What is HPV?

- Human papillomavirus (HPV) is the most common sexually transmitted virus
- Over 80% of sexually active adults have had at least 1 HPV infection in their life
- Most people's immune system can clear an HPV infection effectively, however sometimes it cannot clear the infection and the result can be:
 - Warts in the oral cavity or genitals
 - o 6 kinds of cancer
 - Oropharyngeal cancer
 - Vaginal, vulvar and cervical cancer
 - Penile cancer
 - Anal cancer
- 12 types of HPV are high-risk and types 16 and 18 are known to cause most cancer cases

HPV and OPC:

- OPC cases are rising and 70% of all cases are caused by an HPV infection
- It can take between 10-30 years after an HPV infection for OPC to develop
- An estimated 5,800 males will be diagnosed with head and neck cancer this year, and 1,550 will die from it
- Those at greatest risk for OPC include:
 - Mer
 - People who became sexually active at a young age
 - People who have had multiple sexual partners
 - Immunocompromised



HPV-related OPC Signs and Symptoms:

- OPCs caused by HPV typically arise in the tonsils or base of the tongue and into the throat
- The most common symptom or presentation is a painless lump in the neck usually found while shaving for men
- Symptoms include:
 - Sore throat
 - · Sensation of something stuck in the throat
 - Ear pain
 - Trouble/pain when swallowing
 - · Change in voice

HPV-related OPC Treatment:

- Treatment typically involves surgery, radiation, chemotherapy, or a combination of these treatments. Radiation is extremely effective in treating and decreasing the significance of the surgery. Prognosis is good if the disease is caught early
- Although this treatment is effective, and has a high survival rate, this treatment is very invasive and life-altering
- OPC survivors may be left with difficulty or an inability to talk, eat or swallow
- Many patients are not able to return to work at their previous jobs and social interactions become limited or difficult
- Head and neck cancer has a very high suicide rate that is 2x as high as other cancers



Scan this QR code with your phone camera to watch a video on HPV & cancer, and access some more resources on this topic.



What can Dental Practitioners Do?



Increase awareness of HPV-related OPC by engaging in conversations and educating patients



Screen for OPC during regular dental exams as a standard of practice

- Conduct a thorough head and neck exam that includes a detailed discussion on cancer screening while conducting the examination
- Palpate for lumps (intraoral and extraoral)
- Check tonsils, uvula and lateral throat walls directly and with a mirror to push down the tongue. Clinical tip: have the patient "show me your uvula" and "pant like a puppy" to get a good look



Expedite treatment

- Provide appropriate referral to patients with suspected OPC for individuals that have not responded to conventional treatment within 3 weeks of initial examination
- Refer to the AHS Provincial Head & Neck Cancer Diagnosis & Referral Pathway



Encourage HPV prevention behaviours

- Counsel patients on high-risk behaviours use a standardized brochure as a communication tool to initiate conversations on sensitive topics
- Prescribe and provide an HPV vaccine to patients. Follow up with patients in future appointments to ensure they received the vaccine and if not - encourage them to or help identify barriers to getting the vaccine

The HPV Vaccine

- This vaccine is highly effective against the most common cancer-causing HPV strains
- Males and females should both get the HPV vaccine
 - The vaccine is linked to an 88% decrease in the occurrence of the most common types of HPV-related to oral infections
 - The vaccine is linked to a 100% reduction in OPC among vaccinated men
- Health Canada has authorized several vaccines to prevent HPV
 - These vaccines require 2 doses in children and 3 doses in adults.

HPV Vaccine Eligibility:

- Everyone ages 9+ should get the vaccine
- In Alberta, the vaccine is offered to grade
 6 and grade 9 students
- Patients who did not receive the vaccine in school are eligible to receive the vaccine for free up to the age of 26 through public health clinics
- For those over the age of 26 in Alberta, personal insurance may or may not cover vaccines, this needs predetermination with the patient's pharmacist
- If a patient does not remember or know if they were vaccinated, they can contact their physician or pharmacist to check with Alberta Health records.
 - Vaccination records from other provinces or territories or Countries need to be accessed via the patient
- For HPV vaccine eligibility for other jurisdictions please scan the QR code or visit your local public health units website

For a list of references, please visit: