

FOCUS ON

Second-hand Harms from Alcohol

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Key Messages

- Individual-level alcohol harms are well documented. Second-hand harms, or alcohol's harms to others (AHTO), refer to negative impacts beyond the individual consuming alcohol.
- AHTO are numerous and generally fit into the following broad categories: physical violence, sexual violence, child abuse and neglect, financial harms, psychological harms, and social harms.¹
- Given that AHTO take place in a socio-ecological context in which individual-level factors interact with alcohol consumption context and community-level factors, broad-based and targeted public health measures that consider AHTO risk factors are needed to reduce second-hand harms to society.² These measures need to equitably address population-level alcohol harms.³
- While there is understanding that an individual's alcohol use can impact others, there is a need to broaden routine data collection to quantify alcohol's harm to others and determine the related health burden.

Background

There has been a noticeable transition from solely focusing on alcohol harms as consequences affecting the individual consuming alcohol to include the perspective of those individuals affected by other's alcohol consumption (regardless of their own).^{4,5} These negative consequences include both health and social impacts and can be experienced by an individual known to the person drinking (e.g. family member, co-worker, neighbour) or a stranger.⁴ The complications of alcohol use have been documented in the literature since at least 1985.⁶ Many complications arising from alcohol use (both impairment and binge drinking) involve second-hand effects that affect someone other than the person who drinks (e.g., motor vehicle collisions, domestic violence, child abuse and neglect).⁷ Individual-level second-hand effects of alcohol use can include interruptions to sleep, verbal, physical or sexual abuse.⁸ Several terms have been used to refer to this concept including, but not limited to: The second-hand effects of drinking,⁹ social harm from others' drinking,¹⁰ and alcohol's harm to others.^{4,11} The Canadian Centre on Substance Use and Addiction (CCSA) has reported that the risk of acute outcomes such as unintentional injuries and violence is strongly associated with consuming more alcohol, this increase in risk begins with consuming more than two standard drinks per occasion.⁷ In Canada, national survey data from 2012, the most recent data available, indicate one in seven individuals aged 15 years and older reported experiencing harm resulting from another person's drinking in the past year.¹²

The purpose of this Focus On is to provide an overview of alcohol-related harms and focuses strictly on alcohol's harms to others (AHTO). This overview considers harms to communities (e.g., noise, vandalism, and property damage), families (e.g., spousal abuse and child neglect), in workplaces (e.g., absenteeism, co-worker problems, and work-related accidents), and to friends, acquaintances, and others (such as victimization by physical and sexual assault, notably on college/university campuses, as well as in bars and public places).¹¹ This Focus On explores the range of AHTO and the population health impacts of AHTO or second-hand harms. For the purpose of this overview, second-hand effects of drinking or second-hand harms will be used interchangeably with 'alcohol's harms to others' (AHTO), which is also found in the alcohol policy literature.

Methods

A targeted search of the published and grey literature was conducted to identify relevant context and the best available evidence relevant to alcohol-related harms. Google Scholar and PubMed were searched for relevant papers published 2014 to present. PubMed Similar Articles and Cited by functions were used to snowball search relevant published papers. Relevant organizations' web sites were searched for position statements, systematic reviews, or recommendations or guidelines relating to second-hand harms of alcohol. These organizations included CAMH and Ontario Public Health Association (OPHA) (Ontario); Canadian Centre on Substance Use and Addiction (CCSA), Canadian Public Health Association (CPHA), Health Canada, Public Health Agency of Canada (PHAC) (Canada) and Substance Abuse and Mental Health Services Administration (SAMHSA), (US). PHO's Scientist with expertise in alcohol policy (Erin Hobin) was consulted for key additional reports and documents.

Overview

What are Alcohol's Harms to Others?

