



ALL OF US

AGAINST

HPV

Questions from the SOGC's Facebook Live Events

Questions answered by Dr. Jennifer Blake, Dr. Kim Alexander, Dr. Nancy Durand, and Dr. Dustin Costescu

What is HPV?

The Human papillomavirus (HPV) is the most common sexually transmitted infection in the world. Our lifetime risk of exposure to HPV and having infections is about 80-90%. HPV can follow several different pathways:

- You can become a carrier of HPV and not develop any disease but be able to pass it to a partner.
- You may develop external genital warts.
- You may develop pre-cancers or cancers of various areas in the body, such as the vaginal walls, the vulva, anal area, or cancers of the mouth and throat in addition to the cervix.

The highest risk is in the younger years, but we still have exposures, infection, and disease as we get older. Males have a higher chance of acquiring and carrying HPV and have a higher chance of developing cancers of the mouth and throat. Females are at higher risk of cancers of the genitals, including the vulva, vagina, and cervix. We are all vulnerable to this virus regardless of age or gender.

Abstinence will only protect us from HPV for so long, so we rely on HPV vaccination to prevent infection and the diseases that HPV causes. Vaccination protects against 9 types of HPV, which cause 90% of strains that cause external genital warts and 90% of the strains that cause cancer.

Can you receive the COVID-19 and the HPV vaccine at the same time?

Recently the National Advisory Committee on Immunization (NACI) recommendation was released and stated that co-administration of any vaccine is now acceptable with the COVID-19 vaccine. This includes the flu shot and the HPV shot. It is no longer necessary to wait the two weeks or one month between shots.

How many strains of HPV are there? How many strains does the vaccine protect against?

There are approximately 40 HPV strains that affect the anogenital area, but most of them do not cause disease. The HPV vaccine protects against the 9 most common HPV types which cause 90% of external genitals warts and 90% of invasive cancers.

Where should I go if my child missed their school vaccination due to COVID-19?

School vaccination programs are the **most effective way** to get the HPV vaccine. These programs provide protection to children before they reach the ages where they would most likely be exposed to HPV. It is important that if your child missed their vaccine due to disruptions, to contact your local health unit, school board, or parent teacher association for information on their catch-up programs.

For those who have started the vaccination but have not been able to finish due to COVID-19 disruptions, it's important to know that according to the National Advisory Committee on Immunization (NACI) guidelines it is ok to catch up on your vaccination whenever you are able to do so. We have data that says the vaccination is very effective up to one year without a decrease in effectiveness and even beyond one year.

Each public health unit has their own strategy for catching up school-based vaccine programs. You can check with your local public health unit to learn more about their plan for school-based clinics or catch-up clinics by contacting them or visiting their website.

In many parts of Canada, if you have missed your school vaccines, you are able to catch-up up until the end of high school through your public health unit. There are only a few provinces (Yukon, Northwest Territories, Alberta, Saskatchewan, Manitoba, and New Brunswick) that offer catch up to the age of 26 in Canada.

What do you recommend for parents who are hesitant about the HPV vaccine for their children?

We understand that the primary concern for parents is the safety of their child. Because the vaccine has been rolled out in school programs worldwide, we have great ways to study the results. What we have found after many, many studies that have looked at these interventions, is that the vaccine is extremely safe.

The risk of long-term side effects is virtually none. There is really no sign of above baseline results for any of the disorders that people are worried about.

Shame and worry over sexuality is a huge part of sexual health for a lot of people. We know that getting kids vaccinated for HPV does NOT increase their level of sexual activity.

Most importantly, the vaccine will keep children safe from cancer in the future.

There is a lot of misinformation about HPV and HPV vaccination circulating on the internet and on social media. The best way to learn more about the vaccine and determine if it is right for you or your family is to speak about your concerns with your health care provider. You can also learn more by visiting, hpvinfo.ca.

What if I can't get in to see my doctor due to COVID-19 restrictions?

Pharmacists are allowed to give out any National Advisory Committee on Immunization (NACI) approved vaccination without needing a prescription. You can walk into your local pharmacy and ask for the HPV vaccine and they can administer the vaccine on site.

Your family doctor can send a prescription to the pharmacy if there is a request for it.

If you are vaccinated, can you still get HPV?

Yes, you can still get HPV from a current or future sexual partner, but the infection is usually milder and the chance of disease is lower. The vaccine is effective against 90% of the HPV types that cause disease- not 100%. The vaccine is most effective if you are vaccinated before you are exposed to HPV. For these reasons, you should continue to be screened with pap tests if you are eligible.

What is the age limit for HPV vaccination?

