Key Messages for Health Care Providers and Policy Makers

Overview
Smoking and the use of all smokeless products such as chewing tobacco and snuff have been linked to several different kinds of cancer and other serious oral health conditions.

The Link between Smoking and Oral Health
- Tobacco use is the main risk factor for developing oral cancer.\(^1\) It is causally linked to laryngeal, esophageal, and pharyngeal cancers and cancers of the oral cavity such as cancers of the lip, cheek and gum.\(^2,3\) Epidemiological studies have shown that smoking is associated with a 5- to 9-fold increase in the risk of developing oral cancer.\(^4\)
- Chewing tobacco and using snuff is associated with a 50% increased risk of cancer of the gums, cheeks, and inner lining of the lips compared to the risk for non-smokers.\(^1,2\) The risk of getting cancer of the cheek or gum is fifty times greater for long-term snuff users.\(^2\)
- The use of smokeless products can cause gingival recession, periodontal (gum) disease\(^5\) and oral leukoplakias (white patches or lesion of the oral mucosa). Leukoplakias may transform from dysplasia to cancer.\(^2\)
- People who smoke are about three times more likely to have severe periodontitis than non-smokers.\(^6\) Smoking may be responsible for almost 75% of periodontal diseases among US adults.\(^5\)
- Smoking increases the risk of periodontitis\(^7,6\) and contributes to oral conditions like halitosis, stained teeth and tongue, and delayed healing after dental work.\(^5\) As a result, there may be tooth loss and an increase in the risk of developing more serious illnesses, including respiratory disease.\(^8\)

Impact
Oral cancers are the 13th most common type of cancer in Canada. In 2009, 3,400 Canadians developed an oral cancer.\(^9\) Oral cancer accounted for 1,067 deaths in 2004.\(^7\) Although the incidence and mortality rates for oral cancer are relatively lower than those for prostate, breast and colorectal cancer, they are nearly three times more than for cervical cancer and almost twice those for liver cancer.\(^10\)

Actions
- The incidence of oral cancers in men has declined since 1998 and the incidence and mortality rates in both men and women has declined since 1997.\(^11\) A decline in smoking likely accounts for these downward trends in oral cancer.
- The CAN-ADAPTT Guideline Development Group 12 recommends that health care providers should:
  - Ask patients about tobacco use status on a regular basis.
  - Clearly advise patients or clients to quit.
  - Assess the willingness of patients or clients to begin treatment to quit smoking.
  - Offer assistance to every tobacco user who expresses the willingness to begin treatment to quit.
  - Conduct regular follow-up to assess response, provide support and modify treatment as necessary.
  - Refer patients or clients to relevant resources as part of the treatment, where appropriate.

For additional clinical topics as they relate to tobacco use, please see the CAN-ADAPTT website at: [www.can-adapt.net](http://www.can-adapt.net)
Helpful Resources

- Canadian Dental Association <www.cda-adc.ca>
- Canadian Dental Hygienists Association <www.cdha.ca>

References