



## Oral Cavity and Oropharyngeal Cancer Fact Sheet

The British Dental Association (BDA) is the professional association and trade union for dentists practising in the UK. This briefing has been prepared for doctors, dentists, pharmacists and the whole healthcare team, particularly those working in primary care.

### Definitions

Mouth cancer includes both oral cavity cancer (OCC) and oropharyngeal (“throat”) cancer (OPC). The risk factors, treatment and outcomes from these two diseases are different.

**Oral cavity cancer** (OCC) can affect the intra-oral tongue, gums, buccal mucosa, floor of mouth, hard palate but excludes the external part of the lip. Lip cancer is considered a distinct cancer with specific UV / sun exposure as the dominant risk factors.

**Oropharyngeal cancer** (OPC) can affect the base of the tongue, lingual tonsil, tonsil & Waldeyer’s ring of tonsil tissue, soft palate, oropharynx and pharynx.

### Epidemiology

Each year, there are around **500 patients** diagnosed with oral cavity cancer and nearly **400 patients** diagnosed with oropharyngeal cancer in Scotland. While rates of oral cavity cancers have seen moderate increases in recent years, rates of oropharyngeal cancer are among the fastest rising cancers in Scotland.

These OCC and OPC are among the most unequally distributed cancers in the population, with the greatest burden in those from the most deprived areas.

### Risk Factors

Older age, low socio-economic status, and male gender are associated with increased risk for both OCC and OPC.

The main behavioural risk factors are tobacco use and consumption of alcohol (and particularly these behaviours in combination) and so alcohol and tobacco are the main avoidable risk factors for OCC and OPC.

Smoking in a person who has never been an alcohol drinker doubles the risk for these cancers.

Drinking alcohol in a person who has never been a smoker similarly doubles this risk for developing these cancers.

Alcohol and tobacco use are independent risk factors for OCC and OPC, but for smokers and drinkers the risk increases. The population attributable risk for alcohol and/or tobacco use is estimated to be 72% (with 4% attributable to those using alcohol alone, 33% from using tobacco alone and 35% from those using tobacco and alcohol together).

Other important factors include a poor diet which is low in fresh fruit and vegetables and poor levels of oral health and dental care.

Oral Human Papillomavirus (HPV) is emerging as a major risk factor for OPC, the virus is sexually transmitted.

### Benefits of Smoking and Alcohol Cessation

Giving up smoking has an almost immediate effect with the risk reducing to normal within 1-4 years of quitting, whereas the benefits of reducing alcohol intake take a longer time to fully emerge: up to 20 years.

### Identifying Individuals at Risk of Cancer

In addition to elucidating known risk factors from a patient's history, a routine clinical oral examination for the presence of mucosal lesions which have a potential for malignant transformation is essential.

Risk factors	Potentially malignant lesions / symptoms and signs - Scottish Referral Guidelines *
Increasing age (>60 years) Male > Female Low Socioeconomic status Tobacco use Alcohol use	<ul style="list-style-type: none"><li>• Persistent unexplained head and neck lumps &gt;3 weeks</li><li>• Ulceration or unexplained swelling/induration of the oral mucosa persisting for &gt;3 weeks</li><li>• All red or mixed red and white patches of the oral mucosa persisting for &gt;3 weeks</li><li>• Dysphagia or odynophagia (pain on swallowing) lasting for &gt;3 weeks</li><li>• Persistent pain in the throat lasting for &gt;3 weeks.</li></ul>

\* <http://www.cancerreferral.scot.nhs.uk>

### Prevention

To reduce the burden of cancer, prevention needs to be focused on preventing behavioural / modifiable risk factors, particularly smoking and alcohol drinking.

HPV-driven OPC can be uniquely prevented by the HPV vaccination, which has been given to school girls for the last decade in Scotland, and the decision to extend to school boys has recently been taken following a successful campaign by the BDA and partners from the HPA Action coalition. With the peak age of incidence still 60 to 65 years, early detection efforts will continue to be needed. Those eligible should be encouraged by the dental team to have the HPV vaccination.

Early detection of OCC or OPC at an early stage would reduce the treatment burden and improve the prognosis of those diagnosed with the disease, especially quality of life and survival.

Front line primary care teams have a potential role in delivering these prevention and early detection interventions. Dental practices have a pivotal role in routine clinical oral examination, but it is important to note that those at highest risk are perhaps less likely to attend dental practices regularly. Further efforts are required to extend the reach of dental services into these communities, perhaps by establishing local clinical networks across primary care.

**This factsheet has been developed with the University of Glasgow Dental School.**



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