There is no upper age limit for vaccination for anyone. When a product like a vaccine first gets approved (here by Health Canada), Health Canada does not put an age limit on the vaccine because the clinical evidence from the clinical trials only went up to that age. It's not to say that it does not work at the age of 46 or older. After Health Canada approves the vaccine, we then look for the recommendations to our National Advisory Committee on Immunization (NACI). NACI then speaks to us about the recommendations on age groups. NACI felt very strongly that they should not put a hard limit of age 45 for the HPV vaccine. By the NACI recommendation, there is no upper age limit for males or females. The Society of Gynaecological Oncology of Canada (GOC) recommends that all Canadians are vaccinated, regardless of age.

Is HPV a "women's disease" or can men get HPV too?

HPV is gender neutral, and we all must be aware of the impact that it's having. Anyone who has a throat and anus, as well as anyone with a cervix are at risk for HPV and HPV related cancers.

The most common HPV caused cancer right now in Canada is throat, tongue, and tonsil cancer and this affects ANYONE.

We have the ability to do screening tests for cervical cancer through pap testing and HPV testing, but we don't currently have any effective screening tests for head and neck cancers or anal cancer. Our only real tool is prevention and that is why vaccination is so important.

What are warning signs of HPV related cancers?

For most of the pre-cancerous changes, there are no symptoms. That is why Pap or HPV testing is so important.

Things to look for when dealing with the development of cancers are:

- Abnormal vaginal bleeding that is unfamiliar (especially if that bleeding is brought on by intercourse)

- Pelvic pain (especially that is not explained by your normal menstrual complaints)
- Signs of any sort of mass, felt by you or a partner.
- Any kind of mass (especially at the back of the throat)
- Painless swelling in the neck (painless enlarged lymph node)
- Rectal or anal bleeding

The above signs are especially serious if you are overdue for screening or have a history of abnormal pap tests.

Cancers of the mouth and throat in males are becoming more common than cervical cancer. Any kind of mass in the back of the throat or painless swelling in the neck should be investigated.

Dentists and dental hygienists will often do a screening of the mouth during dental appointments. You can also ask them about anything you are concerned about in the neck or mouth.

Will we be able to eliminate HPV related cancers?

Yes! Roughly 5 years ago, Australia created a model based on their population's rates of vaccination and rate of drop in HPV infection after their quick and effective distribution of the HPV vaccine, and what they have announced is that they will have eradicated cervical cancer by 2028.

One of the key factors in this process is that they extended their catch-up program to the age of 26, which we have not done across all of Canada. In many parts of Canada, if you have missed your school vaccines, you are able to catch-up until the end of high school through your public health unit. There are only a few provinces (Yukon, Northwest Territories, Alberta, Saskatchewan, Manitoba, and New Brunswick) that offer catch up to the age of 26 in Canada.

Are there side effects associated with the HPV vaccine?

A sore arm is the main side effect, just like with most vaccines that you receive. Mild headaches and slight fatigue have occasionally been reported during trials.

Most side effects that people worry about like chronic fatigue syndromes or pain syndromes are not associated with the HPV vaccine.

What if I have missed my pap test?

Regular pap tests have been a challenge during the pandemic and many people have missed their cervical screening. If you are due or overdue for your cervical screening, reach out to your provider to schedule a pap. If you wait 4 or more years between pap tests, there is a higher risk for abnormalities of the cervix.

Why are pap tests three years apart instead of every year?

It is based on the evidence that HPV develops into cervical cancers very slowly. The interval for the pap test that has been proven to be safe is three years to detect pre-cancerous cells and provide treatment to prevent cancer. However, with the pap test, you should not go longer than three years between pap tests.

In some provinces, HPV testing is replacing pap smears. The test is done in a similar way but is more sensitive to HPV. A negative HPV test means a 99% chance of not developing a high-grade pre-cancer or cervical cancer in five years, so screening will be even less often.

Should I ask for the HPV test instead of the pap test? And what about self-testing?

In Canada, in the next few years, we will move to HPV being the first test done on all people with cervixes. Those who test positive will then have the pap test done to determine if abnormal cells are present. Having a positive HPV test does not equal disease; it just means that you have the virus. Having the virus is very common in young people and

will often go away by itself. A pap test will then tell you if you have any abnormal cells that would require you to take action. Many countries have already adopted this system.

There are self-testing kits for HPV being developed. Unfortunately, self-testing is not yet approved in Canada. It is a great method of alternate screening for cultures and groups who are not comfortable with traditional pap tests.

Does provincial medical coverage cover the vaccine? The vaccine's financial cost can be a big deterrent.

Provincial medical plans do not cover the cost of HPV vaccination outside the school-based programs. The best time to get vaccinated is in school, and the next best time to get vaccinated is NOW. Some provinces cover HPV vaccination in "high-risk" groups where the risk of cancer is higher, including men who have sex with men, and those living with HIV. There are age restrictions in some provinces and territories for these special groups receiving funded HPV vaccines. It is best to check with your provincial or territorial government website describing HPV vaccination.

Financial barriers are very real, but perhaps the bigger barrier is awareness. The greatest benefit from vaccination comes from vaccinating early. A good start would be to cover the cost of vaccine up to the age of 26, or through public pharmacare plans.

