



Cannabis use
Obesity
Mental health
Physical activity
Alcohol use
Smoking
Sedentary behaviour

COMPASS is an ongoing longitudinal study (started in 2012) designed to follow a prospective cohort of grade 9 to 12 students attending a convenience sample of Canadian secondary schools to better understand how changes in school environment characteristics (policies, programs, built environment) and provincial, territorial, and national policies are associated with changes in youth health behaviours. This special edition of the COMPASS brochure highlights current trends of youth alcohol use in Canada using the COMPASS data.

THE COMPASS STUDY

- The COMPASS study connects researchers with schools and youth across Canada to identify important youth health issues. Results will help schools, communities, and government agencies across Canada to develop and evaluate policies and programs aimed at promoting healthy lifestyles among Canadian youth.
- COMPASS offers multi-level, multi-year, comprehensive research paired with knowledge exchange and strategic health partnerships to help turn knowledge into action and action into positive results for youth, like no study has done before.
- Student responses are linked throughout all participating years giving researchers the ability to examine trajectories of different health behaviours.



THE VALUE OF COMPASS DATA

Student-level Data: COMPASS annually collects individual level data on student behaviours across a number of health domains. Each student is tracked using a unique anonymized code allowing researchers to understand how health outcomes develop and change over time.

School Policies and Programs Data: School administration provides details regarding the presence, absence, or any change to relevant school programs, policies, and/or resources related to student health for each of the behavioural domains measured by COMPASS. Data on school programs and policies are then linked back to student-level data to determine the impact the school environment has on youth health behaviours.

Built Environment Data: Built environment data are collected within the school and the surrounding community to measure the impact these characteristics and structures have on student health behaviours and outcomes.

AMONG ONTARIO STUDENTS PARTICIPATING IN THE COMPASS STUDY IN 2018/19, 41% OF MALES AND 37% OF FEMALES AGED 15-19 HAVE HAD MORE THAN A SIP OF ALCOHOL IN THE LAST 30 DAYS.

CHANGES TO THE ALCOHOL ENVIRONMENT

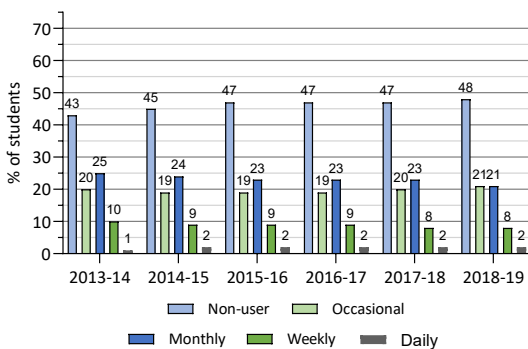
- There have been a number of provincial government led changes, such as extended hours of sale, and changes to where alcohol can be consumed and purchased, that may shift the social environment surrounding consumption.
- Youth in the jurisdictions exposed to the latest change in LCBO policy authorizing grocery stores to sell alcohol are more likely to transition from abstinence to high-risk regular drinking and high-risk regular drinkers are more likely to maintain their behaviours.

(GOHARI, ET AL, UNDER REVIEW)

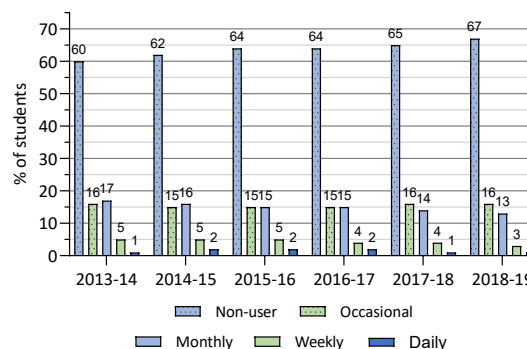
AMONG GRADE 12 STUDENTS PARTICIPATING IN THE COMPASS STUDY IN 2018/19, 75% HAVE HAD MORE THAN A SIP OF ALCOHOL AT LEAST ONCE IN THEIR LIFETIME.

