

Even low-risk drinking can be harmful

What you need to know:

Many countries propose low-risk drinking guidelines (LRDGs) to mitigate alcohol-related harms, but drinkers following these guidelines can still experience the harms caused by alcohol. Canadian LRDGs are high by international standards, suggesting that men not exceed 15 drinks and women not exceed 10 drinks per week. The researchers conducted a series of analyses to estimate the proportion of alcohol-caused health harms that are experienced by those drinking within and above Canadian weekly guidelines.

What is this research about?

It is widely recognized that alcohol is harmful and causes many health and social consequences, including the burden of disease and economic costs on society. Countries worldwide have established LRDGs to provide information to drinkers wishing to reduce their risk. LRDGs vary by jurisdiction and usually provide both daily and weekly thresholds that should not be exceeded.

The researchers evaluated whether the current Canadian weekly LRDGs might be too high by applying the [International Model of Alcohol Harms and Policies](#) (InterMAHP), an open-access alcohol harms estimator that applies latest evidence to categorise health harms and benefits into drinking groups (e.g., those drinking within and above weekly LRDGs).

What did the researcher do?

In light of recent evidence suggesting that the safest level of alcohol consumption globally is zero and in consideration of the relatively high level of the Canadian LRDGs, the researchers applied InterMAHP to measure the alcohol-caused harms experienced by those drinking within and above these guidelines. This estimated the proportion of alcohol-caused deaths and hospital stays in British Columbia (BC) that are experienced by people who drink within weekly guidelines.

The researchers then customized a recent Global Burden of Disease (GBD) analysis (an assessment of mortality and disability from major diseases, injuries, and risk factors) to inform guidelines in high-income countries, such as Canada.

The researchers also analyzed inpatient hospitalization data for 2014, which included a census of all overnight hospital stays experienced by BC residents.



Researchers at the UVic Canadian Institute for Substance Use Research (CISUR) evaluated whether the current Canadian weekly drinking guidelines are too high (Photo credit: Paul Candon).



What did the researchers find?

More men (18%) than women (7%) drank above weekly guidelines. The researchers found that drinkers following weekly LRDGs are not insulated from harm. Greater than 50% of alcohol-caused cancer deaths are experienced by those drinking within weekly limits. British Columbians drinking within guidelines also experienced 140 more deaths and 3,663 more hospital stays than if they had abstained from alcohol. A weighted relative risk (a difference in risk among the population, compared to non-drinkers) analysis found that for both women and men, the risk was lowest at a consumption level of 10 g per day. For all levels of consumption, men were found to experience a higher weighted relative risk than women.

Findings suggest that guidelines of around one drink per day may be appropriate for high-income countries.

How can you use this research?

This study is relevant to policy- and decision-makers, and other stakeholders as it provides evidence and advice towards revising high-income countries' LRDGs downwards.

The researchers provide recommendations based on the study for suggested limits around a Canadian standard drink per day. The researchers also suggest a gender-neutral recommendation similar to what is used in the Netherlands: "don't drink, or if you do, drink no more than one drink per day".

About the researchers

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Keywords

Alcohol consumption; alcohol-related harm; harm reduction; harm minimization; low-risk drinking guidelines (LRDGs); standard drink; and drinking guidelines.

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