# ASHES, Vol. 20(8) - How does alcohol use affect smoking cessation outcomes?

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Tobacco and alcohol consumption are both risky behaviors that are associated with poorer physical and mental health outcomes. They are also highly comorbid — for example, one Canadian study found that people who smoke report higher rates of harmful alcohol consumption compared to people who do not smoke. Additionally, people who use both tobacco and alcohol are at higher risk of other substance use disorders and chronic diseases compared to people who use either substance alone. Thus, it might also be important to consider concurrent use of tobacco and alcohol in treatment and recovery efforts. This week, ASHES reviews a longitudinal study by Benjamin Wong and colleagues that examined smoking cessation outcomes among people with varying severities of alcohol use.

### What was the research question?

How does smoking cessation success vary among smokers with different levels of alcohol use?

#### What did the researchers do?

The researchers recruited participants who were daily cigarette smokers and enrolled in the Smoking Treatment for Ontario Patients (STOP) program, which offers smoking cessation treatment and counseling services for those who wish to quit smoking. At the first assessment period, the researchers measured risk for alcohol use disorder using the Alcohol Use Disorders Identification Test (AUDIT). They categorized participants into non-users of alcohol, low-risk users (AUDIT Scores 0-7), medium-risk users (AUDIT scores 8-14), and high-risk users (AUDIT scores 15+). After six months, the researchers assessed participants for smoking cessation success by self-reported smoking abstinence from cigarettes over the past 7 days. They used logistic regression to estimate the odds of smoking cessation for each alcohol risk group, while controlling for confounding variables such as mental health history, number of cigarettes smoked per day, and perceived ability to quit.

# What did they find?

Almost a third (31.3%) of non-drinkers reported successful smoking abstinence over the past 7 days, compared to 33.7% of low-risk drinkers, 30.0% of hazardous or harmful drinkers, and 21.5% of users with possible alcohol use disorder. High-risk drinkers also reported the highest rates of mental health diagnoses and lower perceived ability to quit smoking.

More severe levels of alcohol use were associated with lower odds of smoking cessation (see Figure). Smokers in the highest alcohol risk group were least likely to report successful smoking cessation (0.73) compared to medium-risk users (0.86) and low-risk users (0.94).

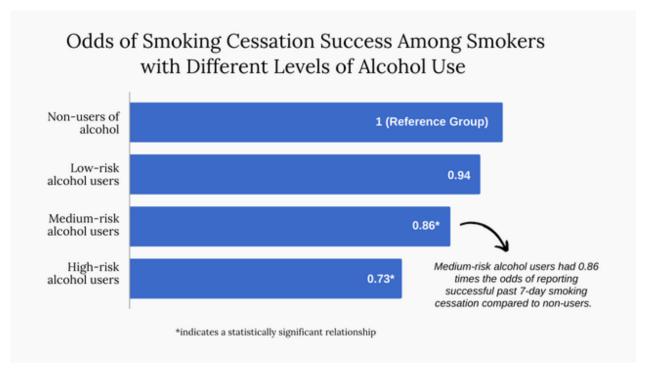


Figure. Adjusted odds ratios of successful smoking cessation by alcohol risk group. Click image to enlarge.

## Why do these findings matter?

Participants with the highest risk for alcohol use disorder had lower odds of successfully stopping smoking compared to participants who were non- or low-risk drinkers. This suggests that it is important to implement alcohol reduction strategies such as <a href="mailto:brief">brief</a> alcohol interventions for those in tobacco addiction treatment who also experience problematic alcohol use, as their alcohol use may make recovery from smoking more difficult. It is also important to address <a href="mailto:barriers">barriers</a> to the widespread implementation of brief alcohol interventions, such as many healthcare professionals lacking the time and training to address alcohol with their patients.

## Every study has limitations. What are the limitations in this study?

This study only used <u>self-reported</u> data to measure alcohol use and smoking cessation, so the results may be affected by <u>social desirability</u> and other biases. The researchers also only recruited participants who were receiving nicotine replacement therapy, so the findings might not be <u>generalizable</u> to all people who smoke.

#### For more information:

<u>SmokeFree</u> offers tools and tips for quitting and maintaining abstinence from smoking tobacco. The Centers for Disease Control and Prevention also provides <u>research and tips</u> about cigarettes and how to quit. The <u>National Institute on Alcohol Abuse and Alcoholism</u> has tips and resources for people struggling with problem drinking. For additional self-help tools, please visit the BASIS <u>Addiction Resources</u> page.

- Annette Siu