que se encuentran en los últimos años de la adolescencia y a principios de los 20. Casi todas las personas sexualmente activas tendrán el VPH en algún momento de sus vidas aunque la mayoría nunca lo sabrá.

La mayoría de las veces, el cuerpo combate naturalmente el VPH antes de que cause problemas de salud. Pero en algunos casos, el cuerpo no lo combate y el VPH puede causar problemas de salud, como cáncer y verrugas genitales. Las verrugas genitales no son una enfermedad que ponga en riesgo la vida, pero pueden causar estrés emocional y el tratamiento puede ser muy incómodo. En los Estados Unidos, aproximadamente 1 de 100 adultos sexualmente activos tienen verrugas genitales en algún momento.

Se recomienda la vacuna contra el VPH en preadolescentes de entre 11 y 12 años de edad

También se recomienda para niñas de 13 a 26 años de edad y para niños de 13 a 21 años de edad, que no hayan recibido la vacuna. Por lo tanto, si su hijo o hija no ha comenzado o finalizado la serie de vacunas contra el VPH, no es demasiado tarde. Consulte a su médico sobre cómo obtenerlas ahora.

Hay disponibles dos vacunas, Cervarix y Gardasil, para prevenir los tipos de VPH que causan la mayoría de los cánceres de cuello de útero y de ano. Una de las vacunas contra el VPH, Gardasil, también previene el cáncer de vulva y vagina en mujeres y las verrugas genitales en hombres y mujeres. Solo Gardasil ha sido probado y autorizado para usarse en varones. Ambas vacunas se administran en una serie de tres dosis durante seis meses. La mejor manera de recordar que su hijo debe recibir las tres vacunas es realizar una cita para la segunda y la tercera vacuna antes de salir del consultorio del médico después de la primera vacuna.

¿Es segura la vacuna contra el VPH?

Sí. Las dos vacunas contra el VPH han sido estudiadas en decenas de miles de personas alrededor del mundo. Se han distribuido más de 57 millones de dosis hasta la fecha y no ha habido problemas de seguridad graves. Los Centros para el Control y la Prevención de Enfermedades (CDC, por sus siglas en inglés) y la Administración de Alimentos y Fármacos (FDA, por sus siglas en inglés) continúan controlando la seguridad de las vacunas. Estos estudios siguen demostrando que las vacunas contra el VPH son seguras. Los efectos adversos más comunes que se informan son leves. Entre ellos se...
su hijo pueda recibir la vacuna. Es una buena idea que su hijo se siente o se recueste cuando le den la vacuna y por 15 minutos después de recibir la vacuna para evitar que se desmaye y sufra lesiones que podrían producirse al desmayarse. La vacuna contra el VPH se puede administrar de manera segura al mismo tiempo que las otras vacunas recomendadas, incluidas las vacunas Tdap, antimeningocócica y antigripal.

Ayuda para pagar las vacunas

El Programa Vacunas para Niños (VFC, por sus siglas en inglés) proporciona vacunas para niños menores de 19 años de edad que no reciben suficiente seguro, no tienen seguro médico, son elegibles para Medicaid o son indígenas americanos o nativos de Alaska. Para obtener más información sobre el programa VFC, visite http://www.cdc.gov/spanish/especialesCDC/ProgramaVacunas/

Aunque usted tenga seguro o su hijo sea elegible para el VFC, algunos consultorios pueden cobrarle también un cargo por administrar las vacunas.

La historia de Jacquelyn “Yo estaba sana y tuve cáncer de cuello de útero”.

Al final de mis 20 años y principios de mis 30, antes de que naciera mi hija, tuve algunos exámenes de Papanicolaou anormales y me hicieron pruebas adicionales. Me dieron que tenía el tipo de VPH que puede causar cáncer y displasia leve.

Durante tres años más, mis pruebas fueron normales. Pero cuando me realizaron el primer examen de Papanicolaou después de que naciera mi hijo, me dijeron que necesitaban realizar una biopsia. Los resultados dieron que era cáncer y mi médico me envió a un oncólogo. Afortunadamente, el cáncer estaba en un estado temprano. Los ganglios linfáticos estaban limpios y no necesitaba radiación. Pero debían realizarme una histerectomía total.

Mi marido y yo hemos estado juntos por 15 años y planeábamos tener más hijos. Estamos tan agradecidos por nuestros dos hermosos hijos, pero esperábamos tener más, lo que no sucederá ahora.

¿Qué sucede con los varones?