Patients are often surprised to learn they have coverage for HPV vaccination through their employer-sponsored or third-party plans. Those that have insurance should check. About 40% of private insurance companies cover the cost of HPV vaccines. Many plans offer employees flex dollars or Health Spending Accounts – these funds can be used over 2 calendar years to help cover the cost of 3 vaccine doses. If you do not have insurance, cost can be dependent on health unit.

How long does the vaccine last in protecting me from HPV? Will I need a booster?

HPV vaccination is long-lasting and does not require booster dosing. Studies have shown that no breakthroughs have been detected after full vaccination.

If you were vaccinated before 2015 then you got the original Gardasil vaccine, which protected against 4 types of HPV. You can consider being vaccinated with Gardasil 9 - the added benefit is that the Gardasil 9 vaccine covers 5 additional high-risk types of HPV. These 5 types cause an additional 20% of cervical cancers.

Is there a booster for Gardasil 9 for people who received Gardasil 4 instead of having to do the full series again?

Because the vaccine contains five new strains, a booster is not enough to protect you from those types. You need 3 full doses of Gardasil 9, if over age 14, to be fully protected against the 5 extra types in Gardasil 9, even if you have had the 4-type vaccine. One study did confirm that one dose is not enough.

One of the problems in determining “effectiveness” is related to risk exposure. Having a higher number of sexual partners increases your risk of acquiring a new HPV infection, but sex with the same partner can still lead to reinfection in some cases.

If you have already had HPV or abnormal cells, should you still get the HPV vaccine?

Yes! There are several types of HPV. The HPV vaccine protects against the 9 most common HPV types which cause 90% of external genital warts and 90% of invasive cancers. It is helpful to be vaccinated even after a positive HPV test since vaccination can protect you against types you have not been exposed to. Vaccination has also been shown to reduce recurrence (reinfection and return of abnormal paps) even after being treated for an HPV-related disease.

We don't know if vaccination helps clear an existing HPV

infection, but reinfection seems to be an important player in how HPV causes disease, and so reducing reinfection is important.

How can we make sure that our children can get the vaccine? Do our doctors make us aware?

A consent form is sent home to parents in the fall of the year that children get vaccinated. Your local public health office can tell you which grade this will be in your province/territory. Your primary health care provider will also be aware which grade this will be in your region.

If your child was due for HPV vaccination this year, and you have not heard anything, contact your local Public Health office – they will let you know the plan for HPV vaccination in your area.

Many provinces and territories are now looking at ways for those who missed their school doses in 2019-2020 and 2020-2021 school years to be vaccinated through their local public health offices. Each area will look a bit different – in some places public health will offer catch-up clinics, and in other areas they will get doses out to family doctors, nurse practitioners, and pharmacies.

If the 3 vaccine doses are given over a longer period of time or are disrupted, will they still protect you?

While it is best to get the 3 doses over 6 months, the dosing interval can be extended. It is always best to resume as soon as possible to complete the series of 3 shots. At this time, as long as you get three doses in, there is no need for additional booster shots.

Can you get HPV with non-sexual contact? Can you get HPV from a public washroom?

No, you cannot get HPV from sharing towels, from toilet seats or trying on bathing suits. For average-risk people, HPV is by far most likely transmitted through sex.

Is it safe for pregnant people to receive the HPV vaccine?

While it is likely safe to receive the HPV vaccine inadvertently in pregnancy, it is not recommended. You can be vaccinated before pregnancy and after delivery, even when breastfeeding.

If you have had 1 or 2 doses and then become pregnant, you can resume where you left off after you deliver.

If you get a dose of HPV vaccine and then find out you were pregnant when you got the dose, it is not a reason to worry. In large clinical trials of women who were vaccinated without knowing they were pregnant, there were no complications found in either the mother or the baby's health. HPV vaccine is not a live vaccine and does not affect the baby.

Can HPV affect your fertility?

HPV has not been shown to decrease fertility, but HPV related diseases or their treatment can affect fertility. The treatments that are done for cervical pre-cancerous cells can increase the risk for premature labour, especially if a large area must be removed or if several treatments are necessary. In countries with high rates of HPV vaccination, there is a suggestion that preterm birth rates are decreasing; with the success of vaccination, fewer women are developing pre-cancerous changes, and therefore fewer treatments are needed.

Can a doctor tell what type of HPV you have? Cancer causing? Etc.?

The HPV test checks for 14 types of high-risk HPV which can be associated with possible development of cancers. We do not have a test for low-risk types of HPV which can cause external genital warts and some of the mild abnormal cells on pap tests.

Genital warts are usually low-risk strains, and do not necessarily mean you are at higher risk of cervix cancer.

For more information, or answers to questions you may have, please visit HPVinfo.ca

More information:
hpvinfo.ca