UNDERSTANDING THE ODDS:

GAMBLING AMONG BC YOUTH AGED 12-18



UNDERSTANDING THE ODDS:

Gambling among BC youth aged 12–18

We acknowledge that McCreary Centre Society is located on the ancestral, traditional, and unceded territory of the Coast Salish Peoples, including the territories of the xwməθkwəyəm (Musqueam), Skwxwú7mesh (Squamish), and Səlílwəta?/Selilwitulh (Tsleil-Waututh) Nations. We also acknowledge the ancestral and continuing connection to this land of the Métis Nation.

Copyright: McCreary Centre Society, 2021

ISBN: 978-1-926675-80-0

McCreary Centre Society, 3552 East Hastings Street, Vancouver, BC V5K 2A7

Copies of this report are available at: www.mcs.bc.ca.

For enquiries about this report, please email: mccreary@mcs.bc.ca.

PROJECT TEAM

ADVISORY COMMITTEE

Annie Smith

Executive Director

Colleen Poon

Senior Research Associate

Garrett Jones

Research and Evaluation Analyst

Zainab Thawer

Research Associate

Report layout by

Danielle Mahdal & Stephanie Martin

Luke Clark

Director, Centre for Gambling Research, University of British Columbia

David Horricks

Executive Director, Community Support Division, Gaming Policy and Enforcement Branch, BC Ministry of Attorney General

Jason Michaud

A/Director Prevention Services, Community Support Division, Gaming Policy and Enforcement Branch, BC Ministry of Attorney General

Gerald Thomas

Director, Alcohol, Tobacco, Cannabis and Gambling Policy and Prevention, BC Ministry of Health

Nigel Turner

Independent Scientist, Institute for Mental Health Policy Research, CAMH; Assistant Professor, Dalla Lana School of Public Health, University of Toronto

Brynn Warren

Senior Policy Analyst, BC Ministry of Municipal Affairs and Housing

Jamie Wiebe

Director, Player Health, British Columbia Lottery Corporation (BCLC)



Funding for this report was provided by the BC government.

Smith, A., Poon, C., Jones, G., Thawer, Z., & McCreary Centre Society. (2021). *Understanding the odds: Gambling among BC youth aged 12–18*. McCreary Centre Society.

TABLE OF CONTENTS

Key findings	4
Introduction	6
Gambling among BC youth	9
Gambled without money	13
Gambled for money	16
1998–2018	17
Number of gambling activities	20
Types of gambling activities	20
Problematic gambling	28
Frequent gambling & potential harms	31
Youth more likely to engage in frequent gambling	36
Reducing frequent gambling	42
A closer look at gaming	50
Gaming after bedtime	50
Online gaming for money	51
Conclusion	58
Resources	59
References	60

KEY FINDINGS

- About a fifth (21%) of BC youth aged 12–18
 had gambled for money in the past year (i.e.,
 engaged in online gaming, bet on sports,
 played cards/dice, or played lottery tickets/
 scratch cards).
- Youth also played these types of gambling games without using money. Overall, around two thirds (63%) of BC youth engaged in any gambling in the past year (for money or without money), with females less likely than males and non-binary youth to gamble with or without money. Younger youth were more likely than older ones to gamble without money, whereas older youth were more likely to gamble exclusively for money.
- Youth who gambled without using money generally reported a similar health profile to youth who did not gamble at all in the past year, and a more positive one than those who gambled for money. They were also less likely than youth who gambled for money to engage in other risk-taking behaviours such as skipping school and driving after consuming alcohol.

- Playing dice or cards in person, playing lottery tickets/scratch cards, and online gaming were the three most common activities youth did for money in the past year. However, gaming online for money was the most common activity youth engaged in regularly, including on a weekly and daily basis.
- Unlike other forms of gambling for money, there were no gender differences in weekly or daily rates of online gaming for money. The profile of online gamers also looked different to other forms of gambling for money in that younger youth were generally the most likely to be playing regularly.
- In comparison to youth who engaged in other types of gambling for money, youth who exclusively engaged in online gaming for money were less likely to have in-person friends; and were more than twice as likely to have multiple online friends whom they had never met in person, and to only have online friends.
- Youth were less likely to gamble for money online than they were to play for money in person, as 9% played online cards/dice, sports betting, and/or online gaming for money, compared to 12% who played cards/ dice or sports betting in person.
- Although youth in the Fraser region were generally less likely to gamble than youth from other parts of the province, they were more likely to engage in regular online sports betting.

- Youth who were involved in organized sports, informal sports, or extreme sports (such as BMXing) on a weekly basis in the past year were more likely to engage in sports betting during that year.
- Three percent of youth who gambled for money reported that their gambling had reached a point where they needed help. Non-binary youth were the most likely to report that their gambling had become problematic (10% vs. 3% of males vs. 1% of females).
- Problematic gambling was more common among youth who gambled online than among those who gambled in person. It was also more common among youth who engaged in multiple types of gambling activities, and who gambled at least a couple of days a month over the past year.
- Youth who frequently gambled for money (i.e., at least a couple of days a month) were more likely than their peers who gambled less frequently to experience problems connecting with others; and were more likely to be sedentary, to experience mental health challenges, and to engage in potentially unsafe or excessive technology use.

- Youth were more likely to frequently gamble for money if they had experienced challenges in their life (such as hunger and deprivation), as well as if they were employed in excess of 20 hours a week, participated in extreme sports four or more times a week, engaged in regular or potentially risky substance use, and engaged in other potential health risk behaviours.
- Frequent gambling did not appear to be associated with the proximity of a youth's school to the location of casinos, community gaming centres, and race tracks. However, youth who played lottery tickets/scratch cards were more likely to do so on a weekly and daily basis when there were a greater number of lottery retailers within a twokilometre radius of their school.
- ♦ Youth who had gambled for money in the past year were less likely to do so on a regular basis when they felt their family understood and supported them, felt connected to school, had friends with healthy attitudes toward risk behaviours, had supportive adults in their community, and felt hopeful for the future. Additionally, the more protective factors youth had across different aspects of their life—such as family, school, community, and peers—the less likely they were to gamble frequently.

INTRODUCTION

There have been few population-level studies of gambling in Canada, and those that have been conducted have tended to focus on adults (Williams et al., 2016). However, there is some evidence that adolescents who gamble are often doing so as a way to cope with trauma and stress, and are at greater risk for experiencing problematic gambling both during adolescence and later in life (Allami et al., 2018; Derevensky & Gilbeau, 2015; Raisamo et al., 2020).

In recent years, gambling has become more widely available and attractive to young people due to the increase in mobile and online gambling and gaming options, including through simulated gambling games and online games which are 'free-to-play', but encourage players to spend money to increase their chances of making progress or winning (Floros, 2018; King & Delfabbro, 2018; Wijesingha et al., 2017).

This report explores online and in-person gambling among youth in British Columbia (BC) using data from the BC Adolescent Health Survey (BC AHS). The BC AHS is a comprehensive youth health survey completed every five years since 1992 in school districts across the province. In 2018, over 38,000 Grade 7–12 students in 58 of BC's 60 school districts completed the survey. For more details about the survey methodology, visit www.mcs.bc.ca.

The BC AHS has always included a question about gambling. In 2018, students were asked specifically about gambling activities they had engaged in for money over the past 12 months, including online gaming, playing cards/dice for money online or in person, sports betting online or in person, and playing lottery tickets/scratch cards. The survey also asked whether they had engaged in any of these activities but not for money, whether they used their phone to gamble on their most recent school day, whether they were gaming after they were expected to be asleep, and whether they felt or had been told that their gambling was problematic.

The majority of students who completed the BC AHS were under the legal age for gambling (which is 19 years old in BC). This report therefore focuses on gambling among 12- to 18-year-olds.

The report begins by looking at gambling behaviours overall (with and/or without money) before focusing on youth who had gambled for money in the past year. It then offers a profile of youth who engaged in various gambling behaviours, and considers the frequency at which gambling was linked to an increased likelihood that youth experienced problems with their gambling, and at which there appeared to be other associated challenges. The report also looks at risk and protective factors for frequent gambling, and concludes with an in-depth look at online gaming for money.

ABOUT THE ANALYSIS FOR THIS REPORT

All reported comparisons in this report are statistically significant at least at p<.05. This means there is less than a 5% likelihood these results occurred by chance.

Where it is not obvious, a note is added to a table or chart if there is no statistically significant difference between percentages.

Any percentage that is marked with an asterisk (*) should be interpreted with caution, as the standard error was higher than others but is still within the releasable range.

The report provides associations, and does not imply causation or the direction of the relationship. For example, problematic gambling was associated with problematic substance use but we cannot tell from the BC AHS data the direction of that relationship or if one leads to the other.

Reported results for non-binary students are among the 2% of students who identified as such. For example, if 50% of non-binary students provided a certain response to a survey question, this represents a relatively small group of youth and equates to 1% of the youth population surveyed. Results should be interpreted with this in mind.

LIMITATIONS

The BC AHS data is considered representative of over 95% of BC youth in Grades 7–12 who were attending mainstream schools in the province. However, it does not capture the gambling behaviours of youth who were not attending public school or who were not in school on the day the survey was administered. Youth with certain disabilities, and literacy or comprehension challenges, may also have been excluded.

As a broad health survey, the BC AHS asks about a range of health topics including gambling, but it is not intended to be an in-depth survey on the topic. Therefore, it may have missed some information that may be relevant to fully understanding youth's gambling behaviour. For example, the BC AHS did not ask youth when they first started gambling or how long they had been gambling. Additionally, the BC AHS asked about engaging in gambling (including online gaming) for money and not for money, but did not specifically ask about other rewards or items of value which youth may be gambling for.

Non-binary youth were included in all 2018 BC AHS analyses but due to the small percentage of BC youth who identified as non-binary, results could not always be reported separately. Additionally, previous years' survey results can only be reported for males and females as these were the only available gender responses.

The survey questions about gambling changed over the years, making direct comparisons over time difficult.

Glossary

Frequent gambling

Participating in any gambling activity for money at least a couple of days a month over the past year. Gambling at least a couple of days a month was found to be the frequency at which youth appeared to be at increased risk of problematic gambling.

Gambled for money

Played games of chance or skill for money in the past year (i.e., played cards/dice, lottery tickets/scratch cards, bet on sports, or engaged in online gaming for money).

Gambled without money

Played games of chance or skill exclusively not for money in the past year (unless otherwise noted).

In-person gambling

Played cards/dice or bet on sports in person for money in the past year.

Non-binary

Youth who did not identify as male or female.

Online gambling

Played cards/dice, bet on sports, or engaged in gaming online for money in the past year.

Online gaming

Refers explicitly to youth who reported that they engaged in online gaming for money.

Problematic gambling

Youth who felt or had been told they needed help for their gambling in the past year.

Quotes from youth who completed the 2018 BC AHS are included throughout this report, and are included in the relevant sections. For example, quotes relating to online gaming are included in the online gaming section.

