



**AHNS Prevention & Early Detection Committee
AHNS Response to USPSTF recommendation for
screening of oral and oropharyngeal cancer**

Approved by the AHNS Executive Council August 5, 2014

The AHNS is in agreement with the recent statement by the U.S. Preventive Services Task Force regarding screening for oral cancer. The USPSTF “found no new good-quality evidence that screening for oral cancer leads to improved health outcomes for either high-risk adults (i.e., those over the age of 50 who use tobacco) or for average-risk adults in the general population....There is also no new evidence for the harms of screening. As a result, the USPSTF could not determine the balance between benefits and harms of screening for oral cancer.” (<http://www.uspreventiveservicestaskforce.org/3rduspstf/oralcan/oralcanrs.htm>)

Current research regarding screening for head and neck cancers has focused on screening for oral cancers and oropharyngeal cancers. Oral cancers are located in the mouth, tongue, lips, gums, inside the cheek, and hard palate, and are often associated with smoking and alcohol use. Oropharyngeal cancers are cancers of the back or base of the tongue and tonsils, and are associated high risk human papilloma virus (HPV) and marijuana use, as well as smoking and alcohol use.¹

In addition to this recent USPSTF recommendation, the AHNS supports the routine physical exam screening for oral and oropharyngeal cancers in a primary care setting as a part of routine examination. This performance of an oral and oropharyngeal physical examination and screening for disease is a part of a routine standard exam for primary dental and medical providers. The current standard of care examination represents ongoing opportunistic screening that may allow detection of early stage disease and may decrease oral and oropharyngeal cancer morbidity and mortality.² Furthermore, the AHNS advocates the performance of a comprehensive oral and head and neck exam, particularly in symptomatic or at risk individuals as the best known method of detecting oral and oropharyngeal cancers.

Secondly, the dramatic increase in incidence of HPV associated oropharyngeal cancers is evidence of an emerging epidemic. Primary prevention of HPV infection through vaccination has been shown to have an efficacy of 91-98% against persistent HPV 16/18 infection and the development of premalignant lesions in the cervix. Current FDA recommendations include use of the HPV vaccine for males age 9-26 years for genital wart prevention, but the efficacy of this vaccine for prevention of oropharyngeal cancer is undetermined. However, a recent randomized controlled trial of HPV vaccination in Costa Rica demonstrated a 93.3% vaccine efficacy when compared to the control group at preventing persistent oral infection.³ The AHNS supports HPV vaccination of both sexes as approved by the FDA and actively supports efforts to improve vaccination rates in the US population.

Screening campaigns are not only important for disease detection but also for educating patients about the risk factors, and early signs and symptoms for head and neck cancer. Although smoking and alcohol are known risk factors, public awareness with regards to smokeless tobacco

and HPV risk factors including marijuana use are very low. Hence, the AHNS supports screening campaigns for head and neck cancer in part for their additional educational value.

The AHNS also finds no new good quality definitive evidence supporting population based screening for other head and neck cancers in asymptomatic, otherwise healthy individuals by physical examination, laboratory, imaging, or other testing modalities. The AHNS agrees with the USPSTF analysis that the use of salivary HPV DNA detection assays to screen for oropharyngeal cancer in asymptomatic otherwise healthy individuals is not supported, given the high rate of salivary HPV DNA detection in the general population.⁴

Finally the AHNS concurs that there is a significant knowledge gap regarding useful screening techniques for tobacco and HPV related oral and oropharynx cancers including physical exam based and adjunctive tests. The AHNS supports additional research and resources dedicating to eliminating these knowledge gaps.

1. Gillison ML(1), D'Souza G, Westra W, Sugar E, Xiao W, Begum S, Viscidi R J Natl Cancer Inst. 2008 Mar 19;100(6):407-20. Distinct risk factor profiles for human papillomavirus type 16-positive and humanpapillomavirus type 16-negative head and neck cancers.
2. Speight PM, Palmer S, Moles DR, et al. The cost-effectiveness of screening for oral cancer in primary care. *Health Technology Assessment*. 2006;10(14):1-144.\
3. Herrero R, Quint W, Hildesheim A, Gonzalez P, Struijk L, Katki HA, Porras C, Schiffman M, Rodriguez AC, Solomon D, Jimenez S, Schiller JT, Lowy DR, van Doorn LJ, Wacholder S, Kreimer AR; CVT Vaccine Group. Reduced prevalence of oral human papillomavirus (HPV) 4 years after bivalent HPV vaccination in a randomized clinical trial in Costa Rica. *PLoS One*. 2013 Jul 17;8(7):e68329. doi: 10.1371/journal.pone.0068329. Print 2013.
4. Gillison et al. *JAMA*. 2012 Feb 15;307(7):693-703.doi:10.1001/jama.2012.101. Epub 2012 Jan 26 <http://www.ncbi.nlm.nih.gov/pubmed/22282321>