Una de las vacunas, Gardasil, es para varones también. Esta vacuna puede ayudarles a los varones a evitar infecciones con los tipos de VPH que pueden causar cánceres de la boca/garganta, el pene, y el ano. Esta vacuna también ayuda a prevenir las verrugas genitales. La vacunación contra el VPH en hombres también puede beneficiar a las mujeres al reducir el contagio de los virus de VPH. Para obtener más información sobre el VPH y la vacuna contra el VPH, visite http://www.cdc.gov/spanish/especialesCDC/VacunaVPH/

Para obtener más información sobre las vacunas recomendadas para preadolescentes y adolescentes, llame al: 800-CDC-INFO (800-232-4636)

http://www.cdc.gov/spanish/especialesCDC/VacunasPreadolescentes/
o http://www.cdc.gov/vaccines/teens (para más información en inglés)
What Parents Should Know About HPV Vaccine Safety and Effectiveness

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
There are two vaccines licensed by the Food and Drug Administration (FDA) and recommended by CDC to protect against HPV-related illness. 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 continually 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
One HPV vaccine (Gardasil) is recommended for boys. This vaccine 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 not insured, Medicaid-eligible, American Indian or Alaska Native. You can find out more about the VFC program by going online to www.cdc.gov and typing VFC in the search box.
Tips and Time-savers for Talking with Parents about HPV Vaccine

Recommend the HPV vaccine series the same way you recommend the other adolescent vaccines. For example, you can say “Your child needs these shots today,” and name all of the vaccines recommended for the child’s age.

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!
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 disease 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 around 12,000 new cervical cancer cases diagnosed annually, and 4,000 women die from cervical cancer every year. Men are affected too. Around 7,000 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.
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 cervical cancer. In some cases, the body fights off the virus naturally. In cases where the virus cannot be fought off naturally, the body is at risk for serious complications, including cancer.

What is HPV vaccine?

There are two HPV vaccines licensed by the Food and Drug Administration (FDA) and recommended by CDC: Cervarix and Gardasil. Both vaccines protect against cervical cancers in women. One vaccine, Gardasil, also protects against genital warts and cancers of the anus, vagina, and vulva. Both vaccines are available for females. Only Gardasil is available for males. HPV vaccines are given in three doses over six months; it is important to get all three doses to get the best protection.

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

Routine vaccination with three doses of HPV vaccine is recommended for all 11- and 12-year-old boys and girls. The vaccines can be given as early as 9 years of age. If your son or daughter did not receive the three 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 your daughter can be given the vaccine through the age of 26. 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 three 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 vaccines have 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. Both HPV vaccines have 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, these vaccines are 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.

Are HPV vaccines effective?

The vaccines have been shown to be highly effective in protecting against the HPV types targeted by the vaccines. 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

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


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


CDC. National Center for Immunization and Respiratory Diseases. HPV Vaccine-Questions and Answers. www.cdc.gov/vaccines/vpd-vac/hpv/vac-faqs.htm

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


Related press release: www.cdc.gov/media/releases/2013/p0619-hpv-vaccinations.html

Immunization Action Coalition

St. Paul, Minnesota • 651-647-9009 • www.vaccineinformation.org • www.immunize.org

www.immunize.org/catg.d/p4250.pdf • Item #P4250 (11/13)
How common is HPV in the United States?
HPV is the most common sexually transmitted infection in the United States. About 79 million Americans are currently infected with HPV. About 14 million people become newly infected each year. HPV is so common that most sexually active men and women will get at least one type of HPV at some point in their lives.

An estimated 29,600 HPV-associated cancers occur annually in the U.S., including an estimated 9,300 HPV-associated cancers in males. Of these HPV-associated cancers approximately 64% are caused by HPV types 16 and 18, which are included in all three HPV vaccines available in the United States and about 10% are caused by the 5 HPV types also included in Gardasil 9.

How does HPV spread?
HPV is spread through contact with infected skin, usually through sexual contact. Most infected people have no symptoms and are unaware they are infected and can transmit the virus to a sex partner. Rarely, a pregnant woman passes HPV to her baby during vaginal delivery.

What are the symptoms of HPV?
Most people who become infected with HPV have no symptoms. Some people develop visible genital warts, or have pre-cancerous changes in the cervix, vulva, anus, or penis.

Genital warts usually appear as soft, moist, pink, or flesh-colored swellings, usually in the genital area. They can be raised or flat, single or multiple, small or large, and sometimes cauliflower shaped. They can appear on the vulva, in or around the vagina or anus, on the cervix, and on the penis, scrotum, groin, or thigh. After sexual contact with an infected person, warts may appear within weeks or months, or not at all.

How serious is HPV?
Most HPV infections don’t cause any symptoms and eventually go away, as the body's own defense system clears the virus. Women with short-term HPV infections may develop mild Pap test abnormalities that go away with time.

