


## Press Release for article recently published in BMJ Global Health

<b>Research article Title</b>	Association of alcohol and different types of alcoholic beverages on the risk of buccal mucosa cancer in Indian men: a multicentre case-control study Doi: 10.1136/bmjgh-2024-017392
<b>Institution</b>	Centre for Cancer Epidemiology, ACTREC, TMC.
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<b>Division Website</b>	<a href="https://tmcepi.gov.in/MolecularEpidemiologyAndPopulationGenomics/">https://tmcepi.gov.in/MolecularEpidemiologyAndPopulationGenomics/</a>
<b>QR code of the division website</b>	
<b>Link for full research article</b>	Doi: 10.1136/bmjgh-2024-017392

**The embargo lift is: Tuesday December 23 @ 23.30 hours UK (GMT)**

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## Agenda for Press release

**Date: 24.12.2025 Time 11:30 AM – 1.30PM**

**Venue: 7Th floor Seminar Room RRU Building, ACTREC, Kharghar, Navi Mumbai.**

### **Registration and distribution of kit (Press release, copy of the paper, Quotes)**

1. Welcome: Kaizar Bharmal
2. Informative videos- CCE and ACTREC
3. Role of Alcohol in cancer causation: Dr. Sudeep Gupta
4. Presentation of current findings.
  - Oral cancers in India, study methodology and evidence from study: Grace George
  - Importance of findings: Sharayu Mhatre
  - Call to action: Rajesh Dikshit
5. Alcohol control in India: Need for strengthening alcohol control policies: Dr. Pankaj Chaturvedi
6. Question and answer (Dr. S. Gupta, P. Chaturvedi, Dr. R. Dikshit, Dr. G. Mishra, Dr. S. Mhatre, Grace George)
7. Vote of thanks

## Press note

### **Even a low regular intake of International as well as local alcoholic beverages increases risk of oral cavity cancer**

#### **New large study from Tata Memorial Centre Sheds Light**

**Mumbai, India — [24.12.2025]**

A landmark study by **Centre for Cancer Epidemiology, ACTREC at the Tata Memorial Centre, Mumbai**, has demonstrated that there is no safe limit for alcohol drinking in the development of oral cancer. Even a low daily intake of alcohol just around one standard drink is linked to a 50% heightened risk of mouth (buccal mucosa) cancer in India, with the greatest risk associated with locally brewed alcohol, finds a large comparative study, published online in the open access journal **BMJ Global Health**. The study highlighted that all forms of alcohol drinking whether it is international brand like beer, whisky, wine or locally produced brands from India like Mahua, Toddy, Desi Daru or Tharra increases the risk of buccal cavity cancer.

The study for the first time confirmed that tobacco chewing and alcohol drinking jointly increases the risk of oral cavity cancer is four times higher compared to absence of both of the habits. Alcohol was a contributory factor in increasing the risk of mouth cancer irrespective of how long tobacco had been used, possibly because ethanol might alter the fat content of the inner lining of the mouth, increasing its permeability and therefore its susceptibility to other potential carcinogens in chewing tobacco products. As tobacco use and alcohol drinking often goes hand in hand it is thus imperative to control use of tobacco as well as alcohol in order to prevent oral cavity cancer.

Oral cancer is the second most common malignancy in India, with an estimated 143,759 new cases and 79,979 deaths every year, note the researchers. Rates of the disease have risen steadily, with an incidence rate around 15 for every 100,000 Indian men. The main form of mouth cancer in India is that of the soft pink lining of the cheeks and lips (buccal mucosa). Less than half (43%) of those affected survive 5 or more years.

The current study compared 1803 people with confirmed buccal mucosa cancer and 1903 randomly selected people free of the disease (controls) between 2010 and 2021. Each of the participants provided information on the duration, frequency, and type of alcohol they drank from among 11 internationally recognised drinks, including Beer, Whisky, Vodka, Rum and Breezer (flavoured alcoholic drinks); and 30 locally brewed drinks, including Mahua, Desi Daru, and Tharra.

