

Human Papillomavirus (HPV)

What is HPV?

HPV is a genital sexually transmitted infection (STI) caused by the human Papillomavirus. HPV is estimated to be one of the most common sexually transmitted infections (STIs) in Canada and around the world.

Approximately 75 % of sexually active men and women will have at least one HPV infection in their life. There is no cure for HPV infections having a healthy immune system will eventually clear the infection from their bodies. Although a high percentage of sexually active people will be infected with HPV, only a small proportion of these would potentially go on to develop cancer.

There are over 100 different types or strains of this group of viruses named HPV. Thirty or more of these viruses are sexually transmitted, infecting the genital area of women and men, including the skin of the penis and the vulva (area outside of the vagina), or anus, and the linings of the cervix, vagina or rectum. Rarely, a pregnant woman with a genital HPV infection can pass HPV to her baby during vaginal delivery. These babies may develop an HPV infection of the mouth, voice box or throat.

Others strains of this virus are considered “high risk” with the possibility of causing abnormal Pap tests. Some of these types of HPV will lead to cancer of the cervix, vulva, vagina, anus or penis. There are “low-risks” types that may cause abnormal Pap tests or genital warts. Genital warts are single or multiple growths or bumps that appear in the genital area, sometimes cauliflower shaped.

What are the signs and symptoms of HPV infection?

Signs and Symptoms of HPV infection,

The HPV infection is often asymptomatic, meaning people who have the genital sexually transmitted infection do not know they have it. This virus resides in the skin or mucous membranes.

Genital warts or pre-cancerous changes in the cervix, vulva, anus or penis are symptoms of this infection. Genital warts appear as soft, moist, pink, or flesh-colored swellings usually in the genital area. The warts can be raised, flat, single or multiple, small or large.

They may take the form of a cauliflower. They can appear on the vulva, in or around the vagina or anus, on the cervix and on the penis, scrotum, groin or thigh.

Genital warts may appear within weeks or months or not at all after having sexual intimacy with an infected person.

How do you treat Genital Warts?

Treatment for Genital warts

Medications applied by a health care provider who has diagnosed visibly genital warts will remove the warts. The infected individual may also apply the medication or choose not to use any treatment. (individual's choice.)

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Can you get Cancer from HPV?

Yes, but it is rare, approximately 10 of the 30 identified genital HPV strains can lead to the development of cervical cancer. Studies have shown that for 90% of the cases, cervical HPV infection becomes undetectable within two years. Although only a small proportion of women have persistent infection, high-risk strains of human Papillomavirus is the main risk factor for cervical cancer. Cervical cancer will develop in about 1 in 138 (0.7%) Canadian women in their lifetime. Every year there are 1300 new cases diagnosed. Among Canada's 11 million women aged 15-64, 400 will die from cervical cancer each year, making it the 13th most common cause of cancer-related deaths.

What can you do to detect pre-cancerous and cancerous cells of the cervix?

Go to your doctor and have a Pap test.

How is genital HPV infection diagnosed?

Papanicolaou smear or Pap testing is the primary cancer-screening tool for cervical cancer. HPV infection has the potential to cause precancerous and cancerous changes in the cells of the cervix. Having a Papanicolaou (Pap) smear, which involves collecting cells from the cervix and then sending the smear of cervix cells off to the lab will assist the Health Care provider in determining whether the female has developed precancerous or cancerous cells.

All strains of HPV have the potential to cause mild changes to the cells of the cervix. Ninety per cent of the females who have these changes are eliminated within a span of two year. About 10 of the 40 genital HPV types can lead to changes in the cells of the cervix that may lead to cancer. At the present time, there are no HPV tests for men.

How can you reduce the chances of getting HPV?

Using a condom or abstinence from genital contact will help to reduce the chances of getting the HPV infection. Remember condoms only cover the area that is covered during genital sex. Genital warts exposed to the partners skin will not be protected.

Remember using an IUD, diaphragm, birth control pills will not protect you from a partner who has HPV infection.

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Vaccine

There is a vaccine available to help prevent infection with some types of HPV and offers protection against HPV types responsible for approximately 70% of cervical cancers.

Health Canada approved a vaccine containing purified, inactive proteins in July of 2006. The vaccine's name is Gardasil (Merck-Frosst). Gardasil contains the 4 most common strains of HPV, HPV types 6, 11, 16 and 18. HPV strains 6 and 11 cause 90% of genital warts. HPV 16 and 18 are the HPV types which cause 70% of the cervical cancer. Gardasil does not protect against the other human Papillomavirus types. This vaccine does not contain any antibiotics or preservatives such as thimerosal.

Females will receive three injections of the vaccine. The injections will be given at 0, 2 and 6 months. The vaccine is most effective in females who have not been sexually active or exposed to HPV. Gardasil offers protection for at least 5.5 years whether a booster dose will be required.

The cost for grade eight girls in Ontario is currently free. However, all three injections must be given before the end of August the year the female was attending grade 8. If the female does not complete the three injection series before the end of August, then there will be a cost for the missed or incomplete injections after August. Even with the vaccine, regular Pap smears are essential because the vaccine does not protect against all types of HPV that can cause cervical cancer. Please call your local health unit for further information.

Websites

Centres for Disease Control and Prevention

[Http://www.cdc.gov/std/HPV/hpv.pdf](http://www.cdc.gov/std/HPV/hpv.pdf)

Health Canada, Its Your Health, Human Papillomavirus

http://www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/hpv-vph_e.html

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[Http://www.cmaj.ca/cgi/content/full/177/5/462](http://www.cmaj.ca/cgi/content/full/177/5/462)

Public Health Agency, Canadian Guidelines on Sexually Transmitted Infections 2006 Edition

[Http://www.phac-aspc.gc.ca/std-mts/sti_2006/sti_intro2006_e.html](http://www.phac-aspc.gc.ca/std-mts/sti_2006/sti_intro2006_e.html)