Squamous cell carcinoma of the oral cavity and upper aerodigestive tract affects approximately 40,000 new patients each year in the United States. Presenting symptoms of these cancers vary by site of origin, but are usually characterized by noticeable alterations in normal functions of speech and swallowing. Pain, bleeding, the presence of a non-healing ulcer, or a mass in the neck, all are common presenting symptoms as well. Those patients at risk for this disease are well characterized, with the clearest risk factors for the development of these malignancies being a history of tobacco and alcohol use. Patients with a previous history of squamous cell carcinoma of the upper aerodigestive tract are also at high-risk for development of second primary malignancies.

Treatment of squamous cell carcinoma of the upper aerodigestive tract relies on varying combinations of surgery, radiation therapy, and chemotherapy. Early stage disease is well treated with single modality therapy usually characterized by low morbidity and high efficacy. Advance staged disease is treated with combined modes of therapy with far greater treatment associated morbidity and significantly reduced rates of disease control. Early detection of squamous cell carcinoma of the upper aerodigestive tract significantly reduces treatment related morbidity and improves treatment efficacy. A related benefit of early detection will be a reduction in the cost of care derived from simpler and more efficacious treatments. Diagnosis of these malignancies can be established with routine office examination that includes careful inspection of the mucosal surfaces of the oral cavity and oropharynx, and palpation of the neck. More sophisticated examination techniques such as indirect laryngoscopy or fiberoptic nasopharyngoscopy further increase the diagnostic yield of office examination for the detection of hypopharyngeal and laryngeal malignancies. Research is ongoing into the efficacy of novel strategies for screening and early detection of squamous cell carcinomas of the head and neck, including molecular techniques that may identify measurable markers of disease in serum and saliva.

These considerations suggest that development of screening guidelines and techniques for the early detection of squamous cell carcinoma of the oral cavity and upper aerodigestive tract could provide significant potential benefit for high-risk populations. The Prevention Committee of the American Head and Neck Society advocates the design and implementation of clinical research and prospective clinical trials to investigate the feasibility, efficacy, and cost effectiveness of screening protocols for the early detection of squamous cell carcinoma of the upper aerodigestive tract. Research into novel screening strategies, such as serum and saliva tests, is advocated as a complementary strategy that may increase the diagnostic yield of currently available clinical techniques.