

Head and Neck Tumours

(including the mouth, throat and voicebox)

The following information has been synthesized from the Australian Cancer Council Patient Booklet entitled 'Understanding Head and Neck Cancer'. It can be found in full at; <https://www.cancercouncil.com.au/head-and-neck-cancer/>

Head and neck cancer is a general term used for a range of cancers that start in the head and neck of the body. This region includes the mouth, tongue, palate, jaw, salivary glands, tonsils, throat (pharynx), voice box (larynx), nose and sinuses.

Most head and neck cancers start in the cells that line the moist surfaces of the mouth, nose or throat (squamous cells). These are called squamous cell carcinomas (SCC). Some head and neck cancers start in glandular cells. Many of these are called adenocarcinomas. Squamous cell carcinomas and adenocarcinomas can also occur in other parts of the body.

Types of head and neck cancers

Cancers of the head and neck are categorised by the area of the head or neck where they begin.

Mouth (oral cavity)

The mouth, also called the oral cavity, includes the lips, gums and tongue. The muscles of the base of the tongue continue into the upper throat (oropharynx). Cancer that starts in the mouth is called oral cancer.

Cancer can begin in any part of the mouth – the lips, gums, inside lining of the cheeks and lips, front two-thirds of the tongue, floor of the mouth under the tongue, bony roof of the mouth (hard palate), and the small area of gum behind the wisdom teeth.

Throat (pharynx)

The throat, also called the pharynx, is a hollow tube that starts behind the nose and leads to the food pipe (oesophagus) and the windpipe (trachea).

Cancer can affect the three parts of the pharynx:

- nasopharynx – the upper part, behind the nose and above the soft palate; cancer starting in this area is called nasopharyngeal cancer
- oropharynx – the middle part, the area from the soft palate and tongue base to the back of the mouth, including the tonsils; cancer starting in this area is called oropharyngeal cancer
- hypopharynx – the lower part, behind the voice box (larynx); cancer starting in this area is called hypopharyngeal cancer.

Voice box (larynx)

The voice box, also called the larynx, is a short passageway that connects the lower part of the throat (hypopharynx) with the windpipe (trachea).

Cancer that starts in the larynx is called laryngeal cancer.

The larynx contains the vocal cords (glottis), which vibrate when air passes

through them to produce the sound of your voice. When you swallow, a small flap of tissue called the epiglottis moves to cover the larynx to prevent food going into the trachea.

Salivary glands

The salivary glands make saliva. This keeps the mouth moist, helps you swallow food and protects the mouth against infections.

There are three major salivary glands:

- parotid gland – in front of the ears
- sublingual gland – under the tongue
- submandibular gland – under the jawbone.

There are hundreds of smaller glands throughout the lining of the mouth and throat. These are known as the minor salivary glands.

Most salivary gland cancers affect the parotid glands. Less commonly, the submandibular and sublingual glands are affected.

Nasal cavity and paranasal sinuses

The nasal cavity is the large, hollow space inside the nose. This space warms, moistens and filters the air that you breathe. The bones around the nasal cavity have a group of small, air-filled spaces called the paranasal sinuses. These sinuses affect the sound and tone of your voice.

There are four pairs of paranasal sinuses:

- maxillary sinuses – under the eyes and in the cheek area
- frontal sinuses – behind the forehead
- ethmoid sinuses – above the nose and between the eyes
- sphenoid sinuses – behind the nose and between the eyes.

Who gets head and neck cancers?

About 4400 people in Australia (approximately 3170 men and 1230 women) are diagnosed with head and neck cancer each year.

This includes:

- 1370 people diagnosed with an oral cancer (mouth and tongue)
- 1000 with lip cancer
- 890 with pharyngeal cancer
- 590 with laryngeal cancer
- 320 with salivary gland cancer
- 170 with nasal or paranasal sinus cancer.

Major risk factors

The main risk factors include:

- drinking alcohol – compared to non-drinkers, drinkers have about 6 times the risk
- smoking tobacco (including cigarettes, cigars and pipes) – compared to nonsmokers, smokers have about 7 times the risk
- viruses – the human papillomavirus (HPV), especially HPV 16, has been linked to cancers of the oropharynx, and may play a role in other head and neck cancers. Exposure to the Epstein-Barr virus

(EBV) may also be linked to the development of some head and neck cancers.

Other risk factors

- Older age – head and neck cancers are more common in people aged 40 years and older
- Being male – men are about three times more likely than women to develop head and neck cancer
- family history – people with a parent, brother, sister or child with head and neck cancer have double the risk of developing some types of head and neck cancer.
- Being from southern China and South-East Asia – people from some cultural backgrounds may be more likely to develop some types of head and neck cancers.
- Chemical exposure at work – Breathing in asbestos fibres, wood dust, dry-cleaning solvents or certain types of paint or chemicals is associated with an increased risk of some types of head and neck cancer
- Low immunity – people with low immunity conditions, such as those who have a kidney transplant, have a higher risk of developing oral and oropharyngeal cancers
- Sun exposure – ultraviolet (UV) radiation may cause skin cancer on the lip.
- Areca nut, betel nut, paan or gutka – chewing or smoking these products may cause oral cancer.

Talk to your doctor if you are worried about any of these risk factors.

**Reference; The Cancer Council 'Understanding Head and Neck Cancers'.
<https://www.cancercouncil.com.au/head-and-neck-cancer/>**