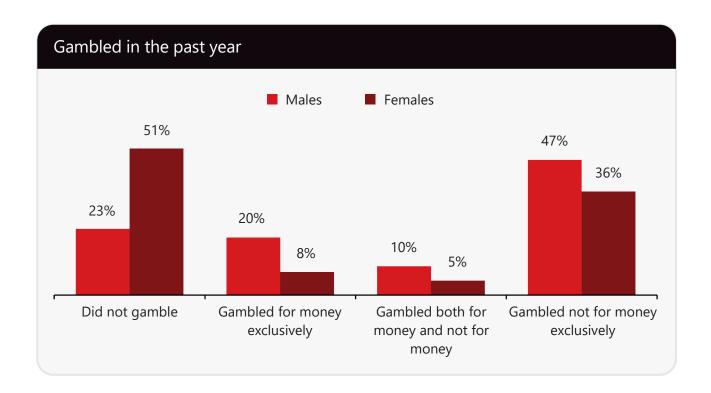
GAMBLING AMONG BC YOUTH

The BC AHS asked youth if they had engaged in online gaming, bet on sports, played cards/dice, or played lottery tickets/scratch cards for money in the past year and if they had done any of these activities not for money.



I've never heard anyone at our school talk about gambling as an issue."

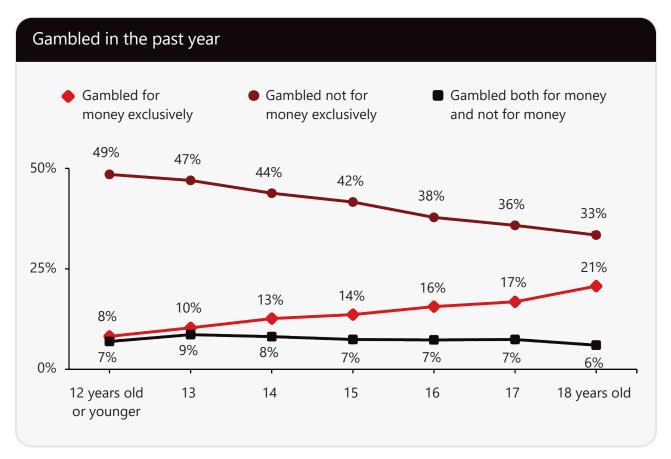
Nearly two thirds (63%) of BC youth aged 12–18 had gambled with or without money in the past year. Females were the least likely to have done so (50% vs. 67% of non-binary youth vs. 77% of males). Most of these youth did not gamble for money. However, 21% gambled for money, including 14% who exclusively gambled for money.



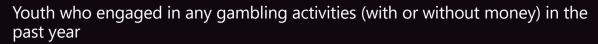
Younger youth were more likely than older ones to gamble without money, whereas older youth were more likely than younger ones to gamble exclusively for money.

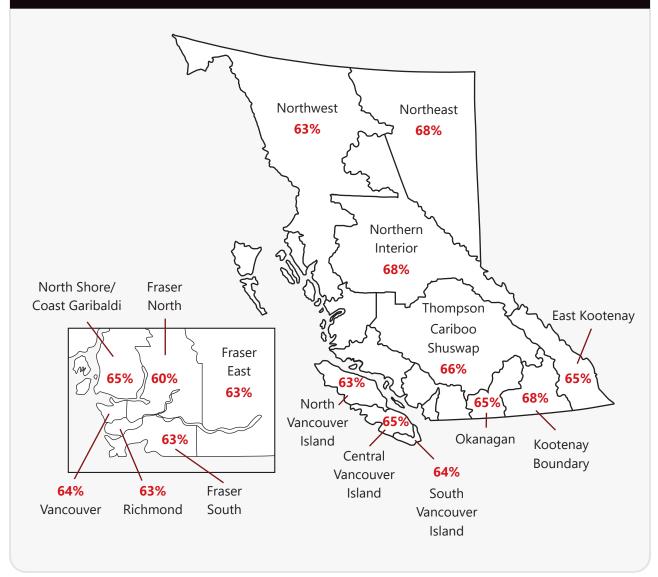
Rural youth were slightly more likely than urban youth to engage in any gambling in the past year (65% vs. 63%).

There were also regional differences, with youth living in the Fraser region less likely than those in other regions to gamble (e.g., 62% vs. 67% in the Northern region). At the smaller Health Service Delivery Area (HSDA) level, gambling rates ranged from 60% in Fraser North to 68% in the Northeast, Kootenay Boundary, and Northern Interior.



Note: Differences between ages were not statistically significant at every point.





(Health Service Delivery Areas Map, from BC Stats)

Note: Not all differences between HSDAs were statistically significant.

Youth aged 19

While this report is focused on 12- to 18-year-olds, some 19-year-olds also completed the 2018 BC AHS. Overall, youth aged 19 gambled at similar rates to younger students.

However, in comparison to younger youth, 19-year-olds were less likely to have exclusively gambled without money (e.g., 21% vs. 33% of 18-year-olds.

They gambled exclusively for money at similar rates to those aged 17 and 18 and at higher rates than those aged 16 or younger (e.g., 28% vs. 16% of 16-year-olds).

Nineteen-year-olds engaged in each of the different gambling activities, such as online gaming for money and lottery tickets, at similar rates to their underage peers.

Gambled on their phone

Two percent of youth who had a cell phone used it on their last school day to gamble, with non-binary youth the most likely to do so (9% vs. 3% of males vs. 1% of females). Older youth were also more likely to use their phone to gamble. For example, 4% of 18-year-olds gambled on their phone, compared to 2% of 15- to 17-year-olds and 1% of those aged 14 or younger.

It is unknown whether youth who gambled on their phone were doing so for money. However, among youth who had a phone, those who had gambled for money in the past year were five times more likely to use their phone to gamble (5% vs. 1% who had gambled without money).



No, I don't gamble on my phone! I am 16!"



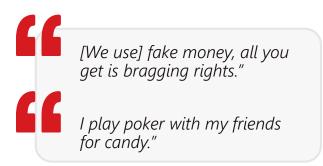
I gamble in a game."

GAMBLED WITHOUT MONEY

There is some concern that gambling for rewards other than money can lead to problematic gambling for money later in life. This section considers the profile of youth who gambled without money in the past year (i.e., they played games of chance or skill but did not do so for money), and compares their health picture to that of youth who gambled for money and those who had not gambled.

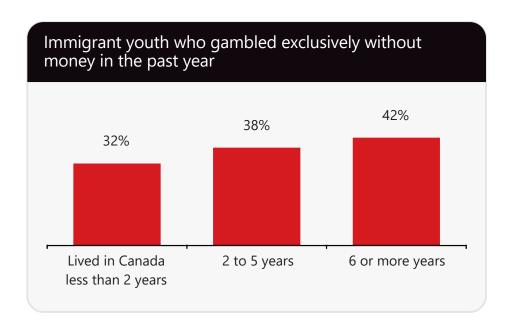
In the past year, 41% of BC youth gambled exclusively without money, with males more likely than females and non-binary students to have done so (e.g., 47% vs. 36% of females).

There were no differences between youth who lived in urban and rural areas, or between the five health authority regions in rates of gambling without money. At the HSDA level, rates ranged



from 39% in Fraser North and North Shore/Coast Garibaldi to 44% in the Northeast and Richmond.

Youth born in Canada were more likely than those born abroad to have gambled without money in the past year (42% vs. 39%). The longer immigrant youth had lived in Canada, the more likely they were to have engaged in this type of gambling.

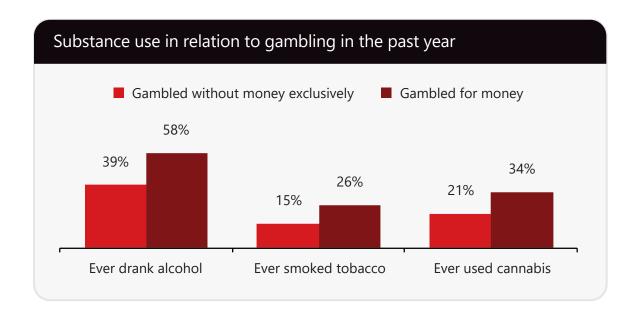


Health of youth who gambled without money

In comparison to youth who gambled for money, youth who played cards/dice, lottery tickets, sports betting or online gaming without money were less likely to have experienced extreme stress in the past month (10% vs. 12%); selfharmed (16% vs. 19%), considered suicide (16% vs. 18%), or attempted suicide in the past year (4% vs. 6%); and to wish they had a different life (16% vs. 20%). They were more likely to feel like they had what they wanted in life (61% vs. 57%), and to have slept for at least eight hours the night before taking the survey (51% vs. 44% of those who gambled for money). All of the rates for youth who gambled not for money were similar to those among youth who had not gambled at all in the past year.

In general, youth who gambled without money used substances at similar or lower rates to youth who had not gambled in the past year, and at lower rates than those who gambled for money. Also, if youth did use substances, they were less likely to use excessively or to experience problems with their substance use. For example, even after accounting for age, youth who gambled without money were less likely than those who gambled for money to have:

- Ever drank alcohol, smoked tobacco, or used cannabis.
- Binge drank the previous Saturday (57% vs. 62%; among those who drank the previous Saturday).
- Used cannabis on 20 days or more in the past month (9% vs. 12%; among those who had tried cannabis).
- ♦ Vaped in the past month (23% vs. 39%).
- Needed help in the past year for their alcohol use (2% vs. 4%), cannabis use (2% vs. 4%), or use of other substances (1% vs. 2%).

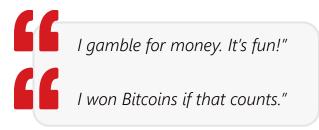


Youth who gambled without money engaged in other forms of risk taking at similar or lower rates to youth who had not gambled, and at lower rates than those who gambled for money. For example, 76% always wore a seat belt when riding in a car, truck, or van (vs. 64% of those who gambled for money); 5% drove after drinking alcohol (vs. 9%; among those who had ever drank alcohol); and 6% skipped classes on three or more days in the past month (vs. 12%).

Finally, very few youth who exclusively gambled without money felt or had been told they had a problem with their gambling (<1% vs. 3% of those who also gambled for money or exclusively gambled for money). For this reason, and because the health profile of these youth was generally more positive than that of youth who gambled for money, and similar to that of youth who had not gambled in the past year, the remainder of this report focuses on youth who gambled for money.

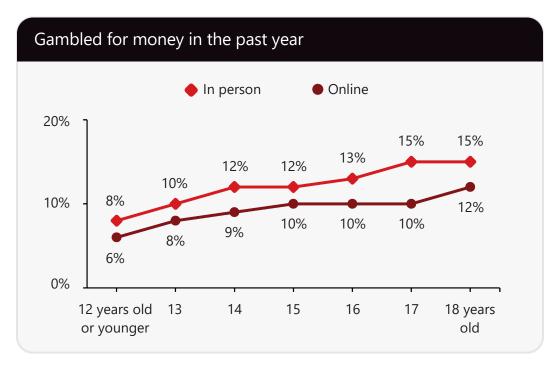
GAMBLED FOR MONEY

About a fifth (21%) of youth played lottery tickets, played cards/dice, bet on sports, and/or engaged in online gaming for money in the past year. As with gambling without money, females were the least likely to play for money (e.g., 13% vs. 30% of males). However, unlike gambling without money, non-binary youth were as likely to gamble for money as males.



