

ORAL HEALTH AND HYGIENE

Good oral health means having healthy teeth and gums along with bones and soft tissues in the mouth. Oral health contributes to physical, mental and social well being and the enjoyment of life's possibilities by allowing us to speak, eat and socialize without pain, discomfort or embarrassment (Canadian Dental Association, 2013). Oral hygiene, a key factor in maintaining good oral health, is the ability to maintain a clean mouth, free of plaque and tartar (hardened plaque). Build-up of plaque and tartar can lead to destruction of the gums, bone and tissues (the periodontal structures) that surround and support the teeth. Many people suffer from varying degrees of periodontal disease. Approximately 44% of First Nations people have an abundance of plaque and tartar build-up and 43.9% show signs of early periodontal disease (First Nations Information Governance Centre [FNIGC], 2012a). Among Inuit, the Inuit Oral Health Survey¹ noted a disproportionate burden of oral health disease with 29.8% of respondents reporting ongoing or persistent pain and 30.3% avoiding certain foods because of problems with their mouth (Health Canada, et al., 2011).

Development of Periodontal Disease

Daily oral hygiene, including both brushing and flossing along with regular cleanings by a dental professional, are important for healthy gums (Darby & Walsh 2010). Without this meticulous care, periodontal disease may develop. There are two main



categories of periodontal disease: gingivitis and periodontitis. The most common type is gingivitis (Health Canada, 2009). Gingivitis is caused by an accumulation of plaque and tartar and may present as redness, swelling and bleeding (Clerehugh, Tugnait, & Genco, 2009). Plaque begins to form almost immediately after the teeth have been cleaned. Within 24 hours, inflammation may begin within the cells of the surrounding gum tissues. If this inflammatory process continues, gingivitis soon develops (Newman, Takei, Klokkevold, & Carranza, 2012). However, if care is taken to remove the plaque and tartar deposits, the gingivitis can be reversed.

Periodontitis, a more severe form of periodontal disease, can occur if gingivitis is left untreated. The inflammation begins to spread beyond the gum tissue, causing loss of bone and connective tissue that support

the tooth. This process is irreversible. Patients may notice that their teeth look 'longer' as the gum tissue recedes; their teeth may also begin to feel loose and drift from their original position. Dental professionals diagnose periodontitis using radiographs (x-rays) and a clinical examination (Clerehugh, Tugnait, & Genco, 2009; Darby & Walsh 2010).

Risk Factors

Most risk factors for the development of periodontal disease are behaviours that can be modified by the individual.

Smoking is considered one of the most important risk factors (Darby & Walsh, 2010). In Canada, the Aboriginal² population has a markedly higher smoking rate than the non-Aboriginal population. The smoking rate is particularly high

¹ The Inuit Oral Health Survey provides estimates of the burden of oral health conditions in Canada's North, with the exception of Nunavik, during 2009-10.

² The term 'Aboriginal' is used here to refer inclusively to the First Nations, Inuit, and Métis people of Canada collectively, regardless of whether they reside on or off reserve or are registered as status Indians.





Photo: Periodontal disease

among First Nations and Inuit, with 57% of adults smoking daily compared with only 31% of Métis adults and 20% of non-Aboriginal Canadian adults (FNIGC, 2012b; Tait, 2009; Métis Centre, 2011).

Uncontrolled diabetes and poor oral hygiene are also risk factors for periodontal disease (Genco, 1996; University of Maryland Medical Center, 2011). Type II diabetes is 3-5 times more prevalent among First Nations people and is increasing among Inuit, putting them at greater risk for periodontal disease (Health Canada, 2012). Also noteworthy is the fact that poor oral health can affect diabetes management (Gillis, 2010).

Other risk factors for periodontal disease include osteoporosis, obesity, genetic factors, stress, and low socioeconomic status (Genco, 1996; University of Maryland Medical Center, 2011). Local factors such as tooth position or the use of partial dentures or orthodontic appliances can also affect the status of the periodontium by causing build-up and retention of plaque (Clerehugh, Tugnait, & Genco, 2009; Darby & Walsh 2010).

Prevention and Treatment

The most effective way to prevent and manage periodontal disease is through regular home care and professional

maintenance. Daily flossing between the teeth and twice daily toothbrushing will help to control build-up of plaque. Regular care by a dental professional is also recommended. The First Nations and Inuit Health Branch provides dental care through the Non-Insured Health Benefits (NIHB) program. NIHB are available to all registered First Nations and Inuit in Canada. The dental benefits include regular exams and cleaning as well as, periodontal and other services (Health Canada, 2013). Despite the insurance coverage, 41% of Aboriginal people have not seen a dentist in the past year (Lawrence, 2010).