Compared with those who didn't drink any alcohol, the risk was 68% higher for those who did. It was observed that any kind of alcohol beverages increases the risk. Both international as well as locally produced liquor almost double the risk of developing buccal mucosa cancer. Among locally produced country liquors use had highest risk.

Dr. Sudeep Gupta, Director Tata Memorial Centre emphasised that the study for the first time demonstrate the joint effect of alcohol and tobacco chewing. He highlighted that alcoholic beverages have been classified as a Group I carcinogen and in addition to oral cavity cancer is also responsible for seven other cancer sites. He reiterated the IARC WHO statement that "Strong alcohol policies are among the smartest investments you can make"

Dr. Pankaj Chaturvedi, Director, ACTREC, suggested that it is now high time to strengthen and implement alcohol control policies. The current legal framework for alcohol control in India is complex

and involves both central and state laws. Alcohol is included in the State List under the Seventh Schedule of the Indian Constitution, giving states the power to regulate and control alcohol production, distribution and sale. However, the locally-brewed liquor market is unregulated, with some forms used by participants containing up to 90% alcohol content,” he points out.

Dr. Rajesh Dikshit, Director, Centre for Cancer Epidemiology highlighted that findings suggest that more than 1 in 10 cases (nearly 11.5%) of all buccal mucosa cancers in India are attributable to alcohol, rising to more than 15 % in some of the states with a high prevalence of the disease, such as Arunachal Pradesh, Meghalaya, Assam, Telangana and Madhya Pradesh. The states like Gujarat which has banned the sale of alcohol shows the very low attributable risk for alcohol related oral cancer.

Miss Grace George pointed out that both International and Local liquor approximately double the risk of oral cavity cancer.

Dr. Sharayu Mhatre, Scientific Officer and lead senior author of the study said that our study demonstrates that there is no safe limit of alcohol consumption for buccal mucosa cancer risk. Our findings suggest that public health action towards prevention of alcohol and tobacco use could largely eliminate buccal mucosa cancer from India.

It is important to note that scientific evidences are clear as suggested by current study on oral cancer and IARC monograph that regular use of alcohol even a small amount is responsible in cancer development. The alcohol control policies therefore will save lives, save money, take effect quickly, and will helpful in preventing many cancer sites and other chronic diseases.

## Frequently asked questions

### **Q1: What is burden of Oral cavity Cancer in India.**

Oral cavity cancer is a significant public health issue in India. The country accounts for about one-third of global oral cancer cases, resulting in one of the highest burdens worldwide. It ranks among the top three cancers among men in India and is also prevalent in women. The high prevalence of smokeless tobacco and betel quid consumption significantly contributes to this burden. Every year, approximately 141,342 new cases of oral cavity cancer are diagnosed in India. The age-adjusted rates of oral cancer vary between 25 and 33 per 100,000 people in many Indian states. Unfortunately, oral cancers are often diagnosed at advanced stages, leading to high mortality rates and considerable challenges in treatment.

### **Q2: What are main risk factors for Oral cancer.**

The major risk factors include:

- Tobacco use (smoked and smokeless forms such as Gutkha, khaini, Zarda, and betel quid with tobacco)
- Alcohol consumption
- Areca nut (supari) chewing, even without tobacco
- Poor oral hygiene.
- Long-term exposure to these factors significantly increases the risk.
- Genetic Susceptibility.

### **Q3: Whether locally produced country liquor increases the risk of oral cavity cancer?**

Yes, the current study demonstrates that local alcoholic beverages also increases the risk.

### **Q4: Whether internationally recognized liquor increases the risk of oral cavity cancer?**

Yes, the current study demonstrate that international brand of alcoholic beverages also increases the risk.

### **Q5: What is Case-Control study?**

A case-control study is a type of research design used to find out what factors might be linked to a certain disease or outcome. In this approach, one group of people who already have the condition (cases) is compared with another group who do not have the condition (controls). Researchers then look back in time to see what exposures or differences existed between the two groups. This helps identify possible causes or risk factors for the particular condition.