Youth were less likely to gamble for money online than they were to play for money in person, as 9% played online cards/dice, sports betting, and/or gaming for money, compared to 12% who played cards/dice or sports betting in person.

Youth aged 16 to 18 were more likely than younger youth to gamble in person for money (e.g., 15% of 17-year-olds vs. 10% of 13-year-olds); and 18-year-olds were generally the most likely to gamble for money online (e.g., 12% vs. 8% of 13-year-olds).



Note: Differences between ages were not statistically significant at every point.

1998-2018

The 2018 BC AHS gambling items could not be directly compared to most previous cycles of the survey as the question wording changed significantly to reflect the changing gambling options available. Despite these changes, patterns were the same across survey years, with males generally more likely to gamble for money than females, and older youth more likely to do so compared to younger ones. Also, in each survey

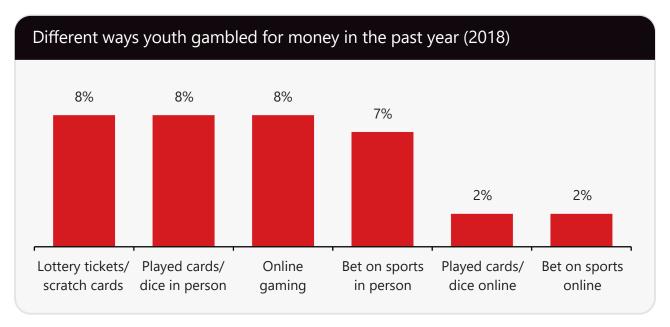
year, most youth who gambled for money in the past year did not do so on a regular basis.

The question wording for lottery tickets changed between 2003 and 2018. However, on both surveys, males and females were equally likely to have played lottery tickets in the past year, but males were more likely than females to have played on a monthly and weekly basis.

Youth who gambled for money in the past year				
SURVEY YEAR	SURVEY QUESTION	PERCENTAGE WHO GAMBLED FOR MONEY (and percentage who did so at least weekly)		
1998	How often do you gamble, such as playing cards or lotteries to win money?	44% (4% weekly)		
2003	During the past year, how often have you a) Played cards for money? b) Played bingo for money? c) Bet money on sports pools? d) Bought sport lottery tickets? e) Bought other lottery tickets (e.g., Scratch & Win, pull-tabs)? f) Bet money on gambling machines? g) Bet money at a casino?	51% (6% weekly)		
2008	In the past year, how often have youa) Played games for money?b) Bought lottery tickets?c) Bet money at casinos, race tracks, or video gambling machines?	39% (4% weekly)		
2013	In the past 12 months, how often have you played games for money, bought lottery tickets, or bet money at a casino, race tracks or online?	10% (1% weekly)		
2018	In the past 12 months, how often have you done the following for money a) Played cards/dice? b) Sports betting? c) Lottery tickets/scratch cards? d) Online gaming?	21% (4% weekly)		

Playing cards in person and playing lottery tickets were among the most popular ways youth gambled prior to 2018. For example, in 2003, 33% played cards for money, and 50% bought sports lottery tickets or other lottery tickets. These activities remained popular, as in

2018 the three most common ways that youth gambled for money were playing dice or cards in person, playing lottery tickets/scratch cards, and online gaming (each activity was done by 37% of youth who gambled for money or 8% of all BC youth).



Note: Youth could choose more than one response.

Playing dice or cards in person, playing lottery tickets/scratch cards, and online gaming (which was asked about for the first time in 2018) were the three most common activities youth played for money in the past year. However, gaming online for money was the most common activity they engaged in regularly, including on a weekly and daily basis.

Frequency of gambling for money in the past year (among those who engaged in each activity)

	At least twice a month	At least once a week	Daily
Engaged in online gaming	53%	40%	18%
Played cards/dice online	43%	25%	7%
Bet on sports online	41%	26%	10%
Played cards/dice in person	27%	13%	3%
Bet on sports in person	24%	10%	3%
Lottery tickets/scratch cards	17%	7%	2%

Note: The differences between playing cards/dice online and sports betting online were not statistically significant at any frequency of gambling. For gambling at least twice a month, the difference between playing cards/dice in person and sports betting in person was not statistically significant. For daily gambling, the differences for cards/dice in person, sports betting in person, and lottery tickets/ scratch cards were not statistically significant.

Number of gambling activities

Among youth who gambled for money in the past year, most (64%) engaged in a single type of gambling. They most commonly exclusively played lottery tickets/scratch cards (33%), followed by gaming online (27%), betting on sports (20%), and playing cards/dice (18%) in person. Females were the most likely to have engaged in a single activity (74% vs. 60% of males vs. 47% of non-binary youth).

Among those who exclusively engaged in one type of gambling, males were more likely to have engaged in sports betting in person (e.g., 25% vs. 12% of females), and females were more likely to have played lottery tickets/scratch cards (e.g., 58% vs. 19% of males).

Among youth who gambled for money in the past year, around 1 in 5 youth (21%) engaged in two different types of gambling, 8% in three types, and 6% in four or more different types. Non-binary youth were the most likely to have participated in all six gambling activities they were asked about (14% vs. 2% of males vs. 1% of females).

Among youth who engaged in more than one type of gambling in the past year, they most commonly played cards/dice in person in combination with betting on sports in person, gaming online, or playing lottery tickets/scratch cards.

Types of gambling activities

In this section we consider the different types of gambling activities youth participated in for money in the past year. Older youth were more likely than younger ones to participate in each of the activities except online gaming for money. There were also some differences between the activities based on gender, sexual orientation, length of time in Canada, and geography.

CARDS OR DICE



We play for like five-cent pots."

Youth who played cards or dice were more likely to play both in person and online than they were to engage in just one of these. For example, among youth who played cards/dice online in the past year, 81% had also played in person. However, there were a few differences in the profiles of youth who played in person and online.

Played cards or dice in person

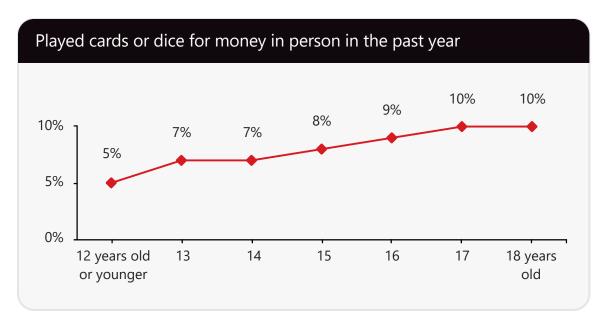
In the past year, 8% of youth played cards or dice for money in person, including 2% who played at least a couple of days a month and 1% who played at least weekly. Older youth were generally more likely than younger ones to have played, but were no more likely to have done so regularly.

Males and non-binary youth were more likely than females to have played in the past year (e.g., 11% of males vs. 4% of females), and non-binary youth were the most likely to play regularly, including daily. For example, 24% played cards/dice in person on a weekly basis, compared to 12% of males and females.

Also, youth who identified as straight or mostly straight were more likely than youth who identified as lesbian, gay, or bisexual (LGB) to have played (e.g., 8% of youth who identified as straight vs. 6% who identified as LGB).

Urban and rural youth played cards or dice in person at similar rates. There were also few regional differences except youth in the Fraser were less likely than youth from all other regions to have played in the past year (7% vs. 9% of youth from other regions).

Among youth who had played cards or dice for money in the past year, youth born outside Canada were more likely than youth born in Canada to have done so regularly. For example, 18% played at least weekly vs. 11% of Canadianborn youth. However, the longer youth born abroad had lived in Canada, the less likely they were to have played weekly (12% who had been in the country at least six years vs. 26% who had been in Canada less than two years).



Note: Differences between ages were not statistically significant at every point.

► Played cards or dice online

Fewer youth played cards or dice online than played in person (2% vs. 8%). However, youth who played online tended to do so more regularly than those who played in person, including 25% who played at least weekly and 7% who played daily.

There were generally no differences in playing online on the basis of sexual orientation, age, region, or between urban- and rural-based youth. However, non-binary youth were more likely to play online compared to youth of other genders (7% vs. 3% of males vs. 1% of females), and males were more likely than females to play regularly (e.g., 27% played weekly vs. 19% of females).

Youth born outside of Canada were more likely than youth born in Canada to have played online in the past year (4% vs. 2%). However, among youth who played cards or dice online in the past year, youth born in Canada were more likely to play on a daily basis (9% vs. 4% of youth born outside of Canada).

SPORTS BETTING



I'm in a hockey pool."

Reflecting the pattern for cards/dice, youth who engaged in sports betting were more likely to play both in person and online than they were to engage in just one of these. For example, around two thirds of youth who bet on sports online also bet in person in the past year.



► Sports betting in person

In the past year, 7% of youth participated in sports betting in person, including 2% who bet at least a couple of days a month and 1% who bet at least weekly.

Males and non-binary youth were more likely than females to bet on sports in person in the past year (around 10% of males and non-binary youth vs. 3% of females). However, among youth who bet on sports in person in the past year, non-binary youth were three times more likely than males to bet on at least a weekly basis (31%* of non-binary youth vs. 10% of males).

Youth who identified as straight were the most likely to have bet on sports in person in the past year (e.g., 8% vs. 3% of youth who identified as LGB).

There were no differences between youth who lived in urban and rural areas, but there were some regional differences. Vancouver Island youth were more likely than Northern, Interior, and Vancouver Coastal youth to have bet on sports in person on at least a weekly basis.

Among those who engaged in sports betting in person in the past year, regular participation was more popular among youth born outside of Canada than among those born in Canada (15% bet at least weekly vs. 9% of those born in Canada), and was particularly popular among youth who had lived in Canada for less than two years (29% vs. 8% of youth who were born abroad and had lived in Canada for six years or more).

► Sports betting online

As was the case for cards/dice, online sports betting was less popular than playing in person, with 2% of youth betting on sports online in the past year, including 1% who did so on at least a couple of days a month, and less than 1% who did so daily. However, this equated to 1 in 10 of those who had bet on sports online in the past year doing so on a daily basis.

Online sports betting was similar to in-person sports betting in that there were no urban/rural differences in participation. However, non-binary youth (7% vs. 3% of males vs. 1% of females), youth who identified as straight (e.g., 2% vs. 1% of bisexual youth), and those born outside Canada (3% vs. 2% of those born in Canada) were all more likely to have engaged in this type of gambling.

Online sports betting appeared particularly popular with youth who arrived in Canada recently, and as refugees or international students. For example, 8% of youth who arrived in Canada as refugees had engaged in online sports betting in the past year.