For More Information

- **Canadian Dental Association**
www.cda-adc.ca/en/oral_health
- **BC Dental Association**
www.bcdental.org/Dental_health
- **BC Dental Hygienists' Association**
www.bcdha.com/?page_id=23
- **Health Canada – Dental Benefits – First Nations and Inuit Health**
www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/benefit-prestation/dent/index-eng.php

References

- Canadian Dental Association (2013). Your oral health. Retrieved January 12, 2013 from http://www.cda-adc.ca/en/oral_health/index.asp.
- Clerehugh, V., Tugnait, A., & Genco, R.J. (2009). *Periodontology at a glance*. United Kingdom: Wiley-Blackwell.
- Darby, M.L., & Walsh, M.M. (2010). *Dental hygiene theory and practice* (pp. 267-282; 306). Missouri: Saunders Elsevier.
- Genco, R.J. (1996). Current view of risk factors for periodontal diseases. *Journal of Periodontology*, 67(10 Suppl): 1041-9.
- Gillis, M.R. (2010). A place for oral health in diabetes management. *Journal of the Canadian Dental Association*, 76(2):a24. Retrieved March 25, 2013 from <http://www.jcda.ca/article/a24>
- Health Canada (2009). Summary report on the findings of the oral health component of the Canadian Health Measures Survey 2007-2009. Ottawa, ON: Ministry of Health.
- Health Canada (2012). Diseases and health conditions – First Nations and Inuit Health. Retrieved February 15, 2013 from <http://www.hc-sc.gc.ca/fniah-spnia/diseases-maladies/index-eng.php>.
- Health Canada (2013). Dental benefits – First Nations and Inuit Health. Accessed February 15, 2013 from <http://www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/benefit-prestation/dent/index-eng.php>.
- Health Canada, Nunavut Tunngavik Incorporated, Nunatsiavut Government, Inuvialuit Regional Corporation, and Inuit Tapiriit Kanatami. (2011). *Inuit oral health survey report 2008-2009*. Ottawa, ON: Health Canada.
- Lawrence, H.P. (2010). Oral health interventions among Indigenous populations in Canada. *International Dental Journal*, 60(3): 229-234.
- Métis Centre, National Aboriginal Health Organization (NAHO) (2011). *Respiratory health of Métis adults: Findings from the 2006 Aboriginal Peoples Survey*. Ottawa, ON: Métis Centre. Retrieved February 28, 2013 from http://www.naho.ca/documents/metiscentre/english/2011_respiratory_health_factsheet.pdf
- Newman, M.G., Takei, H.H., Klokkevold, P.R., & Carranza, F.A. (2012). *Carranza's clinical periodontology* (pp. 244-246). Missouri: Saunders Elsevier.
- Tait, H. (2009). *Smoking among Inuit in Canada – findings from the 2006 Aboriginal Peoples Survey*. Ottawa, ON: Statistics Canada, social and Aboriginal Statistics Division, presentation to the National Inuit Tobacco Task Group.
- The First Nations Information Governance Centre. (2012a). *Report on the Findings of the First Nations Oral Health Survey (FNOHS) 2009-10*. Ottawa, ON: The First Nations Information Governance Centre.
- The First Nations Information Governance Centre. (2012b). *First Nations Regional Health Survey (RHS) Phase 2 (2008/2010). National report on adults, youth and children living in First Nations communities*. Ottawa, ON: The First Nations Information Governance Centre.
- University of Maryland Medical Center. (2011). *Periodontal disease risk factors*. Medical Reference. Baltimore, MD: University of Maryland Medical Center. Retrieved April 9, 2013 from http://www.umm.edu/patiented/articles/who_gets_periodontal_disease_000024_4.htm



NATIONAL COLLABORATING CENTRE
FOR ABORIGINAL HEALTH
CENTRE DE COLLABORATION NATIONALE
DE LA SANTÉ AUTOCHTONE

FOR MORE INFORMATION:
UNIVERSITY OF NORTHERN BRITISH COLUMBIA
3333 UNIVERSITY WAY, PRINCE GEORGE, BC V2N 4Z9

1 250 960 5250
NCCA@UNBC.CA
WWW.NCCA@CCNSA.CA