Two recent (2019) rapid reviews based in the United States (US) and the United Kingdom (UK) were located which addressed the range of AHTOs. Nayak (2019) assessed risk factors for a comprehensive range of AHTO among adult men and women in the US (2015 data), using prior US surveys and international surveys to identify ten AHTO measures which were then condensed into five groupings.² A UK rapid review collated 22 AHTO based on six surveys across five nations (England, Wales, Scotland, Republic of Ireland and Northern Ireland).¹³ Of the total 22 AHTO, 10 overlapped directly with the US (2019) AHTO measures, with 12 additional measures for consideration. Karriker-Jaffe et al (2023) present a conceptual model linking alcohol policies to harms to women and children, which aims to consolidate considerations around the broader environment, and provides six AHTO categories: physical violence, sexual violence, child abuse and neglect, financial harms, psychological harms, and social harms.¹ These categories were generated from a rapid review of reviews to describe existing evidence of impacts of alcohol policies on the outcomes of physical violence, sexual violence, and child abuse and neglect.¹

To illustrate the various examples of AHTO, the conceptual model's six categories of harm are presented in Table 1 below, with examples of harms identified in the US and UK rapid reviews. It should be noted that specific AHTOs and categories are not assumed to be mutually exclusive and could potentially be overlapping (i.e., several rapid review AHTOs appear in more than one of the six conceptual model categories).

Table 1: Examples of AHTOs Mapped to Conceptual Model AHTO Categories

AHTO Categories ¹	Example of Harms ^{2,13}
Social Harms	<ul style="list-style-type: none"> • Property damaged • Family/marriage problems • Problems at work • Problems with friends/neighbours • Kept awake • Contacted the police
Physical Harms	<ul style="list-style-type: none"> • Physically hurt • Felt physically threatened/harassed/afraid/unsafe • In a traffic accident
Psychological Harms	<ul style="list-style-type: none"> • Harassed, bothered, called names, or otherwise insulted • Feeling threatened or afraid • Passenger in a vehicle with an impaired driver • Emotionally hurt/neglected • Child negatively affected
Financial Harms	<ul style="list-style-type: none"> • Financial problems • Family problems or marriage difficulties • Moved home • Problems at work
Child Abuse and Neglect	<ul style="list-style-type: none"> • Family problems or marriage difficulties • Child negatively affected
Sexual Violence	<ul style="list-style-type: none"> • Harassed, bothered, called names, or otherwise insulted • Forced/pressured into sex

While the current Focus On is not a comprehensive systematic review, the three published sources to inform Table 1 used rapid review methods to source and incorporate relevant literature on types of AHTO categories and examples. The following sections further explore select examples of AHTO and the extent of their impact at population and specific sub-group levels.

What is the Magnitude of Alcohol’s Harm to Others?

US data (2019) reported that approximately one in five adult women (21%) and almost one in four adult men (23%) experienced at least one AHTO in the past year. This translates to 53 million adults (26 million women, 27 million men) in the US experiencing at least one type of harm from someone else’s drinking.² The Canadian Alcohol and Drugs Survey (CADS) 2019 reports direct alcohol harms to the consumer, but does not report second-hand harms from the alcohol consumption of others.¹⁴

In addition to the range of types of second-hand harms, contextual factors related to drinking (e.g. people, place, timing, drink type) all have a role and are consistently associated with alcohol-related harm over and above levels of consumption.¹⁵ Weekend drinking, drinking in licensed premises and concurrent illicit drug use are frequently associated with harms, in particular.¹⁵ Frequent drinking on licensed premises and drinking outdoors (e.g. in parks and in the street) were most clearly associated

with experiencing harm from others' drinking, suggesting that these are important arenas for preventive efforts. Women, young individuals, those with low educational level and those that most frequently drink are population subgroups most often impacted by others' drinking and thus are important target groups for preventive efforts.¹⁶

Impacts of Alcohol's Harm to Others – Select Examples

Child Abuse and Neglect: A 2021 scoping review of register-based studies showed children of parents/guardians who consume high amounts of alcohol to be at greater risk for mental disorders, disease and injury hospitalizations, infant and child mortality, criminality, poor employment and educational outcomes, abuse/neglect, and placement in residential/foster care, among other negative outcomes.¹⁷