A small percentage of people infected with HPV develop persistent (chronic) HPV infection. Women with persistent high-risk HPV infections are at greatest risk for developing cervical cancer precursor lesions (abnormal cells on the lining of the cervix) and cervical cancer. (See next question.)

What are possible complications from HPV?
Cancer is the most serious possible complication from HPV infection. Persistent infection with high-risk types of HPV is associated with almost all cervical cancers. The American Cancer Society (ACS) estimates that in 2015, approximately 12,900 new cases of invasive cervical cancer will occur in the U.S. and about 4,100 women will die from the disease. Worldwide, cervical cancer is the second most common cancer in women; it is estimated to cause over 470,000 new cases and 233,000 deaths each year.

Persistent infection with high-risk types of HPV is also associated with cancers of the vulva, vagina, penis, and anus. For example, ACS estimates that this year there will be about 1,820 new cases of penile cancer in the U.S. and 310 men will die. Genital HPV infection with low-risk types of HPV is associated with genital warts in men and women. About 1% of sexually active adults in the U.S. have visible genital warts at any point in time. It is estimated that approximately 360,000 cases of genital warts occur each year in the U.S. among sexually active people.

Occasionally, low-risk HPV infections can be transmitted during birth, resulting in respiratory tract warts in infants and children.

How is HPV infection diagnosed?
Genital warts in men and women are diagnosed by visual inspection.

Most women are diagnosed with HPV infection on the basis of abnormal Pap tests. Also, a specific test is available to detect HPV DNA in women. The test may be used in women with mild Pap test abnormalities or in women more than age 30 years at the time of Pap testing. In April 2014 the U.S. Food and Drug Administration approved the first HPV DNA test for women.
age 25 years and older that can be used alone to help a health care professional assess the need for additional diagnostic testing for cervical cancer. The test also can provide information about the patient’s risk for developing cervical cancer in the future.

No HPV tests are available for men.

Can genital HPV infection be cured?
There is no cure for HPV infection, although the immune system usually eliminates the virus from the body. Approximately 90% of women with HPV infection become HPV-negative within two years. However, a small percentage of infected people remain infected for many years, which may result in genital warts or cancer.

There are treatments for the health problems that HPV can cause, such as genital warts, cervical cell changes, and cancers of the cervix, vulva, vagina, and anus.

Visible genital warts can be removed by medications the patient applies, or by treatments performed by a healthcare provider. No one treatment is best. Warts might return, especially in the first 3 months after treatment. It is not known whether treatment of genital warts will reduce the chance of passing the virus on to a sex partner. If left untreated, genital warts may go away, remain unchanged, or increase in size or number.

How can people reduce their risk for acquiring genital HPV infection?
The surest way to eliminate risk for genital HPV infection is to refrain from any genital contact with another individual.

For people who are sexually active, a long-term, mutually monogamous relationship with an uninfected partner is the strategy most likely to prevent future genital HPV infections. However, it is difficult to determine whether a partner who has been sexually active with another partner in the past is currently infected.

It is not known how much protection a condom provides against HPV, since skin that is not covered by a condom can be exposed to the virus. However, condoms may reduce the risk of genital warts and cervical cancer. People can also reduce their risk by getting the HPV vaccine.

When were the HPV vaccines licensed?
The first HPV vaccine (Gardasil, Merck) was licensed for females in 2006. Gardasil protects against four HPV types: 16, 18, 6, and 11. About 70% of cervical cancers are caused by HPV types 16 and 18, and more than 90% of genital warts are associated with HPV types 6 and 11. In 2009, Gardasil was licensed for use in males. In 2009, a second HPV vaccine was licensed (Cervarix, GlaxoSmithKline) for use in females. Cervarix protects against HPV types 16 and 18. In 2014, a new version of Gardasil was licensed. This vaccine, called Gardasil 9, protects against the four HPV types included in the original Gardasil as well as 5 additional cancer-causing HPV types. These 5 additional types account for about 10% of all HPV-associated cancer in the United States (14% of HPV-associated cancers in females and 4% in males). Both versions of Gardasil will be available in the United States through 2015.

What kind of vaccine is it?
HPV vaccine is an inactivated (not live) vaccine.

How is this vaccine given?
This vaccine is given as an injection in the deltoid muscle of the arm.