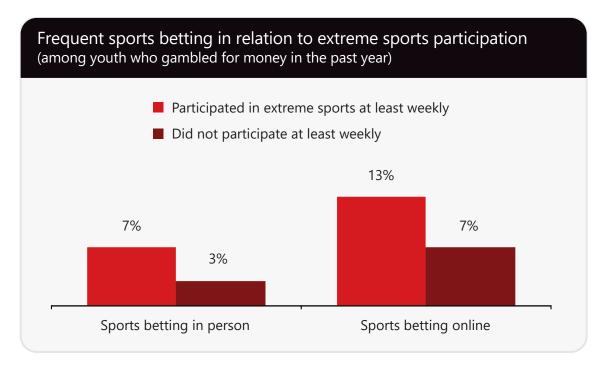
Although Fraser youth were generally less likely to gamble than youth from other parts of the province, they were more likely to engage in regular online sports betting. For example, they were more likely than Vancouver Coastal youth to have bet at least weekly (31% vs. 20%; among those who engaged in online sports betting).

► Link to sports involvement

Youth of all genders who were involved in organized sports, informal sports, or extreme sports (such as BMXing) on a weekly basis in the past year were more likely to engage in sports betting during this time. For example, 15% of youth who participated in extreme sports at least weekly engaged in sports betting in person in the past year (vs. 6% of those who did not participate weekly in extreme sports), and 4% bet online (vs. 2%).

Although weekly participation in all three types of sports was associated with sports betting, youth who participated in extreme sports were the most likely to bet on sports (e.g., 15% of youth who participated in weekly extreme sports bet on sports in person vs. 9% of youth who participated weekly in informal sports).

Also, the more frequently youth played sports in a week, the more likely they were to engage in sports betting. For example, 13% of those who participated in organized sports four or more times a week engaged in sports betting (in person and/or online), compared to 8% who participated in organized sports one to three times a week, and 5% who did not participate weekly.

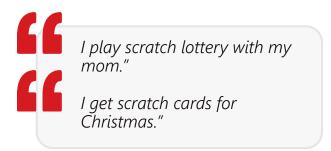


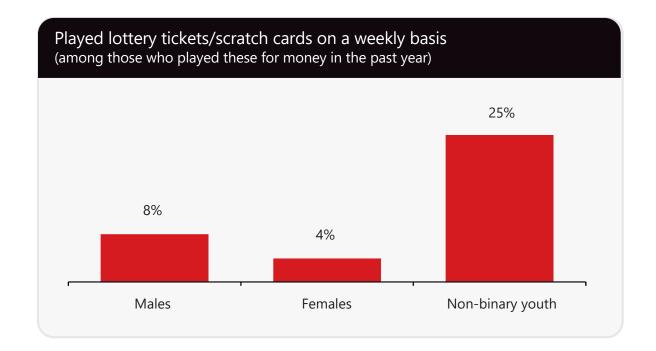
Note: Frequent sports betting refers to betting at least a couple of days a month in the past year.

LOTTERY TICKETS/ SCRATCH CARDS

Eight percent of youth played lottery tickets or scratch cards in the past year, including 7% who did so once a month or less often. Among youth who played lottery tickets/scratch cards, 17% did so on at least a few days a month, including 7% who did so on a weekly basis and 2% on a daily basis.

Non-binary youth were more likely than both males and females to have played lottery tickets/scratch cards in the past year (13% vs. 8%), and to have done so frequently (e.g., on a monthly or weekly basis).

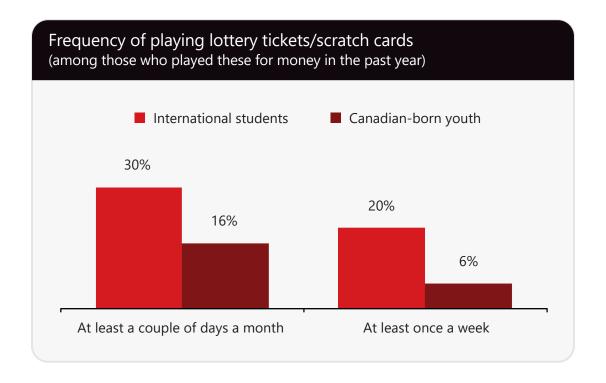




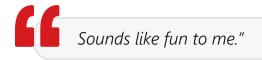
Older youth were generally more likely than younger ones to have played lottery tickets/ scratch cards in the past year (e.g., 10% of 18-year-olds vs. 8% of 15-year-olds vs. 6% of those aged 12 or younger). However, they were no more likely than younger youth to have played them regularly.

Youth in urban regions were less likely than those in rural ones to have played lottery tickets/scratch cards (8% vs. 11%), as were youth in Vancouver Coastal and Fraser regions compared to those in the rest of the province (e.g., 7% vs. 10% in the Interior).

Overall, youth born in Canada were more likely to have played lottery tickets/scratch cards in the past year (9% vs. 5% of those not born in Canada). However, among youth who played these, youth born abroad were more likely to do so regularly, including on a weekly basis (12% vs. 6% of those born in Canada). Regularly playing lottery tickets/scratch cards was particularly popular among international students and youth who had lived in Canada less than six years (16% vs. 7% of those who had lived in the country longer and played lottery tickets in the past year).



GAMING ONLINE



Overall, 8% of youth participated in gaming online for money in the past year, with females the least likely to have done so (e.g., 2% of females vs. 13% of males).

As with several other types of gambling behaviours, youth born outside of Canada were more likely to have engaged in gaming online for money (11% vs. 7% of Canadian-born youth); and the more recently they arrived in Canada, the more likely they were to game (e.g., 13% of youth born abroad who had lived here fewer than six years vs. 8% of those who lived in Canada at least six years). However, youth born abroad were no more likely than their Canadian-born peers to have gamed regularly.

There were few regional differences in gaming online for money except youth in Vancouver Coastal were more likely than those in Northern and Interior regions to have played (9% vs. 7%).

As noted earlier, rates of regularly gaming online for money were higher than for other forms of gambling. For example, 53% of youth who engaged in online gaming for money played on at least a couple of days a month (4% of all BC youth), including 40% who did so on at least a weekly basis and 18% who did so on a daily basis. Also, unlike other forms of gambling there were no gender differences in weekly or daily rates of online gaming for money.

The profile of online gamers also looked different to other forms of gambling for money in that younger youth were generally the most likely to be playing regularly. For example, 49% of youth aged 12 or younger who had participated in gaming online for money in the past year did so at least weekly, compared to 37% of 18-year-olds; and around a quarter of youth aged 13 or younger had played daily, compared to 14% of 18-year-olds.

Online gaming for money is considered in more detail on **p. 50**.

PROBLEMATIC GAMBLING

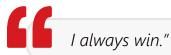
All results in this section are among youth who gambled for money in the past year, unless otherwise indicated.

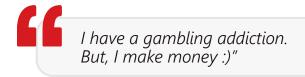
A 2016 study found that around 2% of adolescents were at risk for problem gambling, with males more likely to report problems than females (Elton-Marshall et al., 2016).

Findings from the BC AHS indicated that among youth who gambled for money in the past year, 3% felt or had been told that they needed help with their gambling (1% of all BC youth) during this time. This was lower than the percentages who reported experiencing problematic substance use. For example, among youth who had tried alcohol, 6% reported needing help with their use; among youth who tried cannabis, 10% needed help; and among those who had tried substances other than alcohol or cannabis, 7% needed help for their use during this time.

There was a link between problematic gambling and problematic substance use. For example, among youth who gambled for money in the past year, 12% of those who needed help for their substance use also needed help with their gambling, compared to 2% who did not report problematic substance use.

There were no age differences in needing help for gambling but there were some differences based on gender identity and sexual orientation.





Non-binary youth were the most likely to report needing help (10% vs. 3% of males vs. 1% of females). Also, LGB youth were more likely than those who identified as straight to have needed help with their gambling (6% vs. 2%).

There were few regional differences in the percentage of youth who needed help for their gambling, but urban youth were more likely than rural youth to indicate needing help (3% vs. 1%).

Youth who engaged in online gambling were more likely to have needed help for their gambling than those who gambled in person (4% vs. 3%). Youth who engaged in online card/dice games or sports betting were the most likely to report problematic gambling (about 1 in 10 youth who engaged in these activities).

Among youth who regularly gambled online, those who played cards/dice or bet on sports were more likely than those who engaged in online gaming for money to need help with their gambling (e.g., 18% of those who bet on sports online weekly vs. 6% of those who engaged in gaming online weekly).

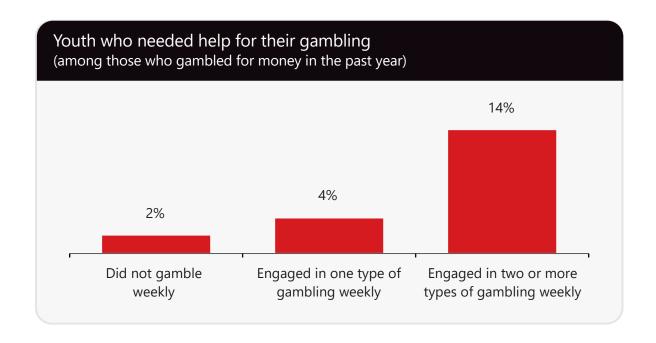
Other studies have found that despite being less likely to gamble on sports, females who engage in sports betting are more likely than males to report problematic gambling (Marchica et al., 2017). This was not the case in BC. Females were no more likely than males to bet regularly, and males who engaged in online and/or in-person sports betting on at least a couple of days a month were at least three times as likely as females to report they needed help for their gambling in the past year.

The more types of gambling youth engaged in for money, the more likely they were to indicate their gambling was problematic. For example, 1% of youth who engaged in one type of gambling activity reported needing help in the past year, compared to 3% who engaged in two activities, and 12% who engaged in four or more gambling activities.

As would be anticipated, youth who participated in a single gambling activity on a daily basis

were more likely to report needing help with their gambling than those who gambled less frequently (e.g., 7% vs. 3% of those who gambled on one activity a couple of days a month). However, youth who were engaging in multiple gambling activities did not need to gamble this regularly to report needing help, as 11% of those who gambled on two or more different activities at least a couple of times a month reported their gambling was problematic.

Although gaming online for money in isolation appeared to be a lower risk for reporting problematic gambling than other types of online gambling, youth who engaged in other in-person or online gambling activities were generally more likely to need help for their gambling if they also engaged in online gaming for money. For example, 13% of youth who engaged in online sports betting and online gaming for money needed help with their gambling, compared to 5% of those who bet on sports online and did not engage in online gaming for money.



Frequent gambling

In general, the more regularly youth gambled for money, the more likely they were to report needing help with their gambling, particularly if they gambled a couple of days a month or more frequently. This was the case regardless of the type of gambling they engaged in. For example, 2% of youth who played lottery tickets/scratch cards once a month or less often indicated needing help with their gambling, compared to 5% who played them a couple of days a month and 13% who played them on a weekly basis.

Similarly, 7% of youth who played cards/dice online once a month or less often indicated needing help with their gambling, compared to 15% who played a couple of days a month.

Overall, 5% of those who engaged in any gambling activity at least a couple of days a month reported problematic gambling, compared to 1% of those who gambled less frequently.

