

HPV 'cures' are popping up online, but here's the truth about the STI and its vaccine

USA TODAY | [Eduardo Cuevas](#)

On TikTok, there are videos where women talk directly to the camera. They promote the "natural remedies" they say cleared their infections and discuss "holistic healing" recommendations. On Facebook, moms debate if the vaccine could harm their kids' reproductive health. And in tweets, people share claims about adverse reactions to the shot.

They're all talking about HPV, or human papillomavirus. It's the most common sexually transmitted infection, but it's also preventable thanks to the vaccine [Gardasil-9](#). Yet online, misinformation runs rampant about the [vaccine, which is also known for historic drops in cancer](#).

The goal is to "inoculate" people to misinformation with facts around the vaccine, said Dannell Boatman, an assistant professor at West Virginia University School of Medicine. The HPV vaccine has the most misinformation of any vaccine, research suggests.

"We know that it affects health behavior," Boatman, who [studied HPV vaccine misinformation](#) across Facebook, TikTok and X, told USA TODAY. "We have to take the time to understand the specific messages, narratives and the conversations that are going on."

Here's what to know about HPV, the vaccine and the claims you may encounter as you scroll through your feeds.



Misinformation runs rampant online about human papillomavirus and the HPV vaccine. Here's what to know about the vaccine credited with historic drops in cancer, including cervical cancer. *YURI CORTEZ*

What is HPV?

The [Centers for Disease Control and Prevention](#) estimates 13 million people, including teens, become infected with HPV annually. Most people will get HPV, but the vast majority of people show no signs or symptoms.

Our immune systems tend to get rid of infections before symptoms appear. But HPV can present as warts. They can be on genitals, hands or fingers, the heels of feet, or on children's faces, beard areas for men and legs for women, according to the [Mayo Clinic](#).

The virus spreads through skin contact, not through bodily fluids, according to the [University of Washington Medicine](#). The virus can only live in certain cells on the surface of the skin or soft tissues in the body's canals and organs, the American Cancer Society said.

About 40 of more than 200 HPV strains can spread through anal, oral or vaginal sex. And a dozen of all strains cause cancer, according to the [National Cancer Institute](#). These are most associated with cervical, vaginal, penile, anal and head and neck cancers.

Each year, HPV causes approximately 36,000 cases of cancer in men and women, CDC said. can help prevent cancer, and the vaccine aims to stop cancer before it can metastasize. [Routine screening](#) can help prevent cancer before it can metastasize, and the vaccine aims to stop the infection that causes it.

What is the HPV vaccine?

The vaccine targets viruses that most often cause cancer. It's for both boys and girls.

The vaccine distributed in the U.S., [Gardasil-9](#), targets nine types of HPV. Vaccination can prevent more than 90% of cancers caused by HPV.

Since the prior Gardasil 4 vaccine was introduced in 2006, infections of HPV strains that cause most cancers and genital warts have dropped 88% in teenage girls and 81% in young adult women, CDC said. Between 2012 and 2019, cervical cancer incidence among women ages 20 to 24 dropped by 65%, an [American Cancer Society report](#) found. In addition, fewer teens and young adults get genital warts as a result of vaccination.

"The vaccine is well known to be very, very safe and very, very effective, especially against the cancer-causing strains of HPV," said Dr. Marc Grella, a pediatrician at MassGeneral Hospital for Children.

More than 135 million vaccines have been distributed in the U.S., CDC said.

Infertility myth spreads online

[Vaccines are recommended](#) for most people starting before their 15th birthday in two doses, with doses given 6 to 12 months apart, CDC said. A first dose can be started at age 9.

Research suggests earlier vaccination around 9 years old provides longer immunity, Grella said. It also helps spread out routine childhood vaccines. Adults can get the vaccine typically in three doses.

On Facebook, a common myth is that it leads to infertility among children. Grella often hears this in his exam room, too. But this is not the case.

What can affect fertility, however, is cancer that develops from an HPV infection from one of the dozen cancerous strains of the virus, according to Eileen Lind, a pediatric oncology nurse practitioner at the Dana-Faber Cancer Institute.



Vaccines are recommended for most people starting before their 15th birthday in two doses, but children can get it starting at age 9. Research suggests a first dose around 9 years old provides longer immunity. *Damien Meyer*

Although many people have no side effects from the vaccine, some people have a sore arm from the shot, [CDC](#) said.

With any vaccine, some people can have dizziness or fainting, and it's more common in adolescents, Grella said. Adolescents are more likely to have anxiety before the vaccine, feel relieved immediately after and their heart rate increases, sometimes causing them to faint.

If it's so safe, why are fewer young people getting vaccinated?

As online videos touting holistic HPV treatment amass hundreds of thousands of views, one has to wonder why this type of content even exists. After all there is a safe, effective vaccine. But some people aren't rejecting it.

[CDC data](#) published in August found drops in HPV vaccination coverage by age 13. Grella said causes behind this are hard to explain, though the COVID-19 pandemic likely delayed regular visits to the doctor. An HPV vaccine — compared to other immunizations — may not fall as high on the list of priority protections, despite its benefits.

Plus, online discussion of several lawsuits has gained traction.

Ongoing lawsuits allege Merck didn't fully disclose severe and long-term side effects. A condition plaintiffs allege they received from the vaccine is [postural orthostatic tachycardia syndrome \(POTS\)](#). The chronic disorder presents as dizziness or fainting after reduced blood volume returns to the heart after a person stands up, followed by rapid increases in heartbeat. It mostly affects women ages 15 to 50.

The federal [Vaccine Adverse Event Reporting System](#) has received 342 reports of POTS, though this doesn't mean vaccines caused the condition. A subsequent federal report found POTS is rarely reported following vaccination, and ongoing monitoring has not detected safety concerns related to HPV vaccination, CDC said in an email.

In a statement, Merck said regulatory agencies have continued to conclude HPV vaccines are safe and effective, as have 30 years of research. Clinical trials have included over 70,000 people with up to 14 years of follow-up monitoring after vaccination. Globally, nearly 400 million have some form of vaccination against HPV, Merck said.



Maureen Ellen Russo, left, is pictured with her grandfather. Russo died from cervical cancer at 37 years old in 2006, and her sister, Eileen Lind, founded a nonprofit, Team Maureen, to raise awareness on human papillomavirus (HPV) vaccination to reduce risk of cancer.
PROVIDED: Eileen Lind

And the vaccine can be lifesaving, said Lind, of Dana-Farber. Lind founded the nonprofit, Team Maureen, in honor of her older sister who died in 2006 after a relapse of cervical cancer. Maureen was 37. She left behind two children and her high school sweetheart, Mike.

“There’s things other people can do” to not lose their sibling, Lind said. A vaccine is one of them.