

# WHAT YOU NEED TO KNOW ABOUT HPV

## Most adults will have at least one HPV infection in their lifetime.

Approximately 75% of Canadians will have a sexually transmitted human papillomavirus (HPV) infection at some point in their lifetime. Most HPV infections occur without any symptoms and go away without treatment.

## Back of mouth & throat are the most prominent sites for HPV-positive cancer.

Some strains of HPV can cause cancer. Oropharyngeal cancer (back of mouth and throat cancer) represents the highest number of HPV-positive cancer cases in Canada, surpassing even HPV-positive cervical cancer.

## >70% of oropharyngeal cancers are HPV-positive.

While most people who acquire an infection will clear it spontaneously, a persistent HPV infection has the potential to transform into cancer.

## Symptoms of HPV-related cancer are subtle & often painless.

The most common symptom is a persistent lump in the neck. Other signs include continual clearing of the throat, hoarseness, persistent sore throat, and difficulty swallowing. Any symptoms lasting more than 14 days should be checked out by a health care professional.

## HPV-positive oropharyngeal cancers are much higher in men than women.

HPV-positive oropharyngeal cancer is seen predominantly in younger males who have had minimal or no exposure to tobacco. Tobacco and alcohol are still major risk factors for oral cancer however HPV-positive cancer is the fastest growing in the back of the mouth and throat.

## Vaccination is one of the best prevention strategies.

Vaccination is one of the best prevention strategies, for both men and women, against certain types of HPV-related cancers. The vaccine greatly reduces the transmission of the virus from one to another.

## Is the vaccine safe & effective?

Yes. More than 270 million doses have been given worldwide since 2006 and the benefits greatly outweigh the risk. Adverse reactions are usually mild, but can include soreness, swelling or redness at the injection site.

## Who should not get the vaccine?

HPV vaccines are not recommended during pregnancy due to limited data. Talk to your doctor if you have any known allergies or are pregnant and are considering an HPV vaccine.



**YOUR DENTAL HYGIENIST HAS THE INFORMATION ON HPV THAT YOU NEED TO KNOW.**

# THE SCIENCE

## HPV is so common that almost every adult will have at least one infection in their lifetime.

Persistent infection with a high-risk strain such as HPV-16 has the potential to develop into cancer. The HPV9 vaccine protects against the nine strains that can cause cancer.

Public Health Agency of Canada. Sexual Health and Sexually Transmitted Infections: Human Papillomavirus (HPV). Ottawa (ON): PHAC; 2020 (accessed 2020-06-11).

<https://www.hpvinfo.ca/what-is-hpv/>

<https://www.canada.ca/en/public-health/services/diseases/human-papillomavirus-hpv.html>

<https://immunizebc.ca/hpv>

## The back of the mouth and throat is one of the most prominent sites for HPV-positive cancer.

Although the incidence of smoking-related oral cavity cancers has decreased in Canada, oropharyngeal (back of mouth, throat) cancers associated with human papilloma virus (HPV) are on the rise. Oropharyngeal cancer (OPC) represents the highest number of HPV-related cancer cases in Canada.

Office of the Chief Dental Officer of Canada. Human papillomavirus and oral health. Can Commun Dis Rep 2020;46(11/12):380-3.

## HPV-positive oropharyngeal cancers are 4.5x higher in men than women.

Numerous studies confirm and establish that the greatest epidemiologic incidence and odds of HPV-positive oropharyngeal cancer is seen in white male patients younger than 65 years of age. The incidence rate of OPC increased in both sexes but at a much faster rate among males.

Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian Cancer Statistics 2016. Special Topic: HPV-Associated cancers. Toronto (ON): Canadian Cancer Society; 2016.

## The signs are subtle and often painless.

According to HPV tumour status, neck mass was significantly more common in patients with HPV-positive OPC vs HPV-negative OPC (51% vs 18%, respectively). The key is persistence; anything unusual or different that persists more than 14 days should always be examined further by a healthcare professional. For a more comprehensive listing of related symptoms, visit; <https://oralcancerfoundation.org/understanding/hpv/hpv-oral-cancer-facts/>

McIlwain WR, Sood AJ, Nguyen SA et al. Initial Symptoms in Patients with HPV-Positive and HPV-Negative Oropharyngeal Cancer. JAMA Otolaryngol Head Neck Surg. 2014;140(5):441-447.

## >70% of oropharyngeal cancers are HPV-positive. Oral HPV infection is a known risk factor.

HPV-positive oropharyngeal cancers are associated with oral HPV infection and sexual behaviour. Individuals with oral HPV-16 infections were over 14 times more likely to have OPC than uninfected individuals. A greater number of sexual partners (particularly oral-sex partners) was also linked with an increased risk of oropharyngeal cancer.

Fakhry C, D'Souza G. Discussing the diagnosis of HPV-OSCC: common questions and answers. Oral Oncol. 2013;49(9):863-871.

Sonawane K, Suk R, Chiao EY, et al. Oral Human papillomavirus infection: differences in prevalence between sexes and concordance with genital human papillomavirus infection, NHANES 2011-2014. Annals of Internal Medicine. November 2017.

Habbous S, Chu KP, et al. Human papillomavirus in oropharyngeal cancer in Canada. CMAJ 2017 August 14;189:E1030-40.

## Vaccination is one of the best prevention strategies against certain types of HPV-related cancers.

In B.C., the HPV vaccine is provided to girls and boys in grade 6 through school immunization programs. Certain conditions determine eligibility and recommendation of the vaccine for individuals beyond the school immunization program.

<https://www.healthlinkbc.ca/healthlinkbc-files/hpv-vaccines>

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-9-human-papillomavirus-vaccine.html>

## Is the vaccine safe and effective?

A 2019 study showed that B.C.'s 12-year school-based HPV immunization program successfully reduced the incidence of cervical pre-cancer cells. B.C. women who had received the HPV vaccine in Grade 6 had a 57% reduction in cervical pre-cancer cells' incidence compared to unvaccinated females. A recent study from Sweden has further demonstrated that HPV vaccination has led to a substantially reduced risk of invasive cervical cancer at the population level.

<http://www.bccancer.bc.ca/about/news-stories/news/2019/hpv-immunization-program-cuts-pre-cancer-rates-by-more-than-half>

<https://immunizebc.ca/hpv/frequently-asked-questions>

Lei J, et al. HPV Vaccination and the Risk of Invasive Cervical Cancer. New England Journal of Medicine. 2020. Oct 1;383(14):1340-1348.



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