Who should get this vaccine?
The CDC’s Advisory Committee on Immunization Practices (ACIP) recommends routine vaccination of boys and girls at age 11 or 12 years with catch-up vaccination for females through age 26 years, and for males through age 21 years; males age 22 through 26 years may be vaccinated. In addition, vaccination is recommended for men age 22 through 26 years who have sex with men or are immunocompromised as a result of disease (including HIV) or medication. The vaccination series can also be started as young as age 9 years, at the clinician’s discretion. Females can receive either Gardasil, Gardasil 9, or Cervarix. Males should receive only Gardasil or Gardasil 9, because Cervarix is not approved by the FDA for males.

How many doses are needed and on what schedule?
The schedule for all three HPV vaccines consists of three injections over a six-month period. The second dose should be given one to two months after the first dose and the third dose should be given six months after the first dose and at least 12 weeks after the second dose. The vaccine can be administered at the same visit as other needed vaccines.

The vaccine provides the best protection when given before onset of sexual activity. However, people who are sexually active also may benefit from vaccination. People who have not been infected with any vaccine HPV type would receive the full benefit of vaccination. Those who already have been infected with one or more HPV types...
would still get protection from the vaccine types they have not acquired. HPV vaccine can be given to females who have had an abnormal Pap test or genital warts. However, the vaccine will not have any helpful effect on existing Pap test abnormalities, HPV infection, or genital warts (that is, the vaccine is not a treatment for HPV infection or HPV-related disease).

Why is HPV vaccine licensed for use in people as young as 9 years of age?
This is because the vaccine is most effective in young people who have not yet been infected by any of the HPV types included in the vaccine so that they will receive the full benefits of the vaccine.

Why are HPV vaccines not licensed for adults older than 26 years?
HPV vaccines have been tested in people age 9 through 26 years. Although Gardasil has been tested in women age 27 through 45 years and found to be safe, data on the effectiveness of the vaccine in this age group was inconclusive, mainly because many of the participants in the trial had already been infected with HPV types included in the vaccine. The FDA will consider licensing the vaccines for older people if additional research shows that it is effective for them.

Should individuals be screened before getting vaccinated?
No. Girls/women do not need to get an HPV test or Pap test to find out if they should get the vaccine.

How effective are the HPV vaccines?
All three HPV vaccines are highly effective in preventing infection with types of HPV included in the vaccines. Studies have shown that all three vaccines prevent nearly 100 percent of the precancerous cervical cell changes caused by the types of HPV included in the vaccine for more than 8 years after vaccination. Among males, efficacy of Gardasil for prevention of genital warts was 89% and efficacy for the prevention of precancerous lesions of the anus was 78%.

How long does vaccine protection last? Will a booster shot be needed?
The length of immunity is usually not known when a vaccine is first introduced. So far, studies have shown people to still be protected after more than 8 years. More research is being done to find out how long protection will last, and if a booster dose will eventually be needed.

Who recommends HPV vaccine?
The Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists (ACOG) all recommend routine HPV vaccination of boys and girls at 11 or 12 years of age.

What side effects have been reported from HPV vaccine?
Mild problems may occur with HPV vaccine, including pain, redness, swelling, and itching at the injection site. These problems do not last long and go away on their own. Fainting has been reported among adolescents who receive HPV vaccine (and other recommended vaccines as well). It’s best for the patient to sit during vaccine administration and remain seated for 15–20 minutes after receiving the vaccine.

Like all vaccines, HPV vaccine will be monitored for more serious or unusual side effects.

Can HPV vaccine cause HPV?
No. HPV vaccines are inactivated so they cannot cause disease-like symptoms or HPV disease.

We’ve heard stories in the media lately about severe reactions to HPV vaccine. Is there any substance to these stories?
No. While serious events, including death and Guillain-Barre syndrome, have been reported among women who had recently received HPV vaccine, CDC and FDA follow-up on these reports has not found that the events occurred more frequently among vaccinees than among the general population, and has detected no pattern that would indicate an association with the vaccine. You can find complete information on this and other vaccine safety issues at www.cdc.gov/vaccinesafety/index.html.

Do women still need to get a Pap test if they’ve been vaccinated against HPV?
Yes. Women should continue to receive regular cervical cancer screening for three reasons. First, the vaccine does not provide protection against all types of HPV that cause cervical cancer. Second, women may not receive the full benefits of the vaccine if they do not complete the vaccine series. Third, women may not receive the full benefits of the vaccine if they were infected with HPV before receiving the vaccine.

continued on the next page
In addition, vaccinated people should continue to practice protective sexual behaviors since the vaccine will not prevent all cases of genital warts or other sexually transmitted infections.

**Does the vaccine protect against all types of HPV?**

No. Although there are more than 100 types of human papillomaviruses, only four (HPV 6, 11, 16, and 18) are included in Gardasil, 9 are included in Gardasil 9 (HPV 6, 11, 16, 18, 31, 33, 45, 52 and 58) and only two (HPV 16 and 18) are included in Cervarix. HPV 6 and 11 causes approximately 90% of genital warts. About 25% of HPV-associated cancers are not prevented by the vaccine.

