

# HPV VACCINE

Human papillomavirus (HPV) is a common group of viruses that infect skin. In the U.S., HPV infections are estimated to cause about 34,800 cases of cancer. HPV vaccination can prevent over 90% of these cancers from ever developing.

The HPV vaccine available in the U.S., Gardasil-9, has been approved for the prevention of cervical, anal, vulvar and vaginal cancers and pre-cancers. The vaccine protects against seven types of “high-risk” HPV that are associated with cancer. It also protects against two “low-risk” types associated with genital warts.

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## HPV-Related Cancer

HPV can lead to cervical cancer. In a few people, high-risk HPV and related cervical cell changes last for many years and can lead to cancer if they aren't found. Being vaccinated against HPV can lower the chance a person with a cervix will develop cervical cancer.

Some types of HPV can also cause cancers of the penis, anus, or oropharynx (back of the throat, including the base of the tongue and tonsils).

## Who Should Get the Vaccine

While the recommended age for HPV vaccine is 11-12, vaccination can start as early as age 9. Why so young? The vaccine produces a stronger immune response when taken during the preteen years, and fewer shots are required—between ages 9 and 14, only two doses are needed, with the second dose given 6-12 months following the first. Also, the vaccine is designed to prevent infection, so vaccination is recommended at a young age *before* kids are exposed to the virus.

## OVERVIEW

- HPV is very common. Most sexually active people have it at some point in their lives.
- HPV infection is usually harmless and the body most often clears it in a short time, but some types can lead to cancer if untreated.
- HPV vaccines help prevent infection with both high-risk HPV types that can lead to cervical cancer and low risk types that cause genital warts.

For older teens and adults who start the series later, starting at age 15, three doses are required. In this case, the second shot should be given one to two months after the first, and the third shot should be given six months after the first. The goal is to get all three shots within six months.

In late 2018, the FDA approved use of the Gardasil-9 HPV vaccine in males and females ages 27-45, expanding the previous indication that covered people ages 9-26. Ideally, people should complete all doses of the vaccine before they become sexually active. However, adults over 27 now have the option of receiving the vaccine and should talk to their healthcare provider to make the decision about vaccination.

## Vaccine Safety

Over 120 million doses of the HPV vaccine have been distributed since the vaccine was licensed, and data has shown it to be safe and well tolerated. There have been some mild to moderate reactions reported from people who have received the vaccines, the most common being pain, redness, and swelling around the injection site. Other mild reactions reported include fever, headache, fatigue, nausea and vomiting. Some people have experienced fainting as well. Therefore, your healthcare provider will/should observe you for about 15 minutes after each dose of the vaccine.

As with any vaccine or medication, there is always a possible of a serious problem, such allergic reaction. However, these reactions are rare. The HPV vaccine also continues to be monitored for any safety concerns.

## Vaccine Effectiveness

Rates of infection with strains of HPV covered by the vaccines have dropped significantly since the vaccine was introduced. Researchers comparing HPV infections rates among females ages 14-19 in years before (2003-2006) and after (2007-2010) the first HPV vaccine became available found a 56% drop in infection rates for the HPV types covered by the vaccine. As more young people receive the vaccine, these rates can continue to drop. As of 2017, almost half (49 percent) of adolescents in the United States were up to date on the HPV vaccine, and 66 percent of adolescents ages 13-17 years received the first dose to start the vaccine series).

## Cervical Cancer Screening After Vaccination

HPV vaccines will not eliminate all HPV or cervical cancer. The vaccines prevent the HPV types that cause 70% of cervical cancer cases, but there are other types of HPV (not covered in the vaccine) that could cause disease. Cisgender women and transgender men who still have a cervix should be screened as recommended, with Pap and/or HPV tests.

## Insurance Coverage

The vast majority of health insurance plans report including most or all of the ACIP recommended vaccines in their benefits for children adolescents and adults. For those that qualify, HPV vaccines are also available through the federal Vaccines for Children (VFC) program.

## Does HPV vaccination lead to an increase in sexual activity?

No. While some parents have expressed a concern about this, several studies have shown this not to be the case. While many studies relied upon self-reported behavior about sexual activity, a 2012 study published in the journal, *Pediatrics*, instead looked at medical data, including pregnancy, STI testing or diagnosis, and contraceptive counseling as evidence of sexually activity. The researchers found that HPV vaccination in the recommended ages was not associated with increased sexual activity.

### Learn More

Learn more about the HPV vaccine from the American Sexual Health Association. a trusted nonprofit organization that has advocated on behalf of those at risk for STIs for more than a century. Our websites include:

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

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

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

[www.nccc-online.org](http://www.nccc-online.org)

[www.askexpertsnow.com](http://www.askexpertsnow.com)

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

