

ALL OF US AGAINST HPV

LET'S BANISH CERVICAL
CANCER TO HISTORY



Questions from the Facebook Live March 3, 2021

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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.

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 genital warts and 90% of invasive cancers.

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. 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.

What are some warning signs of cervical cancer?

- 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.
- 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 caused by HPV are becoming common in males. What are some of the signs and symptoms?

- Any kind of mass (especially at the back of the throat)
- Painless swelling in the neck (painless enlarged lymph node)

Cancer 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. HPV is gender neutral and we all have to be aware of the impact that it's having.

How accurate are pap tests?

If you have a negative pap, you have about a 97-98% of not having a precursor (high-grade lesion) to cervical cancer within the next 3 years. 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 get 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 women. 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.

Is the vaccine covered for college-age students?

Many college and university programs have insurance plans which may cover HPV vaccination- you have to check with your plan if it covers it.

As of 2021, Alberta and Yukon are covering the cost of HPV vaccine for all persons up to and including age 26. All provinces/territories also have funding for MSM individuals with different age restrictions depending on the province/territory.

I received the HVP vaccine in grade 7. Now that it is more than ten years later, do I need to get the vaccine again? How long does it last in protecting me from HVP?

HPV vaccination is long-lasting and does not require booster dosing.

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.

If I have received the HPV vaccine, does that mean that I cannot contract HPV, even if I am sexually involved with HPV positive partners? How effective is my level of protection?

HPV vaccination reduces the chance of HPV infection by more than 90% when given up to age 26 and more than 80% when given over age 26. Condoms reduce transmission but do not eliminate all risk.

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 been diagnosed with HPV and then get the vaccine, can you still spread the virus?

Yes, it is still possible to transmit HPV even after vaccination. Some people will clear their infection, and those people are unlikely to pass HPV to another partner. Others will continue to have HPV and be able to pass to a partner.

If you had HPV before and were cleared, should you get the vaccine if you continue to be sexually active with multiple partners?

Yes, whether you have one partner or multiple partners in the future. It is never too late to get the HPV vaccine, even if you have already had HPV.

There are several types of HPV. The HPV vaccine protects against the 9 most common HPV types which cause 90% of external genitals 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.

Can my teenage child get the HPV vaccine now with the COVID-19 Vaccine? How does that work? Isn't that too many vaccines?

In school-based programs, kids receive their HPV vaccine with other vaccines such as Meningitis and Hepatitis B on the same day; this is very common and is allowed.

However, we are continuing to learn more about the COVID-19 vaccine. We recommend that you space out your HPV vaccination by at least two weeks from your COVID-19 vaccination to avoid confusion.

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 and nurse practitioners.

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 trying on bathing suits?

No, you cannot get HPV from sharing towels, from toilet seats or trying on bathing suits. Health care workers can acquire warts from improper cleaning of equipment so best practices are needed in HPV clinics. 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.

What is the treatment if it's in the uterus?

HPV does not appear to affect the uterus. It causes infection in the cervix, vaginal walls, outside vulvar skin, anal area and back of the mouth and throat.

If someone is pregnant with active HPV infection (warts), this generally does not affect the chances of a vaginal birth.

Children can acquire HPV from birth, but this is uncommon. Rarely, children can acquire HPV in the airway (respiratory papillomatosis) but this is very treatable.

Does HPV affect things such as weight gain and energy levels?

HPV infection has not been shown to directly affect weight gain or energy levels. The diagnosis of HPV can cause anxiety and depression, which can then lead to weight changes and change in energy levels. Most patients with HPV cancers have no or minimal symptoms, that's why it's important to get screened regularly.

If you have been diagnosed with a high-risk strain of HPV, where abnormal cells are being observed, do you need to disclose to future sexual partners that you are positive?

Whenever you are wondering about disclosing an infection or any piece of personal information to a sexual partner, ask yourself "would I want to know this information?".

So, for example, would you want to know if your current partner had previous partners with abnormal paps or HPV tests? Would you want to know a partners HPV status given that all adults have an 85% chance of saying yes if they are over 30? Would knowing someone's HPV status change your decision to have sex with that person?

In general we are big fans of knowledge and consent, and HPV is the unique one, because most of us have it, the risk of cancer for insertive partners is relatively low, and because symptoms show up so far removed from an infection it's often not possible to know "where" it came from. I think you should do what is best for you and have sites like HPVinfo.ca on hand if your future partner has questions.

If a potential future partner discloses that they have HPV, does this mean I will never be able to have fully “safe” sex with them? What types of safe sexual encounters can we engage in? Can this relationship ever be sexually viable?

By the age of 30, 85% of Canadians will have an HPV infection. Abstaining or switching to other activities when your partner is symptomatic reduces the risk of transmission.

HPV is a skin virus, so condoms are a great precaution to take but will not entirely prevent HPV. Any non-penetrative sexual activities are really low risk on a per case basis.

Now is a good time to get vaccinated because it provides good coverage against genital warts if it is the case. Your prospective partner can also be vaccinated now to be protected against other strains. This should not affect or limit your relationship's sexual viability in anyway, and this includes fertility as well.

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.

If your partner was positive with warts, can the strain show as high-risk cervical cancer in your body rather than warts?

The types of HPV that cause external genital warts are low-risk strains. They do not cause cervical cancer. However, a partner with external genital warts can also carry other strains of HPV which might be high-risk strains.

If you are high risk HPV positive, can your immune system fight it off as it can with low-risk strains?

Clearing an HPV infection depends on both the type of HPV (some are more aggressive than others) and the strength of the individual's immune system. Not smoking and being vaccinated for HPV can help us have the best chance for preventing HPV infections.

There is a treatment in Mexico to “clear it.” Why is that treatment not available in Canada?

Consensus from experts around the world is that there is no “cure” for HPV. Most infections will clear on their own. Removal of infected tissue (if there is a pre-cancer) and vaccination is the best way to prevent recurrence. For warts, many options exist but no treatment is 100% effective at clearing and eliminating reinfection.

Do physicians have standardized education and updated education about HPV? I have heard sometimes people have to go to 6 clinics before a pap smear is suggested with possible HPV symptoms.

It is always hard but important to hear stories where HPV or cancer symptoms are not heard, believed, or investigated. Work has been done as part of education on cervical cancer screening and HPV vaccination to both educate health care providers on the warning signs of cervical cancer as well as how to identify an abnormal cervix.

While it doesn't have to be this way, it's important to speak up if you are worried about HPV or cervical cancer.

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

More information:
hpvinfo.ca