TRENDS IN FREQUENCY OF ALCOHOL USE AMONG STUDENTS IN THE COMPASS STUDY

Frequency of Alcohol Use

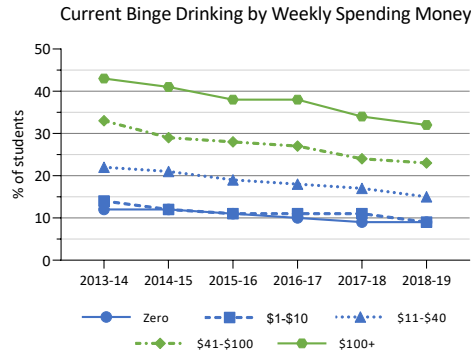
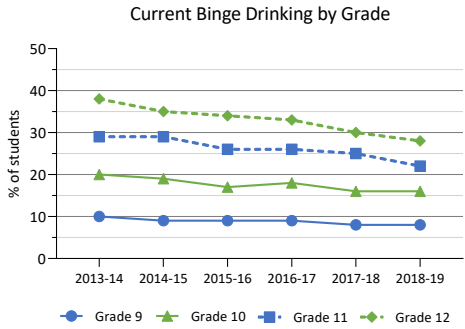
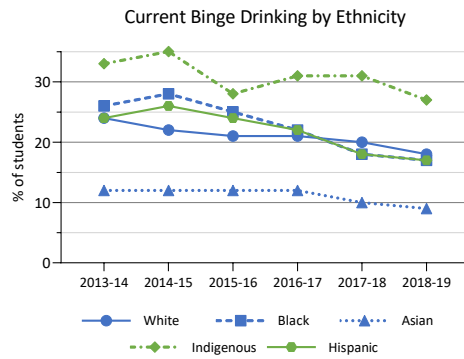
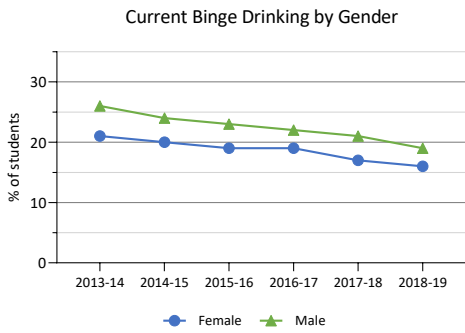


Frequency of Binge Drinking



SOURCE: 2013-14 TO 2018-19 COMPASS ONTARIO SCHOOLS
ALCOHOL USE IS DEFINED AS ANY USE THAT WAS MORE THAN JUST A SIP IN THE LAST 12 MONTHS

BINGE DRINKING IS DEFINED AS CONSUMING 5 DRINKS OF ALCOHOL OR MORE ON ONE OCCASION IN THE LAST 12 MONTHS

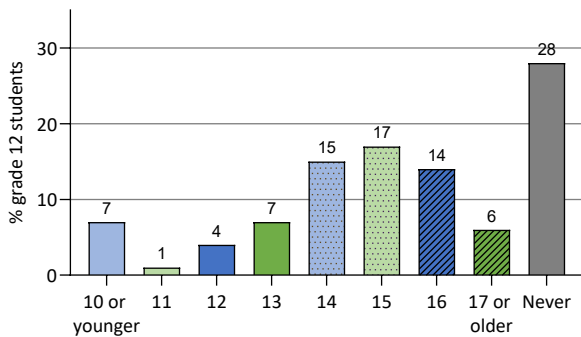


SOURCE: 2013-14 TO 2018-19 COMPASS ONTARIO SCHOOLS

BINGE DRINKING IS DEFINED AS CONSUMING 5 DRINKS OF ALCOHOL OR MORE ON ONE OCCASION IN THE LAST 12 MONTHS

« FROM 2013 TO 2018, BINGE DRINKING HAS DECREASED ACROSS ALL COMPASS PARTICIPANTS IN ONTARIO REGARDLESS OF THEIR GENDER, GRADE, ETHNICITY OR AVAILABLE SPENDING MONEY. »

AGE OF ALCOHOL USE INITIATION AMONG GRADE 12 STUDENTS IN 2018/19



HEALTH BEHAVIOURS AND EARLY INITIATION TO ALCOHOL CONSUMPTION

- » Early initiation of alcohol consumption increases the likelihood for older students to engage in **heavy drinking**. (GOHARI ET AL., 2019)
- » Students who started binge drinking in grade 10 or 11 had larger **body weight and BMI increases** in comparison to those who never became binge drinkers. (VERMEER ET AL., 2019)
- » Younger age of first alcohol use was associated with increased **MVPA** in grade 12 (WILLIAMS ET AL., 2019)

RELATING YOUTH BINGE DRINKING TO OTHER HEALTH BEHAVIOURS AND OUTCOMES

- » The most common **dual use of substances** were alcohol and e-cigarettes (ZUCKERMANN ET AL., 2018)
- » Grade 12 students with higher levels of **school connectedness** were more likely to use alcohol and binge drink. (HOLLIGAN ET AL., 2019)
- » **Team sport participation** has been shown to be associated with binge drinking among COMPASS student participants. (BUTLER ET AL., 2019)
- » Among adolescent girls, those who were considered **dieters** were at increased risk of becoming involved in binge drinking in subsequent years. (RAFFOUL ET AL., 2018)

