HPV and Head and Neck Cancers

Most head and neck cancers are caused by tobacco and alcohol use. But, an increasing number are linked to a virus called the Human Papilloma Virus (also called HPV).

HPV can cause cancers in the back of the throat, base of the tongue and tonsils, in an area called the “oropharynx.” These cancers are called “oropharyngeal cancers.” It is estimated that about 2 out of every 3 oropharyngeal cancers are linked to HPV.

What is HPV?

HPV is a group of more than 200 related viruses that can cause the growth of abnormal cells. There are over 40 types of HPV that can infect the genital areas, the mouth and throat. Some low-risk types can cause benign growths (warts). Most types of HPV are not harmful to people, but in some cases these abnormal cells become cancer. However in most cases, HPV infections of all types go away before they cause any health problems.
There are a number of high-risk HPV types that put people at risk of cancer. HPV-16 and HPV-18 are the two types that are responsible for most HPV-related cancers. HPV-16 has been strongly linked to oropharyngeal cancers and is also related to cervical, anal and penile cancers.

**How is HPV spread?**

Research suggests that HPV is mainly spread through sexual contact. The virus spreads easily by direct skin-to-skin and moist tissue contact with an infected person. The virus enters the body through any break, even very tiny breaks, in the skin.

The same types of HPV that infect the genital areas can infect the mouth and throat. HPV found in the mouth and throat is called “oral HPV.” While studies indicate that oral HPV is most often transmitted to the mouth by oral sex (from mouth-to-genital or mouth-to-anus contact), researchers are still evaluating the different ways oral HPV can be transmitted. It is not known whether open-mouth kissing (for example deep kissing or French kissing) can transmit oral HPV infection. Current studies are inconsistent. Oral HPV is not casually spread by sharing drinks or kissing on the cheek.

The number of lifetime sexual partners (straight or same-sex) is an important risk factor. Oral HPV infection is more common in people who have performed oral sex and who have a higher number of lifetime and recent oral sex partners. Although rare, oral HPV infections have been detected in some people who report never having performed oral sex or have only had a few lifetime oral sex partners.

Having an oral HPV infection does not mean your partner was/is unfaithful and does not suggest promiscuity. HPV is a common infection that is often shared between partners and can lie dormant for many years. A person who has had only one partner can get HPV.

Condoms and dental dams, when used consistently and correctly can lower the chances of giving or getting oral HPV during oral sex. By acting as barriers they can stop the transmission of HPV from person to person.

More research is needed to understand exactly how people get and give oral HPV infections.

**How common is oral HPV?**

HPV is a very common infection worldwide. Many people will likely be exposed to oral HPV in their life. Oral HPV is about three times more common in men than women.

**What are the signs & symptoms of oral HPV infection?**
Most people with oral HPV infections have no symptoms and do not realize that they are infected and can transmit the virus to a partner.

**How do I know if I have oral HPV?**

There is no approved test to find HPV in the mouth or throat. Doctors and dentists do not recommend screening for oral HPV. There is no test to find out a person’s HPV status.

**How is oral HPV linked to cancer?**

Most people who get oral HPV don’t get cancer. The body’s immune system is usually able to get rid of an HPV infection without causing any health problems. Initial studies suggest that most people clear oral HPV infections within a year or two on their own. For some people HPV infection persists, causing abnormal cell growth that can lead to cancer. There is no way to know which people with HPV will get cancer.

Cancer caused by HPV often takes years to develop after initially getting an HPV infection. You can be infected for 10-15 years or more before a cancer develops. There is no known treatment for HPV infections.

**Why I have never heard about this link between oral HPV and head and neck cancers?**

You are not alone. Our understanding about this link between oral HPV and oropharyngeal cancers is quite new. Most people are not aware of this link. Health professionals are still learning about this issue. There is a lot of research going on in this area.

**What about HPV vaccines?**

There are 3 HPV vaccines approved by Health Canada and available for use:

- **Gardasil ®** protects against 4 common types of HPV, including those that cause genital warts, HPV-6 & 11 and the types that are most commonly linked with cancer, HPV-16 and HPV-18.

- **Gardasil 9 ®** protects against HPV 6, 11, 16, 18, 31, 33, 45, 52 & 58.

- **Cervarix ®** protects against HPV16 &18.

These vaccines are designed to prevent cervical and other less common genital and anal cancers. Some early studies show promising results and it is hoped the vaccine will prevent the majority of oral HPV infections and contribute to a reduction in HPV-related cancers of the oropharynx.
The vaccine is recommended for people ages 9-26 years old. It has only been shown to work in people who have not been exposed to the virus. The vaccine will not help clear an infection you already have, but it does prevent people from getting new HPV infections.

**Should my sexual partner be vaccinated to protect him or her?**

Your partner has already been exposed to the virus. So the vaccine will not protect them from HPV. You do not need to change your sexual activities with your partner.

**Should I have my children vaccinated?**

Vaccinating your children before they are sexually active will protect them against the types of HPV that are known to cause cancer. In Nova Scotia, girls and boys in Grade 7 are given the HPV vaccine through the school-based immunization program. It is hoped that children vaccinated now will be protected from developing head and neck and other HPV-related cancers in the future.

Talk to your child’s doctor if you have any questions or concerns. The HPV vaccine is most effective when administered before a child or teen starts having sex.

To learn more about the HPV vaccine, watch the YouTube video by Dr. Mike Evans called “Should you get the HPV Vaccine?” found at [http://www.youtube.com/watch?v=wQSTUlw8_1U&feature=plcp](http://www.youtube.com/watch?v=wQSTUlw8_1U&feature=plcp)

**Where can I learn more about the link between HPV and cancer?**

You can contact the Canadian Cancer Society at [www.cancer.ca](http://www.cancer.ca) or call the Cancer Information Service of the Cancer Society at 1-888-939-3333.

You may want to review the Centers for Disease Control and Prevention’s HPV and Oropharyngeal Cancer- Fact Sheet, [www.cdc.gov](http://www.cdc.gov).

You can also contact your local public library for books, videos, magazine articles and online health information. For a list of public libraries in Nova Scotia go to [http://publiclibraries.ns.ca](http://publiclibraries.ns.ca).

This information does not take the place of the care and advice of your care team. Talk to your care team about your questions and concerns.

Developed by the Head & Neck Cancer Site Team, Queen Elizabeth II Health Sciences Centre.
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Head and Neck Cancer Site Team- Date_____

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