Physical Violence: Approximately 50% of all violent incidents in the US involve alcohol, and a recent review of evidence links alcohol to numerous forms of violence in Canada.¹⁸ There is evidence that alcohol consumption, especially drinking to intoxication, is associated with acts of aggression or violence, however the exact mechanisms by which alcohol contributes to aggression or violence are unknown and there is a lack of evidence to define the exact dose-response relationship.¹⁸

A US study of National Alcohol Survey data (2000-2015) for 20,656 adults showed monopolies on alcohol sales were associated with 41.2% lower odds of physical harms to others, and a 10% increase in bar density was associated with a 1.2% increase in the odds of driving-related harms.¹⁹ Among men, beer taxes were associated with lower odds of physical harms to others and monopolies were associated with lower odds of physical and driving harms.¹⁹

A more stringent alcohol policy environment could reduce assault, and driving-related harm due to another person who consumed alcohol, by lowering binge drinking rates.³¹ Alcohol policies may not be effective in reducing family problems caused by another drinker, with such problems proposed to be more prevalent in low-SES jurisdictions.²⁰ The CCSA's (2022) Update of Canada's Low-Risk Alcohol Drinking Guidelines cites evidence linking alcohol and dating violence and intimate partner violence in Canada.¹⁸

In Ontario, the majority of short-term drivers' license suspensions and federal impaired driving charges in 2021 were related to alcohol (compared to drugs), with alcohol accounting for 95% (5,770/6,100) of suspensions and 78% (12,275 of 15,657) of charges per year.²¹ CAMH has recommended mandatory alcohol screening, Blood Alcohol Concentration (BAC) administrative license suspension program is an example of this. Other recommendations have included the adoption of evidence-informed policies and procedures for reducing physical violence, sexual harassment and assault, risk-based licensing and enforcement for off-premise outlets, and enhanced monitoring and enforcement of alcohol regulations.²²

Sexual Violence: A systematic review of population studies assessing interpersonal violence due to others' alcohol consumption found a significant proportion of the adult population experienced harms from others' drinking (pooled prevalence of sexual violence from others' drinking in men and women was 1.3% (95% CI: 0.5-3.3%, 95% PI: 0.1-16.9%) and 3.4% (95% CI: 1.4-8.3%, 95% PI: 0.2-35.3%), respectively, and ranged between 0.4% (95% CI: 0.1-1.6%, 95% PI: 0.0-7.3%) and 2.7% (95% CI: 1.1-6.3%, 95% PI: 0.2-30.0%) for different other forms of intimate partner violence.²³ This review concluded that a significant portion of the population experiences harms from others' alcohol consumption and therefore to be an integral part of any public health strategy, alcohol policy and interventions should address all health harms caused by drinking, including interpersonal violence from other's drinking.²³

Psychological Harms: Depression and/or anxiety were strongly associated with exposures to individual AHTO, and also to combinations of harms that stemmed from having a drinking partner and/or family members. This was based on 2000-2015 data from four US-based surveys.²⁴ Greenfield et al (2015) studied associations between depression and anxiety and each of the different harms (family/relationship, financial trouble, and assault/aggression, harms all attributed to a partner or family member) both independently and in combinations. For example, relationship difficulties co-occurring with assault, where harms were attributed to the drinking of intimate partners or family members are associated with higher anxiety. Depression or anxiety was found to be associated with financial troubles co-occurring with assaults.

Documenting the impacts of AHTO, including mental health impacts, is important as a rationale for strengthening alcohol control policies⁹ and assisting in designing prevention strategies and interventions to reduce harm.²⁴

Societal Financial Harms: Mothers Against Drunk Driving (MADD) Canada reported that there was a total of 181,911 impairment-related crashes in 2010 (without specifying whether impairment was due to alcohol alone or in combination with other substances). The costs were estimated to be \$20.62 billion, which included fatalities, injuries, property damage, traffic delays, out-of-pocket expenses, hospital/health costs and police, fire and ambulance costs.²⁵