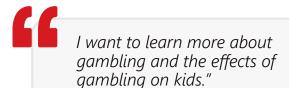
Youth who needed help for their gambling (among those who gambled for money in the past year)

	Once a month or less often	At least a couple of days a month
Played cards/dice online	7%	16%
Bet on sports online	5%	16%
Bet on sports in person	2%	9%
Lottery tickets/scratch cards	2%	8%
Played cards/dice in person	3%	7%
Engaged in online gaming	2%	6%

FREQUENT GAMBLING & POTENTIAL HARMS

All results in this section are among youth who gambled for money in the past year.

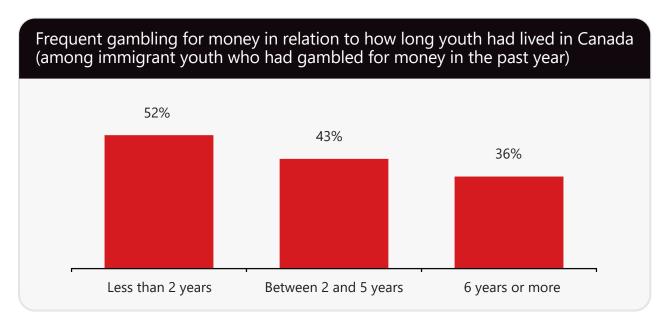
Frequent gambling refers to gambling for money on at least a couple of days a month.



As youth who gambled for money at least a couple of days a month were at least five times more likely than those who gambled less regularly to report that their gambling was problematic, this section looks at the link between gambling this frequently and other potential harms such as relationship difficulties, excessive use of technology, sedentary behaviour, and poorer physical and mental health.

Among youth who gambled for money in the past year, a third (33%) did so at least a couple of days a month, with non-binary youth (49%) the most likely to do so (vs. 37% of males and 23% of females).

Youth born outside of Canada were more likely than youth born in Canada to have gambled frequently (43% vs. 30%), with recent immigrants the most likely.



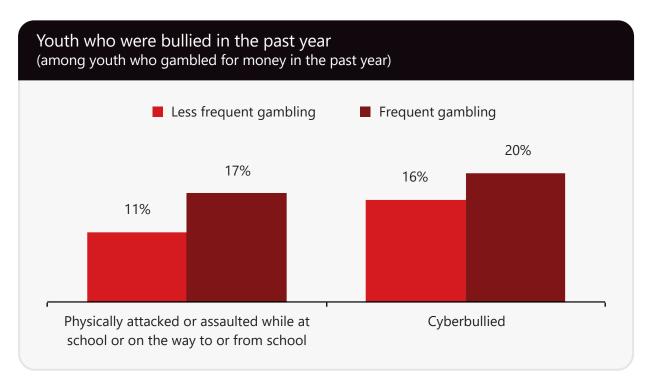
Note: Frequent gambling refers to gambling at least a couple of days a month.

Connections with others

Youth who gambled frequently were less likely to have in-person friends. For example, 20% had fewer than three friends in their school or neighbourhood (vs. 15% who gambled less frequently), and 5% had no friends (vs. 3%). However, they were more likely to have three or more online friends whom they had never met in person (28% vs. 18% who gambled less frequently). This rose to a third (33%) of those who frequently gambled online.

Youth who gambled frequently were more likely to:

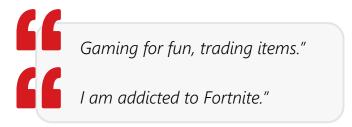
- Feel they had too much time on their own (17% vs. 12% of youth who gambled less frequently).
- Have been cyberbullied. Males were also more likely to have met someone on the Internet who made them feel unsafe (16% vs. 13% of males who gambled less frequently).
- Have been physically assaulted.
- Have been the perpetrators of in-person bullying (19% vs. 15%) and cyberbullying (14% vs. 8%).

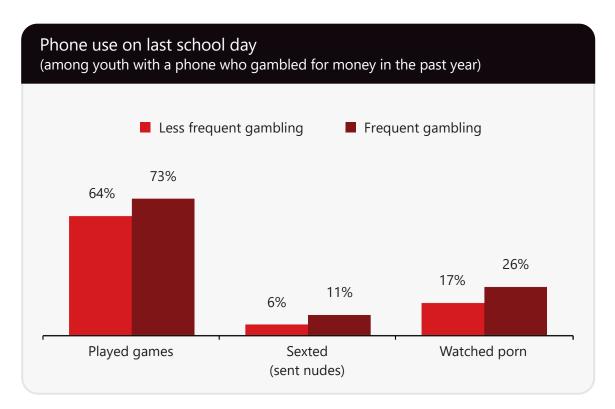


Note: Less frequent gambling refers to gambling once a month or less often. Frequent gambling refers to gambling at least a couple of days a month.

Technology use

Around half (51%) of youth who gambled frequently gamed after the time they were supposed to be asleep, which was higher than for those who gambled less frequently (37% gamed). Frequent gamblers were also more likely to be using their phone to play games, sext, and watch porn.



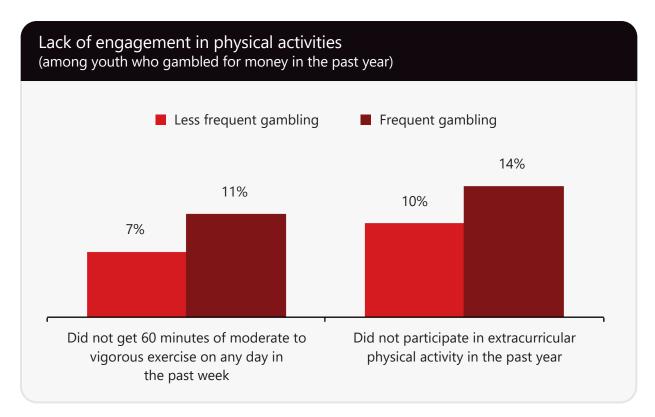


Note: Less frequent gambling refers to gambling once a month or less often. Frequent gambling refers to gambling at least a couple of days a month.

Physical & mental health

Youth who gambled at least a couple of days a month were more likely to rate their overall health as poor or fair (21% vs. 18% of those who gambled less frequently). They were also less likely to be physically active. For example, they were less likely to have met Canadian physical activity guidelines in the past week or to have engaged in any extracurricular physical activities including informal sports, organized sports, extreme sports, or dance/yoga/exercise classes in the past year.

Youth who gambled on a daily basis were the least likely to be physically active. For example, 21% had not participated in any extracurricular physical activities in the past year.

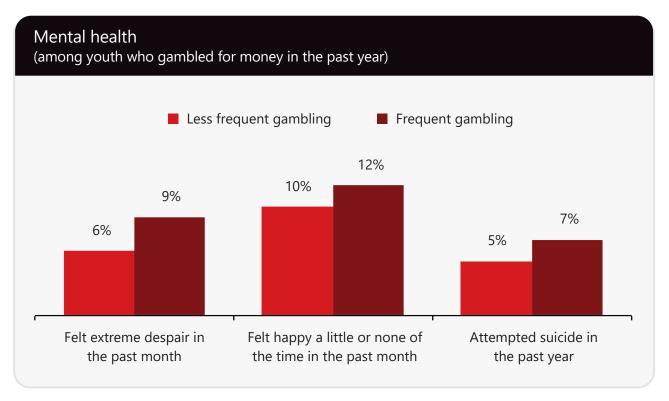


Note: Less frequent gambling refers to gambling once a month or less often. Frequent gambling refers to gambling at least a couple of days a month.

Note: Extracurricular physical activities included informal sports, organized sports, extreme sports, and dance/yoga/exercise classes.

Frequent gambling was also associated with poorer mental health. For example, youth who gambled frequently were more likely than those who gambled less frequently to report extreme despair and to have attempted suicide, and were less likely to feel happy. Extreme stress was also more common among youth who gambled frequently, for both males (9% experienced this in the past month vs. 6% of those who gambled less frequently) and females (25% vs. 21%).

Additionally, males who were frequent gamblers were less likely to feel competent than their peers (19% could not name something they were really good at vs. 16% of males who gambled less frequently), and were more likely to rate their mental health poorly (22% rated their mental health as poor/fair vs. 19%).



Note: Less frequent gambling refers to gambling once a month or less often. Frequent gambling refers to gambling at least a couple of days a month.

YOUTH MORE LIKELY TO ENGAGE IN FREQUENT GAMBLING

All results in this section are among youth who gambled for money in the past year.

Having established that gambling for money at least a couple of days a month was associated with a more negative health picture than less regular gambling, and was also associated with an increased risk of youth reporting their gambling was problematic, this section considers some groups of youth who gambled for money in the past year who appeared to be more likely to be engaging in frequent gambling.

Living situation

Youth who did not live with their parents were more likely than those who lived with at least one parent to have gambled frequently (46% vs. 32%), and those who lived alone were over twice as likely to have done so (69%* vs. 33% who lived with someone).

Youth were also more likely to gamble frequently if they did not feel safe in their neighbourhood in the daytime (58% vs. 38% who sometimes felt safe and 31% of youth who often or always felt safe).



Youth who went to bed hungry at least sometimes because there was not enough money for food at home were more likely than youth who never went to bed hungry for this reason to have gambled frequently in the past year (41% vs. 32%).

Youth who felt deprived of items their peers had, such as clothes in order to fit in, were also more likely to engage in frequent gambling; and the more items they felt deprived of, the more likely they were to gamble. For example, 45% of youth who felt deprived of three or more items gambled frequently in the past year, compared to 34% of youth who were deprived of one item.

Gambled at least a couple of days a month in relation to feeling deprived of items (among youth who gambled for money in the past year)

	Deprived of item	Had item
Clothes in order to belong/fit in	53%	32%
A quiet place to sleep	47%	32%
Access to transportation	45%	32%
Lunch for school or money to buy lunch	40%	32%
A space of their own to hang out in	39%	32%

Adverse experiences

Youth who had been through potentially traumatic experiences were more likely to engage in frequent gambling. For example, they were more likely to gamble at least a couple of days a month if they had lost someone close to them as a result of violence (45% vs. 32% of those who had not experienced this) or suicide (38% vs. 32%).

For males, frequent gambling was more common among those who had experienced abuse. For example, 46% of males who experienced sexual abuse had gambled frequently, compared to 36% of those who had not been sexually abused. Similar results were found for physical abuse (41% vs. 36%).

Extracurricular activities

Participation in extracurricular activities was generally protective. However, regular participation in some activities was linked to frequent gambling, including weekly participation in extreme sports (39% vs. 32%; see p. 24 for the link between extreme sports and sports betting). Also, the more frequently youth engaged in extreme sports, the more likely they were to gamble at least a couple of times a month. For example, 46% of those who did extreme sports four or more times a week gambled frequently, compared to 35% of those who did these types of sports one to three times a week.

Regular employment

In general, working at a paid job during the school year was not associated with frequent gambling, and females who worked during the school year were less likely to have gambled frequently (21% vs. 25% of females who did not work at a paid job). However, youth who worked in excess of 20 hours a week were more likely to be gambling regularly. For example, 43% of youth who worked at least 21 hours a week gambled frequently, compared to 29% of those who worked 12 hours or less.

