

## Part 1. Introduction

Head and Neck cancers are relatively rare. However, the incidence and mortality in Nova Scotia of selected sites is above the national average. Head and neck cancers include a group of subsites with varying and unique natural histories.

In 2006, it is estimated that 80 men and 35 women in Nova Scotia will be diagnosed with oral cancer and that 30 men and 10 women will die of oral cancer. It is estimated that 15 men will die of cancer of the larynx in Nova Scotia in 2006.<sup>1</sup>

Estimated age-standardized incidence rates (2006) <sup>1</sup>				
	Males		Females	
	Nova Scotia	Canada	Nova Scotia	Canada
<b>Oral cancers (2006)</b>	14/100,000	12/100,000	5/100,000	5/100,000

Estimated age-standardized mortality rates (2006) <sup>1</sup>				
	Males		Females	
	Nova Scotia	Canada	Nova Scotia	Canada
<b>Oral cancers (2006)</b>	6/100,000	4/100,000	2/100,000	2/100,000
<b>Larynx</b>	3/100,000	2/100,000	N/A	N/A

<sup>1</sup> Canadian Cancer Society/National Cancer Institute of Canada: **Canadian Cancer Statistics 2006**, Toronto, Canada, 2006

The mucosa of the upper aerodigestive tract is the target of the carcinogenic effects of tobacco and alcohol and squamous cell carcinomas of this region as a group are the sixth most frequent cancer worldwide. This field-wide injury leads to a significant annual risk (approximately 3% per year) of second primary tumour development for patients treated for an initial head and neck cancer.

The skin of the head and neck is preferentially exposed to the effects of ultraviolet radiation from the sunlight, and as a result of this influence is uniquely prone to give rise to basal/squamous cell carcinomas as well as malignant melanoma. Early diagnosis and therapy are important for cure and cosmetic outcome.

The head and neck area is composed of multiple organ sites and diverse tissues that can give rise to a variety of benign and malignant tumours. More than 90% of head and neck neoplasms originate from the mucosa or skin of the region. Certain tissues such as salivary gland and those of sensory organs may give rise to tumours particular to this area.

The histological diversity and relative paucity of many tumours in the head and neck are such that often there is limited experience in the appropriate interpretation of tumour tissue biopsies. **We strongly recommend consultation by expert pathologists in case of an unclear diagnosis.**

Significant efforts have been made to improve prevention, early diagnosis and treatment for squamous carcinomas of the different sites of the upper aerodigestive tract. The overall survival, nevertheless, for advanced stage cancer especially, has not improved substantially.

A limited number of significant prospective, randomized studies with sufficient scientific validity allow us to give a best standard treatment without substantial ambiguity. Many treatment decisions are based on published results of retrospective studies and empirical data. In the absence of so-called gold standard scientifically proven cancer management, the best accepted options from a panel of experts are used locally as the practice pattern of an institution or a group or an individual practice. Quality of life after treatment as judged by the patient and those surrounding them has added a significant new dimension above and beyond the length of survival after a given treatment.

Each anatomic cancer site in this area has unique biological properties. This is one reason that different tumour sites are addressed separately in this guideline.

### **Role of Multidisciplinary Team**

Multidisciplinary management of head and neck tumours is now the accepted standard of therapy, and the individual tumour sites call for specific expertise in the different specialties of medical care. Depending on the tumour presentation and the stage of every case, different members of a multidisciplinary team may be called for assistance.

The close collaboration of interdisciplinary care between members of different specialties has resulted in an increase in therapeutic options that have often had a favorable impact on the quality of survival. Collaboration between different specialties is often called upon for the purpose of performing an organ/function sparing treatment. Conservation strategies for the management of cancers of the upper aerodigestive tract have been refined and continue to improve.

The planning and execution of combined therapies often calls for modifications of standard procedures: changes in radiation fields and dosimetry for pre- or post-operative treatments or performance of conservation or less radical operations when post-operative radiotherapy is planned. At the same time, the intensity of combined/concomitant protocols requires surgeons to constantly re-evaluate the role and timing of surgical interventions.

Most therapies for cancer of the upper aero-digestive tract cause temporary and permanent functional impairments, especially for chewing and speech. Therefore, dietitians are integral to the team and the Speech Language Pathologist's expertise is mandatory.

All multidisciplinary team members play a valuable role in providing support and encouragement to head and neck oncology patients dealing with emotional and psychosocial issues. Specific team members (e.g., speech language pathologist; dietitian; nurses; physicians) are central in helping patients address communication and eating problems that can then have a positive impact on the patient's psychosocial and emotional adjustment and well-being.

See Appendix VI for a description of the contributions that the various professions make to the care and treatment of patients with head and neck cancers.

<b>Multidisciplinary Team Membership</b>	
Otolaryngologist- Head and neck surgeon with a fellowship in head and neck oncology	Radiation oncologist
Otolaryngologist-Facial plastic and reconstructive surgeon	Medical oncologist
Registered Nurse	Pharmacist
Dentist/ Oral Maxillofacial surgeon	Maxillofacial prosthodontist
Diagnostic radiologist	Pathologist
Speech language pathologist	Dietitian
Social worker	Psychologist
Physiotherapist	Other collaborative specialties as appropriate (e.g. Thoracic surgery, Neurosurgery and Ophthalmology, Gastroenterology, Psychiatry)