« Adolescents who initiate binge drinking have a relatively higher risk of poor academic performance, and a lack of preparedness and engagement » (PATTE ET AL., 2017)

« Youth engaging in current binge drinking were approximately three times more likely to smoke tobacco and almost eight times more likely to use cannabis »

(BUTLER ET AL., 2019)

« Male and upper grade students had greater likelihood of engaging in high [risk] level patterns of alcohol consumption. »

(GOHARI., ET AL., 2020)

RELATED COMPASS PUBLICATIONS

1. Gohari MR, Cook RJ, Dubin JA, & Leatherdale ST. (2020). Identifying patterns of alcohol use among secondary school students in Canada: a multilevel latent class analysis. *Addictive behaviors*, 100, 106120.
2. Gohari MR, Dubin JA, Cook RJ, & Leatherdale ST. (2019). Original quantitative research Identifying trajectories of alcohol use among a sample of secondary-school students in Ontario and Alberta: longitudinal evidence from the COMPASS study. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, 39(8-9), 244.
3. Holligan SD, Battista K, de Groh M, Jiang Y, Leatherdale ST. (2019). Age at first alcohol use predicts current alcohol use, binge drinking and mixing of alcohol with energy drinks among Ontario Grade 12 students in the COMPASS study. *Health Promotion and Chronic Disease prevention in Canada: Research, Policy and Practice*, 39 (11).
4. Vermeer J, Battista K, Leatherdale ST (2019). Examining the impact of timing of alcohol use initiation on changes to body weight and weight status among students in the COMPASS study. *Preventive Medicine Reports*, 16.
5. Zuckermann AME, Williams G, Battista K, de Groh M, Jiang Y, Leatherdale ST (2019). Trends of poly-substance use among Canadian youth. *Addictive Behaviors Reports*, 10.
6. Butler A, Romano I, Patte KA, Ferro MA, de Groh M, Jiang Y, Leatherdale ST (2019). Psychological correlates and binge drinking behaviours among Canadian youth: a cross-sectional analysis of the mental health pilot data from the COMPASS study. *BMJ Open*, 9:e028558.
7. Williams G, Battista K, Leatherdale ST (2019). An examination of how age of onset for alcohol, cannabis, and tobacco are associated with physical activity, screen time and BMI as students are preparing to graduate from high school. *Preventive Medicine Reports*, 15.
8. Raffoul A, Leatherdale ST, Kirkpatrick SI (2018). Dieting predicts engagement in multiple risky behaviours among adolescent Canadian girls: a longitudinal analysis. *Canadian Journal of Public Health*, 109: 61-69.
9. Patte KA, Qian W, Leatherdale ST. (2017). Binge drinking and academic aspirations, engagement, and performance: A longitudinal analysis among secondary school students in the COMPASS study. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, 37 (11):376-385.

ONGOING ALCOHOL RELATED RESEARCH PROJECTS

1. Williams GC, Burns KE, Battista K, de Groh M, Leatherdale ST. High school sport participation as a predictor of substance use: a cross-sectional analysis of students from the COMPASS study. Submitted to *The Journal of Adolescent Health*.
2. Williams GC, Battista K, de Groh M, Jiang Y, Morrison H, Leatherdale ST. Longitudinal associations between bullying and alcohol use and binge drinking among grade 9 and 10 students in the COMPASS study. Submitted to: *The Canadian Journal of Public Health*.
3. Gohari MR, Cook RJ, Dubin JA, Leatherdale ST. The impact of an alcohol policy change on developmental trajectories of youth alcohol use: examination of a natural experiment in Canada. (Under review by *Canadian Journal of Public Health*)
4. Gohari MR, Williams G, Leatherdale ST. Conjoint developmental trajectories of youth cannabis and alcohol use in Ontario.
5. Gohari MR, Zuckerman AM, Leatherdale ST. Youth polysubstance use post an alcohol policy change in Ontario.
6. Gohari MR, Zuckerman AM, Leatherdale ST. The impact of authorizing alcohol sales in select grocery stores in Ontario on youth transitioning to polysubstance use.

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VISIT THE WEB FOR MORE INFORMATION ABOUT THE COMPASS STUDY AND TO VIEW COMPASS PUBLICATIONS,



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