Substance use

Reflecting findings from other studies (e.g., Castrén et al., 2015; Dowling et al., 2017), youth who engaged in regular or potentially risky substance use were more likely than those who used substances more moderately or not at all to engage in frequent gambling. For example, youth were more likely to gamble frequently if they:

- Smoked cigarettes in the past month (40% vs. 32% of youth who did not smoke in the past month).
- Used cannabis on six or more days in the past month (39% vs. 31% who used cannabis on fewer days).
- Used injecting as a method of substance use (58%* vs. 32% of youth who had not used this method).
- Needed help for their substance use in the past year (44% vs. 32% who did not need help).
- Used substances the last time they had sex (41% vs. 34% of youth who did not mix substance use and sex; among youth who had sex).
- Drove after using substances in the past month (45% vs. 32% of those who did not drive after using substances).

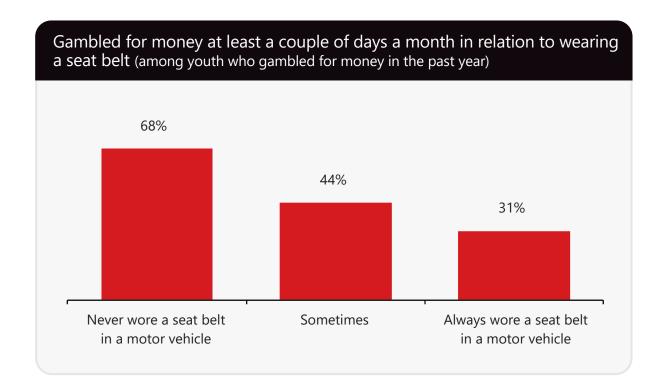
Over a third (37%*) of youth who drank alcohol on a daily basis in the past month also gambled daily, as did 14% of youth who used cannabis on a daily basis.

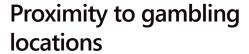
The earlier youth first used some substances, the more likely they were to gamble frequently. For example, among youth aged 16–18 who gambled for money in the past year and had smoked tobacco, 44% of those who first smoked before their 13th birthday had gambled at least a couple of times a month, compared to 31% who waited until they were at least 15 years old to smoke. A similar pattern was seen for males who used alcohol, with those first using at the age of 12 or younger the most likely to be gambling frequently. However, this pattern was not seen for other genders or for any gender who used cannabis.

Other potential risk-taking behaviours

Other potential risky behaviours were also associated with more frequent gambling, including skipping school and not wearing a seat belt. For example, 41% of youth who skipped class on three or more days in the past month gambled frequently in the past year, compared to 31% of youth who did not skip class in the past month.

Many of the risk factors noted above have also been identified as risk factors for potentially harmful substance use including living in poverty and having a history of sexual abuse (Smith et al., 2018). Also similar to the picture for gambling, the relationship between sports involvement, employment, and substance use is complex. For example, having a paid job was not associated with regular smoking but youth who worked in excess of 20 hours a week were more likely to be smoking daily (Smith et al., 2020).





Studies have shown a link between physical proximity of gambling opportunities, gambling involvement, and problem gambling in adults (Vasiliadi et al., 2013). In order to look at this for BC youth, the location of various gambling venues was mapped and explored in relation to the location of a youth's school.

Frequent gambling did not appear to be associated with the proximity of a youth's school to casinos, community gaming centres, or race

tracks. For example, the distance between a school and its nearest casino or community gaming centre was not related to sports betting in person, playing cards or dice in person, or youth needing help for their gambling. However, among those who had played lottery tickets/scratch cards in the past year, youth were more likely to have done so on a weekly and daily basis when there were a greater number of lottery retailers within a two-kilometre radius of their school.



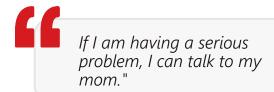
REDUCING FREQUENT GAMBLING

All results in this section are among youth who gambled for money in the past year.

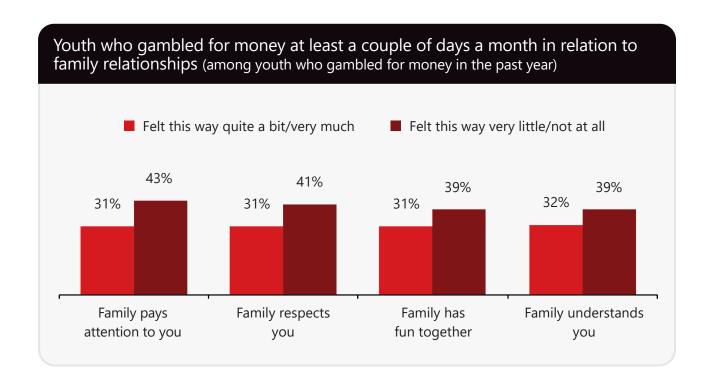
Having identified some potential risk factors for frequent gambling, this section considers what was present in the lives of youth who had gambled for money in the past year, and did not go on to gamble frequently. It is worth noting that each of these protective factors has also been associated with a reduced likelihood youth will experience problematic substance use (Smith et al., 2018).

Supportive family

Among youth who gambled for money, those who felt connected to their family, and supported by them, were less likely to gamble frequently. For example, 31% of youth who had an adult in their family they could talk to when they had a serious problem gambled frequently, compared to 36% who did not have such an adult in their life. Having a supportive adult was particularly protective for non-binary youth, as 51%* of non-binary youth who asked a family member for help in the past year and found the experience helpful had gambled at least a couple of days a month, compared to 86%* who had not received helpful support from a family member.



Youth whose parents knew what they were doing in their free time were less likely than youth whose parents rarely or never knew to have gambled frequently in the past year (30% vs. 43%). This was the case for both in-person (13% vs. 20%) and online (20% vs. 32%) gambling. However, parental monitoring specifically of online behaviours did not appear to be a protective factor against frequent online or in-person gambling.

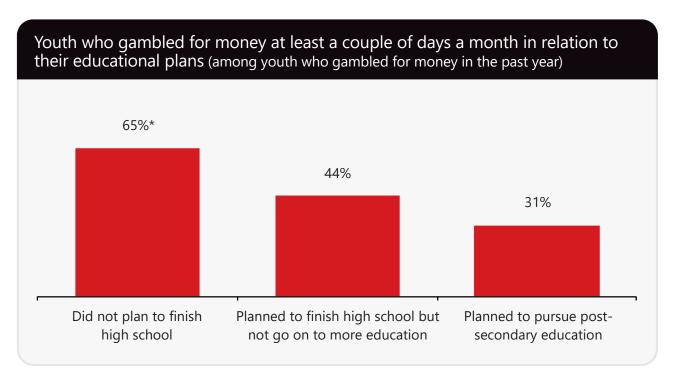


School

Youth who felt connected to school were less likely to gamble frequently. For example, 30% of those who felt like part of their school gambled frequently in the past year, compared to 42% who did not feel like a part of their school. Similarly, youth were less likely to have engaged in frequent gambling if they felt happy to be at their school (31% vs. 39%); felt safe at school (30% vs. 43%); felt that school staff treated them

fairly (30% vs. 43%) and expected them to do well (30% vs. 51%); and felt cared about by their teachers (30% vs. 43%) and other school staff (31% vs. 40%).

Youth who planned to continue their education beyond high school were less likely than those who intended to finish their schooling earlier to have gambled frequently over the past year.



^{*} Percentage should be interpreted with caution as the standard error was higher than others but still within the releasable range.

Supportive adults outside the family

Youth who felt they had an adult in their community (outside of their family or school) who really cared about them were less likely to have gambled frequently in the past year (31% vs. 37% of those without such an adult). In addition, youth who had approached an adult such as a teacher, coach, or spiritual leader for help in the past year and found that experience helpful were less likely to have gambled frequently.



My friend's guardian really cares about me."

Youth were also less likely to have gambled frequently if they had an adult who helped them with tasks such as finding a job (31% vs. 39% of those who did not have this type of adult support), making appointments (31% vs. 46%), getting to appointments (31% vs. 48%), homework (32% vs. 37%), and preparing for post-secondary (32% vs. 37%).

Youth who gambled for money at least a couple of days a month who approached an adult for help (among those who gambled for money in the past year)

	Found the support helpful	Did not find it helpful
Teacher	31%	41%
Sports coach	31%	49%
School staff other than teacher (such as a Principal or support staff)	33%	45%
Friend's parents	35%	49%
Nurse	37%	46%
Spiritual leader	41%	56%

Relationships with friends

Youth who had friends with healthy attitudes toward risk behaviours were less likely to gamble regularly, including if they had friends who would be upset with them if they beat someone up (28% vs. 38% whose friends would not be upset), dropped out of school (30% vs. 43%), were involved in a pregnancy (30% vs. 39%), or used cannabis (31% vs. 34%).

Hopefulness & perseverance



I just want a bright future."

Youth who had gambled for money in the past year were less likely to have engaged in frequent gambling if they felt hopeful for the future (31% vs. 41% of those who did not feel hopeful), as well as if they persevered when things went wrong. For example, among youth who had experienced setbacks, 32% of those who always pushed themselves to achieve their goals had gambled frequently, compared to 50% of those who did not push themselves.

Extracurricular activities

Youth who took part in any extracurricular activities in the past year were less likely to have gambled frequently (32% vs. 45% of those who did not take part). More frequent participation in some activities was also protective. For example, youth who played organized sports at least weekly in the past year were less likely to have gambled frequently during this time (31% vs. 35% of those who did not play this regularly). Additionally, non-binary youth who participated in dance, yoga, or exercise classes on a weekly basis were less likely than non-binary youth who did not participate this regularly to have gambled frequently (34%* vs. 53%).

Community connection

Community connectedness was also protective for males in a way not seen for youth of other genders. Males who had gambled for money who felt connected to their community were less likely to have gambled frequently than those who did not feel connected (35% vs. 43%).

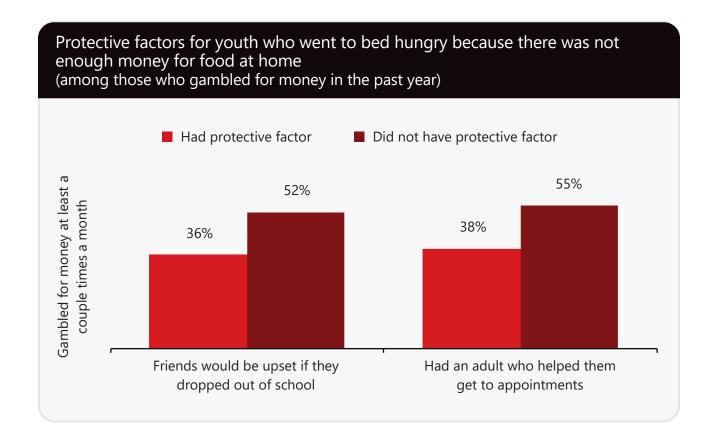


Cadets is something I actively take part in. Perhaps more advertising for groups like Cadets in school would be beneficial."

