## A longitudinal study of the changes in alcohol consumption and its predictors among adults in Victoria during the COVID-19 pandemic

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**Introduction:** This study aims to assess changes in the frequency of alcohol consumption and the probability of heavy episodic drinking (HED) during the pandemic, and further investigates if changes were more pronounced in specific subgroups or during lockdowns.

**Method:** Optimise is a longitudinal cohort study conducted from September 2020 to August 2022. Participants were adults residing in Victoria. The primary outcome was past week frequency of alcohol consumption (number of days/per week) and prevalence of past week HED (6+ standard drinks in a single occasion). Zero-inflated Poisson regression model with bootstrap confidence intervals reported as risk ratios (RR) were used to estimate the association between the frequency of alcohol consumption and gender, Christmas period and lockdown.

**Results:** Data from 682 participants (Mean age: 44.7, SD: 17.0; 72.6% female) and 10,782 surveys were included. The mean days of alcohol consumption per week decreased from 1.92 (SD: 1.92) in 2020 to 1.54 (SD:1.94) in 2022. HED decreased from 25.4% in 2020 to 13.1% in 2022. Participants were more likely to report increased frequency of alcohol consumption during the 2020 Christmas period (RR: 1.12, 95% CI [1.01,1.20]), the 2021 Christmas period (RR: 1.21, 95% CI [0.34,1.30]) and the sixth lockdown period in 2021 (RR: 1.06, 95% CI [1.01,1.12]).

**Discussions and Conclusions:** This study found that drinking frequency and HED declined across the pandemic, offset by increases during the Christmas Period and the sixth lockdown. This study provides one of the strongest pictures of drinking changes in Victoria during the pandemic, with excellent sample retention and high frequency data collection.

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