**What if a person doesn't get all of the recommended three doses?**

It is not known how much protection people would get from receiving only one or two doses of the vaccine. For this reason, it is very important to receive all three doses of the vaccine. If there is a gap in the schedule longer than the recommended time, the series should be continued from where it left off – there is no need to restart the series. A person who starts the series before the 27th birthday should complete the series even if he or she is now older than age 26 years.

**Can an HPV vaccine series begun with Cervarix or Gardasil be completed with Gardasil 9?**

Yes. Any HPV vaccine may be used to continue or complete the series for females for protection against HPV 16 and 18. Gardasil or Gardasil 9 may be used to continue or complete the series for males. However, receiving only two doses of Gardasil or Gardasil 9 may provide less protection against genital warts caused by HPV types 6 and 11 than the usual 3 dose series. It is not known how much protection a person will have against the 5 additional HPV types included in Gardasil 9 if the person receives fewer than 3 doses.

**Does CDC recommend revaccination with Gardasil 9 for people who previously received a series of Cervarix or Gardasil?**

CDC has not recommended routine revaccination with Gardasil 9 after a series of Gardasil is safe. Discuss this issue with your healthcare provider to decide if the benefit of immunity against 5 additional oncogenic strains of HPV is worth the time and expense of revaccination.

**Do women and men whose sexual orientation is same-sex need HPV vaccine?**

Yes. HPV vaccine is recommended for females and males regardless of their sexual orientation.

**Who should NOT receive HPV vaccine?**

Anyone who has ever had a life-threatening allergic reaction to any component of HPV vaccine (such as baker’s yeast), or to a previous dose of HPV vaccine, should not get the vaccine. Pregnant women should not get the vaccine. Although the vaccine appears to be safe for both the woman and developing baby, this issue is still being studied. Inadvertently receiving HPV vaccine during pregnancy is not a reason to consider terminating the pregnancy. Patients and healthcare providers should report any exposure to HPV vaccine during pregnancy to the manufacturer of the vaccine, Gardasil at (877) 888-4231, Gardasil 9 at (800) 986-8999, or Cervarix at (888) 825-5249. Breast-feeding women can safely get the vaccine. People who have a moderate or severe acute illness should wait until their condition improves to be vaccinated.

**Is HPV vaccine covered by insurance plans?**

Many health insurance plans cover vaccines recommended for children and adolescents. The Vaccines for Children (VFC) program provides free vaccines to children and adolescents younger than 19 years of age, who are Medicaid-eligible, American Indian, or Alaska Native, uninsured, or receiving care in a Federally Qualified Health Clinic or Rural Health Center. This includes boys as well as girls. For adults, if you’re not certain about your healthcare coverage, contact your health insurance plan for further information. If you don’t have health insurance or if your plan doesn’t cover this vaccine, ask your doctor or your local health department how you can obtain this vaccine.
Protect yourself from **HPV**…

Get vaccinated!

### What is HPV?
Human papillomavirus (HPV) is the most common sexually transmitted disease (STD) in the U.S. HPV can lead to cervical cancer in women, as well as other oral and genital (sex organ) cancers in men and women. HPV also causes genital warts.

### How do you catch it?
HPV is usually spread during sex. You can spread (or get) the virus without knowing it. Sometimes babies become infected from their mothers during birth.

### Is it serious?
Yes. HPV is the main cause of cervical cancer. In the U.S., about 10,000 women get cervical cancer every year, and about 4,000 die from it. HPV can also lead to cancers of the vagina, vulva, penis, anus, throat, and mouth.

### Am I at risk?
If you ever have sex, you are at risk. At least half of sexually active people get infected with HPV at some point in their lives.

### How can I protect myself from HPV?
Vaccination is the best way to prevent HPV infection. The vaccine is most effective if you get it before becoming sexually active. However, if you are already sexually active, you should still get vaccinated.

Both girls and boys should get 3 doses of HPV vaccine, starting at around age 11–12 years. Older teens and young adults should also start or complete their HPV vaccine series.

For more information, visit [www.vaccineinformation.org](http://www.vaccineinformation.org)

Technical content reviewed by the Centers for Disease Control and Prevention

1573 Selby Avenue • Saint Paul, Minnesota • [www.immunize.org](http://www.immunize.org)

For other vaccine handouts in this series, visit [www.immunize.org/vaccine-summaries](http://www.immunize.org/vaccine-summaries)