Protective factors among vulnerable youth

Youth at higher risk of frequent gambling may be less likely to have protective factors in their lives. However, when these youth do have access to opportunities and feel supported, their likelihood of gambling frequently is reduced. For example, 41% of youth who went to bed hungry because there was not enough money for food at home had gambled frequently. However, if these youth felt like school staff expected them to do well at school, they were less likely to gamble frequently (38% vs. 54% of youth who did not feel school staff expected them to do well).

In addition to a supportive school environment, youth who went to bed hungry and who had prosocial peers, had an adult who helped them with tasks, or parents/guardians who knew what they were doing in their free time were less likely to gamble frequently. For example, 39% of those who went to bed hungry who had parents who monitored their free time had gambled frequently, compared to 47% of those whose parents never or rarely monitored them.





The presence of individual protective factors appeared to reduce the likelihood that youth who gambled would do so frequently. Overall, the more protective factors youth had across different aspects of their life, such as family, school, community, and peers, the less likely they

were to gamble frequently. For example, 28% of youth with at least eight different protective factors gambled at least a couple times a month, compared to 43% of youth who had four protective factors and 65%* who had one of the protective factors.



Note: Differences may not be statistically significant at every point.

^{*} Percentage should be interpreted with caution as the standard error was higher than others but still within the releasable range.

A CLOSER LOOK AT GAMING

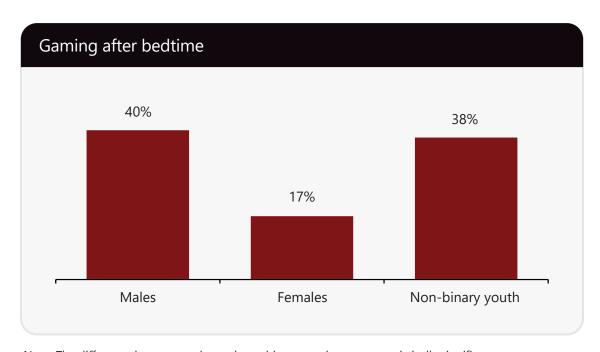
As the profile of youth who engaged in online gaming for money looked different to other types of gambling behaviour, and it is likely that the question about gaming for money did not capture those gaming for non-monetary rewards, this section looks in more detail at gaming.

Gaming after bedtime

In addition to asking about gaming with and without money in the past year, the BC AHS asked youth about gaming after they were expected to be asleep. Around 3 in 10 youth (29%) were gaming after the time they were normally expected to go to sleep, with older

youth more likely than younger ones to be doing so (e.g., 33% of 17-year-olds vs. 30% of 15-year-olds vs. 24% of 13-year-olds). Females were the least likely to be gaming after bedtime.

The survey item about gaming after bedtime did not specify the type of gaming. However, youth who gambled for money were more likely to have been gaming after the time they were supposed to be asleep (41% vs. 30% of those who gambled without money). This rose to 57% among youth who gambled online (vs. 25% of those who did not gamble online). Also, 59% of those who reported gaming online for money were gaming after bedtime (vs. 31% of those who were engaged in other types of online gambling).

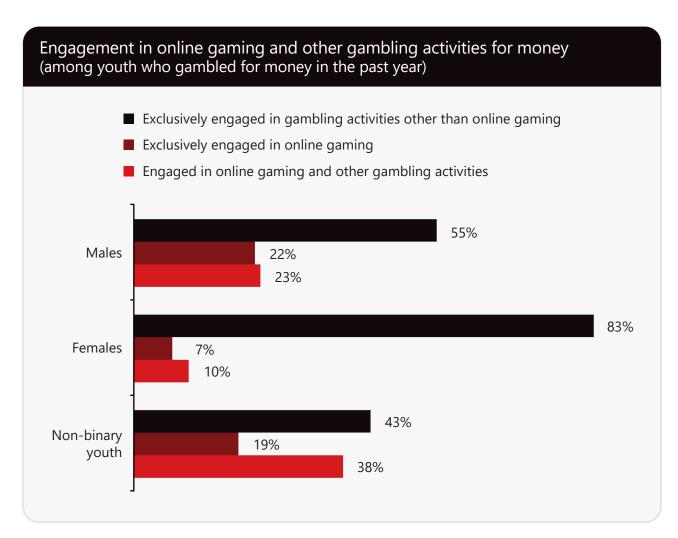


Note: The difference between males and non-binary youth was not statistically significant.

Online gaming for money

All results in this section are among youth who gambled for money in the past year.

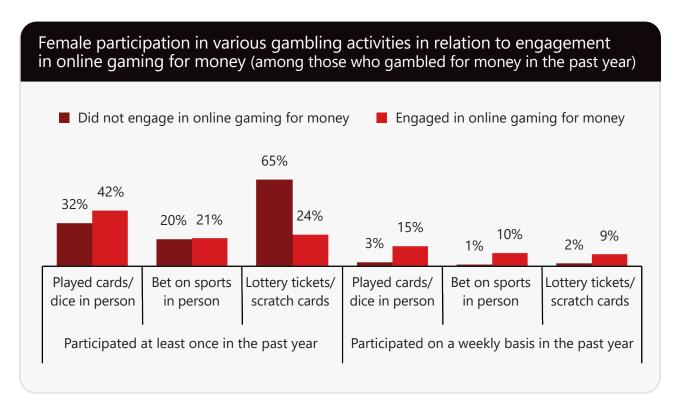
Among youth who gambled for money in the past year, 63% did not engage in online gaming, while 17% engaged exclusively in online gaming and 20% engaged in online gaming and other gambling activities for money.



Note: The difference between male and non-binary youth in engaging exclusively in online gaming for money was not statistically significant. Among males, there was no significant difference between engaging exclusively in online gaming and engaging in online gaming and other activities for money. Among non-binary youth, there was no significant difference between engaging exclusively in gambling activities other than online gaming for money and engaging in online gaming and other activities.

Among youth who gambled for money in the past year, those who engaged in online gaming were more than twice as likely to participate in other types of online gambling (24% vs. 9% of those who did not engage in online gaming for money). Females were also more likely to have

played cards/dice in person. However, males who engaged in online gaming for money in the past year were less likely to participate in in-person types of gambling (playing cards/dice or betting on sports) than their same-gender peers who did not game online.

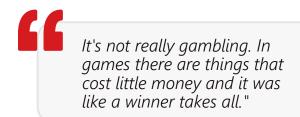


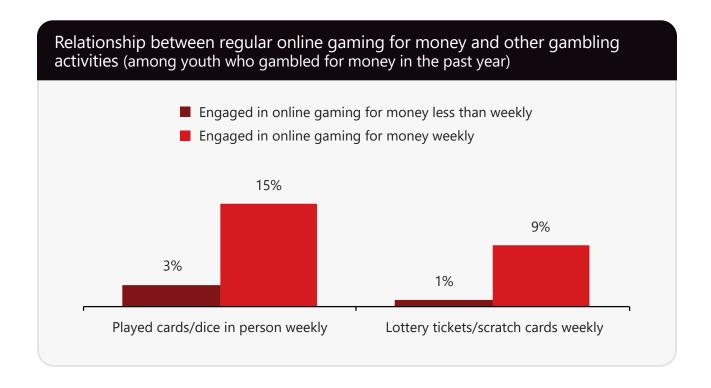
Note: The difference for betting on sports at least once in the past year was not statistically significant.





Youth who were regularly gaming online for money were the most likely to be engaging in other types of gambling. For example, youth who engaged in online gaming for money at least weekly were more likely than those who played less regularly to have also played cards/dice in person and played lottery tickets on a weekly basis.





Potential harms

As with other forms of gambling, there was a link between online gaming for money exclusively (without gambling in other ways) and relationships, technology use, and physical and mental health.

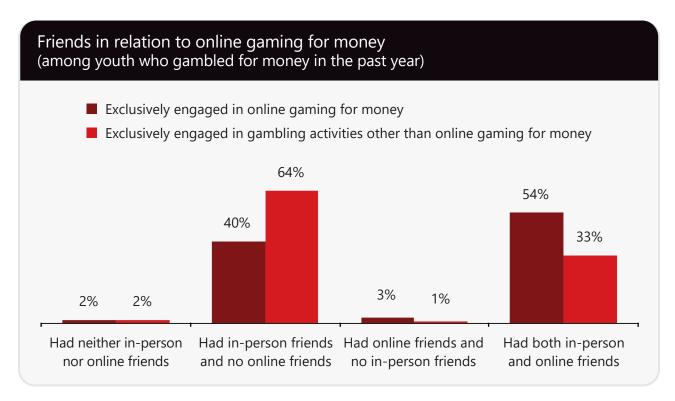
and were more than twice as likely to have multiple online friends whom they had never met in person (32% vs. 15%), and to exclusively have online friends.

3% who engaged in other types of gambling),

CONNECTIONS WITH OTHERS

In comparison to youth who engaged in other types of gambling for money, youth who exclusively engaged in online gaming for money were less likely to have in-person friends (e.g., 5% had no friends in their school or neighbourhood vs.

Youth who exclusively engaged in online gaming for money were less likely to be bullied in person and to have met someone through the Internet who made them feel unsafe (16% vs. 20% of those who engaged in other forms of gambling), and were not at increased risk of being cyberbullied. However, they were more likely to have perpetrated cyberbullying in the past year (11% vs. 8% of youth who engaged in other types of gambling).



Note: In-person friends are close friends youth had in their school or neighbourhood. Online friends are close friends whom youth had never met in person.

Note: Percentages for those who engaged in online gaming for money exclusively do not equal 100% due to rounding.



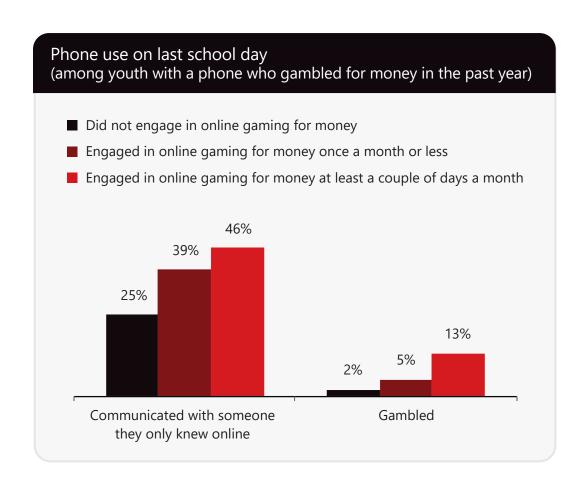
TECHNOLOGY USE

Over half (58%) of youth who engaged exclusively in online gaming for money reported that they were gaming after the time they were supposed to be asleep. This compared to 31% of youth who gambled but did not game online for money.

Among youth with a phone who gambled for money in the past year, those who exclusively engaged in online gaming for money were not only more likely to game on their phones on their last school day (78% vs. 59% of those who gambled in other ways), they were also more

likely to use their phone to talk to someone they only knew online (41% vs. 25%). They were less likely to use their phone to communicate with their parents (76% vs. 83% of those who gambled in other ways) and in-person friends (86% vs. 91%).

