



Risk Factors Of Head And Neck Cancer

	Risk factor	Type of Head and Neck Cancer
Lifestyle	Smoking (cigarettes, Pipes and cigars) First and second-hand tobacco smoke.	<p>Tonsil</p> <p>Larynx</p> <p>Mouth</p> <p>Tongue</p> <p>Not significant for cancers of the nasal cavity and salivary glands.</p>
	Alcohol (regular drinking)	<p>Tonsil</p> <p>Tongue</p> <p>Mouth</p> <p>Larynx</p>
	Poor diet Low levels of Vitamin A and C	<p><i>Salted fish in Chinese diet:</i> It contains high levels of nitrates and nitrites that react with proteins to form nitrosamines. Larynx</p> <p><i>Processed meat:</i> Larynx</p> <p><i>High fat content:</i> Larynx</p> <p><i>Betel quid (Paan) salted or preserved food:</i> Larynx</p>
	Bad weather	

Viral infections	<p><i>Human papillomavirus (HPV) type 16: middle ear, tonsil, larynx, pharynx, nasopharynx, mouth, nasal, paranasal and tongue</i></p> <p><i>Herpes Simplex Virus 1 And 2: mouth</i></p> <p><i>Epstein Barr Virus (herpes virus type spread by the saliva): nasopharynx, nasal cavity, salivary glands.</i></p>
Ultraviolet sunlight	Outer ear
Occupational exposure	<p><i>Formalaldehyde (it is used to make chemicals, buildings and household products): Pharynx and mouth</i></p> <p><i>Hardwood dust (it is used in the industry to make wooden furniture, cabinets and floor): ethmoid adenocarcinoma, nasal cavity</i></p> <p><i>Leather dust (shoemakers): nasal cavity</i></p> <p><i>Manufacturing of rubber: larynx</i></p> <p><i>Sulphur mustard gas (warfare): Larynx</i></p> <p><i>Softwood: paranasal and nasal cavity</i></p> <p><i>Chromium (VI) compound: stainless steel, fabric, plastics and leather (nasal cavity)</i></p> <p><i>Nickel (make stainless steel): nasal cavity</i></p> <p><i>Acid mist (industry): larynx</i></p> <p><i>Cloth fibres</i></p> <p><i>Asbestos: larynx</i></p> <p><i>Radiation: Radium 226 and 228 radioactive metals are found in low levels in nature (air, water, soil and rocks: nasal cavity</i></p>

		<i>Isopropyl alcohol (household products): nasal cavity.</i>
Socio demographic factors Genetics	Sex/Gender: Males are more at risk	Larynx Nasal and paranasal sinus Mouth
	Location: Urban rather than rural area	Larynx
	Ethnicity	<i>South East Asia and Eastern China –</i> Mouth, Salivary glands, nasopharynx <i>North Africa: nasopharynx</i>
	Race	<i>Fair skin: Outer ear</i>
	Age:	Older patients at most risk (above 75): Larynx Mouth Some cancers (50-70 years). Younger patients below 50 (smaller incidence) oropharynx
Medical conditions (co-morbidity)	Low immune system Systemic lupus erythematosus (lupus) autoimmune disease where immune cells attack body)	Outer ear Larynx
	Repeated ear infections	Middle ear
	Radiotherapy to Head and Neck cancer	Inner ear Salivary glands
	Chronic syphilis	Mouth Tongue

	Retinoblastoma	Nasal cavity
	Gastro-oesophageal reflux disease (GORD) stomach flows back into oesophagus from stomach Barretts' oesophagus: grow abnormally	Larynx (two-fold increase)
Family History and Genetic mutations	Family history (lifestyle factors not genetics)	Salivary glands Mouth
	Duchenne Muscular Dystrophy	
	Germline mutation of p53 guardian of the genome	Mouth
	Major Histocompatibility Complex	Pharynx