

Sex, Gender and Alcohol



Preventing alcohol use problems and related harms is important to addressing public health concerns. Tailored responses are needed that attend to how sex- and gender-related factors affect initiation, patterns of use, and health and treatment outcomes. Therefore, it is important that we identify how sex-related factors affect the biological responses to alcohol use and treatments, and how gendered factors such as social, cultural and economic norms, relationships, and opportunities affect uptake, patterns of use, and responses to policies and programs.

DEFINITIONS

Sex-related factors affect how your body reacts to substances, including how substances are metabolized, what effects they may have on your brain, and the development of tolerance and dependence. Female and male bodies have different genetic and physiological characteristics that affect these processes.

Gender-related factors affect your risks for use, exposure to marketing or exploitation, access to care and services, and the societal response to problematic use. Men, women, and gender diverse individuals experience these elements differently. In part, this is based on social roles and expectations that are dependent upon cultural context.

The prevalence of alcohol use, and alcohol use related disorders, tends to be higher among boys and men. However, the gender gap appears to be narrowing. Recent evidence demonstrate that there is a greater increase in rates of alcohol use disorder and binge drinking among girls and women compared with boys and men^[1,2] and equally high rates of binge drinking among girls and boys.^[3]

Key Sex-Related Factors

- Females transition from initiation to regular use of alcohol faster than males.^[3]
- Women develop and have more progressive liver injuries, even when consuming lower quantities of alcohol.^[10]
- Males tend to have more gastric alcohol dehydrogenase, an enzyme which breaks down alcohol in the stomach.^[5] Therefore, females require smaller amounts of alcohol to become intoxicated/reach higher blood alcohol concentration.^[8]
- Women with chronic alcohol use are more sensitive to the neurotoxic effects of alcohol consumption compared to men.^[4,5] This can result in more pronounced reductions in functional brain activation and neurological anomalies in multiple areas of the brain.^[6]
- Girls who binge drink demonstrate poorer sustained attention and working memory than boys who binge drink.^[7]
- The use of the medication naltrexone for treating alcohol use is associated with significantly greater reductions in alcohol craving among women compared to men.^[9]

Key Gender-Related Factors

- Masculine norms are associated with alcohol use among boys and men,^[11, 12] including transgender men.^[13] Traditional perceptions of masculinity (i.e. alcohol use is “part of manhood”) have been associated with motivation to consume alcohol, and alcohol related problems.^[14]
- Co-occurring depression and substance use is more common among women and girls, who may be more likely to use alcohol and other substances as a coping mechanism or to respond to peer pressure.^[15-17] Interventions that address depression, coping skills, communication, and the relational elements of alcohol use have been identified as promising and gender transformative approaches to preventing and reducing

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While alcohol use and alcohol use disorders are prevalent among individuals of all genders, tailored policies and interventions are required at all levels (harm reduction, prevention and treatment) to address the linkages between sex, gender, and alcohol use.

alcohol use among women.^[15, 18, 19] These, as well as interventions that focus on media messaging, peer and family norms, and self-esteem/body image can further support girls in preventing and reducing alcohol use.^[16, 17]

- Men have fewer protective factors for alcohol use compared to women. For example, men are unlikely to have perceived social sanctions regarding alcohol use.^[18]
- Simultaneous use of alcohol and cannabis tends to be higher in young men compared to young women^[20-22] and is associated with substantial risks, including: greater impairment; heavier alcohol use; negative social consequences including driving while impaired; and greater likelihood of comorbid substance use and mental health issues.
- For men, alcohol and substance use is associated with increased violence against intimate partners as well as strangers.^[23]
- Transgender individuals may use substances to socially validate or affirm their gender identity, and transgender men's use of alcohol may be influenced by the societal belief that excessive drinking is associated with masculinity.^[13]
- Among Indigenous women and men, intergenerational trauma is closely linked with substance use, including alcohol misuse.^[24]

For information about alcohol and its effects while pregnant, breastfeeding, and parenting, visit: bccewh.bc.ca

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