Also, the more frequently youth participated in online gaming for money in the past year, the more likely they were to have used their phone to gamble and to communicate with people they did not know in person.

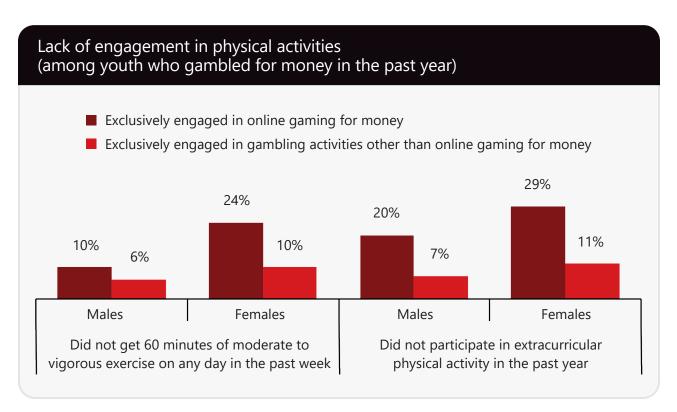


PHYSICAL & MENTAL HEALTH

The mental and physical health picture of those who were online gaming was similar to that of youth who gambled in other ways. However, those who were exclusively engaging in online gaming for money were less likely to have:

- Experienced extreme stress in the past month (9% vs. 13% of those who gambled for money in other ways).
- Missed school in the past month due to their mental health (13% vs.17%), work (4% vs. 6%), or because they were skipping (28% vs. 35%).

- Felt good about themselves (For males: 63% vs. 69% who gambled in other ways. For females: 36% vs. 45% who gambled in other ways).
- Exercised in the past week (12% did not exercise on any of the past seven days vs. 7% of those who gambled without online gaming for money).
- Taken part in any extracurricular physical activities in the past year such as organized or informal sports, extreme sports, or dance/ yoga/exercise classes (21% did not take part vs. 9%).



Note: Extracurricular physical activities included informal sports, organized sports, extreme sports, and dance/yoga/exercise classes.

Risk & protective factors for frequent online gaming for money

As was the case with other forms of frequent gambling, youth were more likely to engage in online gaming for money at least a couple of days a month if they did not live with their parents, lived alone, experienced hunger, had a history of trauma, and engaged in health risk behaviours. Similarly, protective factors that were associated with a reduced likelihood of frequent gambling, such as being connected to family, school, and community, were also generally associated with a lower likelihood of frequent online gaming. However, some of the risk factors for regular gambling identified earlier did not appear to be related to frequent online gaming for money, including having been physically

abused (which was a risk factor for males for frequent gambling), as well as having experienced bereavement due to violence or suicide.

Having parents who monitored their time online appeared to be protective for females against daily gaming for money (2% vs. 3% of females who were rarely/never monitored). However, for males those who had parents who monitored their time online most or all of the time were more likely to engage in online gaming for money at least a couple of days a month (28% vs. 23% of males with parents who rarely/never monitored their time).



CONCLUSION

This is the first in-depth look at gambling among 12- to 18-year-olds using data from the BC AHS. It has raised a number of questions, which it is hoped can be explored in the 2023 BC AHS, such as the role of age of gambling initiation, and the need to better understand non-monetary rewards youth might be seeking and experiencing when gambling and specifically when online gaming.

Despite its limitations, the report has clearly shown that gambling for money at least a couple of times a month in the past year was associated with a more negative health picture in areas such as relationships with peers, physical health, and mental health. The report also highlights which youth were most likely to be experiencing problems with their gambling, and suggests supports should take account of gender differences, and ensure the specific needs of gender diverse youth are accounted for in educational initiatives and services.

The report has also shown differences between those who engage in various types of gambling behaviours and suggests targeted interventions and awareness raising may be useful. For example, the link between sports betting and sports participation suggests coaches and others involved in youth sports have a role to play in increasing awareness of the potential problems associated with this type of gambling, and of where youth can seek help if they need to.

One of the survey participants quoted in the report pointed out there is little discussion within school settings about the potential risks involved in gambling, and this highlights the role that

schools can play in raising awareness of when gambling can become problematic. Educators may also be interested in the link between the density of lottery retailers around youth's schools and their underage gambling. This finding also has implications for policy makers in terms of youth's access to gambling establishments and to gambling advertisements.

Results from the BC AHS indicated that 3% of youth who gambled for money felt they had reached a point where they needed help with their gambling. This is likely an underestimate of those whose gambling is impacting their life in a negative way, as some youth may not recognize the link between their gambling and issues such as not getting enough sleep or exercise. It is also worth noting that many of the risk and protective factors which were identified for problematic gambling are similar to those for problematic substance use. This suggests the need for an upstream approach to support youth to deal with the challenges in their life, build healthy coping mechanisms, and have access to supportive networks and opportunities to fully participate in community life.

It is hoped that this report will spark conversation about underage gambling in BC and that the results can be used to better understand which young people are experiencing challenges in their life that can make them vulnerable to frequent and problematic gambling. Through that understanding we can increase the odds that these young people will get the help they need to address any gambling issues they may experience and the support which will help them to thrive.

RESOURCES

Presentations and workshops

McCreary staff are available to offer presentations and workshops for youth and adult audiences on a range of health topics, including gambling. Please email mccreary@mcs.bc.ca to arrange a presentation or workshop.

The PowerPoint to accompany this report is available at: www.mcs.bc.ca/download_resources.

Youth Action Grants (YAGs)

YAGs were created by McCreary's Youth Advisory & Action Council (YAC). The purpose of the YAGs is to provide BC youth (ages 12–19) with the opportunity to deliver a project to improve youth health. Applications from youth wishing to address gambling, or other health topics, are currently being accepted. Learn more about the YAGs and download the application at: www.mcs.bc.ca/youth_action_grants.

British Columbia Responsible & Problem Gambling Program

Provides free prevention, treatment and support services for anyone struggling with their own or a loved one's gambling. Some resources are available in Chinese, Vietnamese, Korean, and Punjabi.

www.bcresponsiblegambling.ca
BC Gambling Support Line: 1-888-795-6111
(24/7 toll-free)

GameSense

Explains how gambling games work and how to manage gambling to reduce the risk of problems. Provides information about finding help for problem gambling.

www.gamesense.com

Game Quitters

Information, resources, and tools for gamers and for parents or caregivers who are concerned about a young person.

www.gamequitters.com

S.U.C.C.E.S.S. Problem Gambling Program

Education, prevention, self-help resources, and support for Chinese community members. The program offers free counselling for people who want to manage problem gambling and family members who have been affected by gambling.

problemgambling.successbc.ca (Traditional and Simplified Chinese) or www.successbc.ca/counselling-crisis-support/services/problemgambling-program/ (English)

Staying Mentally Healthy with Technology

Strategies to support balance in technology use and recognize when technology use is becoming more harmful than helpful.

www.heretohelp.bc.ca/wellness-module/ wellness-module-10-staying-mentally-healthywith-technology

REFERENCES

- Allami, Y., Vitaro, F., Brendgen, M., Carbonneau, R., & Tremblay, R. E. (2018). Identifying at-risk profiles and protective factors for problem gambling: A longitudinal study across adolescence and early adulthood. *Psychology of Addictive Behaviors, 32*(3), 373–382. https://doi.org/10.1037/adb0000356
- Castrén, S., Grainger, M., Lahti, T., Alho, H., & Salonen, A. H. (2015). At-risk and problem gambling among adolescents: A convenience sample of first-year junior high school students in Finland. *Substance Abuse Treatment, Prevention, and Policy, 10*(9). https://doi.org/10.1186/s13011-015-0003-8
- Derevensky, J. L., & Gilbeau, L. (2015). Adolescent gambling: Twenty-five years of research. *The Canadian Journal of Addiction*, 6(2), 4–12. https://doi.org/10.1097/02024458-201509000-00002
- Dowling, N. A., Merkouris, S. S., Greenwood, C. J., Oldenhof, E., Toumbourou, J. W., & Youssef, G. J. (2017). Early risk and protective factors for problem gambling: A systematic review and meta-analysis of longitudinal studies. *Clinical Psychology Review, 51*, 109–124. https://doi.org/10.1016/j.cpr.2016.10.008
- Elton-Marshall, T., Leatherdale, S. T., & Turner, N. E. (2016). An examination of internet and land-based gambling among adolescents in three Canadian provinces: Results from the youth gambling survey (YGS). *BMC Public Health*, *16*(277). https://doi.org/10.1186/s12889-016-2933-0
- Floros, G. D. (2018). Gambling disorder in adolescents: Prevalence, new developments, and treatment challenges. *Adolescent Health, Medicine and Therapeutics, 9, 43-51.* https://doi.org/10.2147/AHMT.S135423
- King, D. L., & Delfabbro, P. (2018). Predatory monetization in video games (e.g., 'loot boxes') and internet gaming disorder. *Addiction*, *13* (11), 1967-1969. https://doi.org/10.1111/add.14286
- Marchica, L., Zhao, Y., Derevensky, J., & Ivoska, W. (2017). Understanding the relationship between sports-relevant gambling and being at-risk for a gambling problem among American adolescents. *Journal of Gambling Studies*, *33*(2), 437–448. https://doi.org/10.1007/s10899-016-9653-3
- Raisamo, S., Kinnunen, J. M., Pere, L., Lindfors, P., & Rimpelä, A. (2020). Adolescent gambling, gambling expenditure and gambling–related harms in Finland, 2011–2017. *Journal of Gambling Studies*, *36*(2), 597–610. https://doi.org/10.1007/s10899-019-09892-7
- Smith, A., Peled, M., Poon, C., Jones, G., Mahdal, D., & McCreary Centre Society. (2020). *Understanding tobacco use and vaping among BC youth: Findings from the BC Adolescent Health Survey.* McCreary Centre Society.
- Smith, A., Poon, C., Beggs, M., Ferguson, M., Peled, M., & McCreary Centre Society's Youth Research Academy. (2018). Starting a conversation: An upstream approach to reducing potentially harmful substance use among BC youth. McCreary Centre Society.
- Vasiliadi, S., Jackson, A., Christensen, D., & Francis, K. (2013). Physical accessibility of gaming opportunity and its relationship to gaming involvement and problem gambling: A systematic review. *Journal of Gambling Issues*, 28. https://doi.org/10.4309/jgi.2013.28.2
- Wijesingha, R., Leatherdale, S. T., Turner, N. E., & Elton-Marshall, T. (2017). Factors associated with adolescent online and land-based gambling in Canada. *Addiction Research & Theory, 25*(6), 525–532. https://doi.org/10.1 080/16066359.2017.1311874
- Williams, R. J., Belanger, Y. D., & Prusak, S. Y. (2016). Gambling and problem gambling among Canadian urban Aboriginals. *Canadian Journal of Psychiatry, 61*(11), 724–731. https://doi.org/10.1177/0706743716661990



