






Oral Health Effects of Tobacco and Benefits of Quitting

When counseling your patients on tobacco use, share these facts and cessation benefits to encourage them to quit.

Tobacco-Associated Condition	Health Facts	Cessation Benefits
<p>Oral Cancer</p>  <p><small>Photo courtesy of NYU School of Dentistry</small></p>	<ul style="list-style-type: none"> Smoking is a leading cause of oral cancer. Smokers are 5-10 times more likely to develop oral cancer than non-smokers.¹ Smokeless tobacco has at least 28 known cancer-causing chemicals.² 	<ul style="list-style-type: none"> 5 years after quitting smoking, the risk of developing oral cancer is cut in half.³
<p>Leukoplakia</p>  <p><small>Photo courtesy of National Institute of Dental and Craniofacial Research</small></p>	<ul style="list-style-type: none"> Smoking and smokeless tobacco can lead to leukoplakia, a condition in which thickened white patches form on the gums and other areas in the mouth. These can be precancerous.¹ 	<ul style="list-style-type: none"> Quitting smoking and smokeless tobacco can reduce the risk of developing leukoplakia lesions.^{1,4}
<p>Periodontal Disease</p>  <p><small>Photo courtesy of NYU School of Dentistry</small></p>	<ul style="list-style-type: none"> Smokers are 3-4 times more likely to have periodontitis, an inflammation of the gum and/or bone that surround the tooth which can lead to excess bleeding of the gums and tooth loss.⁵ After treatment for gum disease, smokers do not heal as well as nonsmokers.⁶ 	<ul style="list-style-type: none"> Quitting smoking reduces the risk of periodontal disease over time.⁷
<p>Smoker's Melanosis</p>  <p><small>Photo courtesy of National Cancer Institute</small></p>	<ul style="list-style-type: none"> Smoking can lead to melanosis, a darkening of the gums.⁶ 	<ul style="list-style-type: none"> Within 3 months after quitting, the darkening will, in most cases, disappear.⁸
<p>Other Effects</p>  <p><small>Photo courtesy of The Mayo Clinic</small></p>	<ul style="list-style-type: none"> Smoking contributes to the discoloration of teeth, restorations and dentures.⁶ Smoking is a common cause of bad breath and dry mouth, and can decrease the ability to taste and smell.^{6,9} Smokers who undergo oral surgery and placement of dental implants may have delayed wound healing.¹⁰ Tobacco users are more likely to develop hairy tongue, a condition in which the tongue has a dark, furry appearance.⁶ (see image) The high sugar content in smokeless tobacco can lead to tooth decay in exposed roots.^{6,11} Smoking is an expensive addiction that causes up to one-third of all cancer deaths, as well as disease in the lung, heart and rest of the body.³ 	<ul style="list-style-type: none"> Shortly after quitting smoking, breath smells better, and the sense of taste and smell improves. In addition to oral health benefits, quitting smoking can save money and reduce the risk of serious disease, including many cancers and heart disease.

- ¹ Department of Health and Human Services. The Health Consequences of Smoking. 2004 Surgeon General Report. Chapter 2. http://www.cdc.gov/tobacco/data_statistics/sgr/2004/pdfs/chapter2.pdf. Accessed August 19, 2012.
- ² National Cancer Institute. Smokeless Tobacco and Cancer Factsheet. Updated October 25, 2010. <http://www.cancer.gov/cancertopics/factsheet/Tobacco/smokeless>. Accessed August 19, 2012.
- ³ Department of Health and Human Services. How Tobacco Smoke Causes Disease – The Biology and Behavioral Basis for Smoking-Attributable Disease Fact Sheet. 2010 Surgeon General Report. <http://www.surgeongeneral.gov/library/reports/tobaccosmoke/factsheet.html>. Accessed August 19, 2012.
- ⁴ Vladimirov BS, Schiodt, M. The Effect of Quitting Smoking on the Risk of Unfavorable Events After Surgical Treatment of Oral Potentially Malignant Lesions. *Int J Oral Max Surg*. 2009;38:1188-1193.
- ⁵ Tomar, SL, Asma, S. Smoking-attributable Periodontitis in the United States: findings from NHANES III. National Health and Nutrition Examination Survey. *J Periodont*. 2000;71(5):743-751.
- ⁶ Warnakulasuriya, S, Dietrich, T, Bornstein MN, et al. Oral Health Risks of Tobacco Use and Effects of Cessation. *Int Dent J*. 2010;60: 7-30.
- ⁷ Department of Health and Human Services. The Health Consequences of Smoking. 2004 Surgeon General Report. Chapter 6. http://www.cdc.gov/tobacco/data_statistics/sgr/2004/pdfs/chapter6.pdf. Accessed August 19, 2012.
- ⁸ Hedin, CA, Pindborg, JJ, Axéll, T. Disappearance of Smoker's Melanosis after Reducing Smoking. *J Oral Pathol Med*. 1993;22(5):228-230.
- ⁹ Thomson, WM, Lawrence, HP, Broadbent, JM, Poulton, R. The Impact of Xerostomia on Oral-Health-Related Quality of Life among Younger Adults. *Health Qual Life Outcomes*. 2006;4:86.
- ¹⁰ Guo, S, DiPietro, LA. Factors Affecting Wound Healing. *J Dent Res*. 2010; 89(3): 219-229.
- ¹¹ National Institute of Dental and Craniofacial Research. Smokeless Tobacco: A Guide for Quitting. <http://www.nidcr.nih.gov/OralHealth/Topics/SmokelessTobacco/SmokelessTobaccoAGuideforQuitting.htm>. Updated March 25, 2011. Accessed August, 19, 2012.