

## **The Risk of Head and Neck Cancer Increased by Use of Cannabis**

A recent study published determines whether cannabis use disorder (CUD) increases the risk of head and [neck cancer](#) (HNC).



### **Study**

The current study used medical records from TriNetX, a 20-year database comprising 64 [healthcare](#) organizations. Adults with and without CUD with no history of HNC and a recorded outpatient clinic visit were included in the study.

After demographic, [alcohol disorder](#), and tobacco use matching, the relative risks of HNC and its incidence at various sites in the two groups were estimated. Age-stratified analysis in those below 60 years as compared to older patients was also performed.

### **Findings**

The CUD group comprised 116,076 people, about 45% of whom were women and 60% were White with a mean age of 46.4 years. About 19% of patients with CUD reported tobacco use, whereas 22.6% reported [alcohol use](#).

The control group without a history of CUD comprised 115,865 individuals, 74.9% of whom were White and 54.5% were women with an average age of 60.8 years. About 2.4% and 2.5% of these individuals reported alcohol and [tobacco](#) use, respectively.

As compared to controls, people with CUD were at a 3.5-fold increased risk of HNC. The risk of oral, salivary, and nasopharyngeal HNC was 2.5-fold greater in the CUD cohort, whereas the oropharyngeal cancer rate was nearly five-fold that of controls. The incidence of [laryngeal cancer](#) was also 8.4-fold greater in the CUD group than controls.

This increased risk was consistently observed in older and younger age patients for cancers reported one or more years after the first outpatient visit. Although the risk of any HNC remained significant five or more years after the first outpatient visit, it was no longer significant for HNC subsites. This loss of strength for associations with HNC at five or more years from the reporting of CUD may be due to low sample sizes, other confounding factors, and variations in [cannabis](#) use.

### **Conclusion**

The study findings suggest that CUD is a significant risk factor for HNC, as well as cancers affecting various tissues within the head and neck in U.S. adults. Propensity score matching was

performed for alcohol and tobacco use; however, these results should be interpreted with caution due to the inability to completely control for these demographic factors and [HPV status](#).

Although cannabis consumption rates were not provided, the utilization of data from patients with a diagnosis of CUD indicates that these individuals had substantial cannabis exposure that was sufficient to cause physical and/or [emotional symptoms](#) requiring hospitalization.

Cannabis smoke may promote inflammation, especially since it is unfiltered, deep inhalations are taken, and cannabis burns at higher temperatures. In addition to inflammatory injury, oxidative stress and suppression of antitumor [immunity](#) may also contribute to the increased risk of HNC among patients with CUD.

Further research is needed to validate the increased risk of HNC in [patients](#) with CUD and explore underlying mechanisms that may contribute to this association.

**Source:**

<https://www.news-medical.net/news/20240812/Does-cannabis-use-disorder-increase-the-risk-of-head-and-neck-cancer.aspx>