Public Health Ontario (2023) estimated 4,330 deaths, 22,009 hospitalizations and 194,693 emergency department visits by Ontarians aged 15 years and older in the province were attributable to alcohol, with total direct health care costs and indirect costs of \$4.5 billion related to alcohol consumption.²⁶ The table below shows the extent to which alcohol contributed to Ontario’s intentional and unintentional injuries, and to motor vehicle collisions.²⁷

Table 2: Excerpted estimates of average annual deaths, hospitalizations and emergency department visits from selected health conditions attributable to alcohol in people age 15 and older, overall and by sex, Ontario

Events Attributable to Alcohol	Deaths	Hospitalizations	ED visits
Intentional injury attributable to alcohol	18.5% of intentional injury deaths attributable to alcohol	18.6% of intentional injury hospitalizations attributable to alcohol	19.0% of intentional injury ED visits attributable to alcohol
Motor vehicle collisions attributable to alcohol	14.1% of motor vehicle collision deaths attributable to alcohol	13.5% of motor vehicle collision hospitalizations attributable to alcohol	13.7% of motor vehicle collision ED visits attributable to alcohol
Unintentional injury attributable to alcohol	11.9% of unintentional injury deaths attributable to alcohol	9.5% of unintentional injury hospitalizations attributable to alcohol	13.1% of unintentional injury ED visits attributable to alcohol

Source: Ontario Health and Ontario Agency for Health Protection and Promotion (Public Health Ontario). Burden of health conditions attributable to smoking and alcohol by public health unit in Ontario: supplementary tables [Internet]. Toronto: King’s Printer for Ontario; 2023 [cited 2024 Jun 3]. Available from: https://www.publichealthontario.ca/-/media/Documents/B/2023/burden-health-smoking-alcohol-supplementary-tables.xlsx?&sc_lang=en

Limitations and Strengths

Studies that have explored harms of alcohol use have been predominately focused on the individual consuming the alcohol. Second-hand harms of alcohol use, the harms individuals experience as a result of others' alcohol consumption, is a growing area of study and can be challenging to capture the full extent of the impact on individuals, family and society. Therefore, there appears to be limited review-level literature available, pointing to a gap in the literature regarding capturing the extent of the impact that second-hand alcohol use has in our communities and which interventions would be most effective to reduce harms, especially to those who are disproportionately impacted.

Data available in Ontario and Canada is mostly limited to individual's alcohol consumption and behaviour, and current systems do not tend to monitor the second-hand impacts of alcohol use at a population level. We are limited to what is available from research studies (which often use self-reported data) to estimate the impact of AHTO in Ontario.

Many of the policies and interventions implemented have been focused on individuals with higher levels of alcohol consumption and/or those that have been identified as having an alcohol use disorder, and not those who have been disproportionately impacted by alcohol's second-hand harms.

Conclusion

Alcohol's harms to others have been scoped in multiple ways and generally fit into the following broad categories physical violence, sexual violence, child abuse and neglect, financial harms, psychological harms, and social harms.¹ In a similar way that second-hand smoke impacts bystanders, an individual's drinking can impact others who are not consuming the alcohol themselves.²⁸ There is an opportunity to draw upon lessons learned from tobacco control policies with the goal of reducing consumption and harms. There was a significant shift in tobacco control policy with the widespread awareness and acceptance of research evidence on the negative health impacts of second-hand smoke on others.²⁹ Based on prior experience with tobacco control policy and interventions, increasing public awareness of alcohol-caused health harms to others could affect the social acceptability of alcohol use in general and especially in public spaces, with stronger measures modifying the drinking environment and limiting alcohol availability.²⁹ Work is in progress to assess how environments can contribute to or minimize harms for women and other high-priority groups (racial/ethnic minorities and sexual/gender minorities) and will identify types, overlap and severity of second-hand harms from alcohol and drugs.³⁰ Given that AHTO take place in a socioecological context in which individual-level factors (e.g. gender, SES) interact with the alcohol consumption context and community-level factors, broad-based and targeted public health measures that consider AHTO risk factors are needed to reduce alcohol's second-hand harms to society.² Eventual success in quantifying the complete alcohol burden to society could generate meaningful progress analogous to the international treaty on tobacco control.²⁹

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