2023
Oregon Adult Health Survey

Special Report on Gambling

Prepared for the Oregon Health Authority, Problem Gambling Services, by Problem Gambling Solutions, Inc.

January 2025

Acknowledgments

This report is based on a subset of data collected from the 2023 Oregon Adult Health Survey, a survey that is part of the Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a collaboration between Center for Disease Control and Prevention (CDC) and state health authorities. We would like to acknowledge those involved in the development and collection of Oregon's BRFSS data.

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1.0: Introduction

This report explores gambling-related topics among Oregon adult residents using data from the 2023 Oregon Adult Health Survey, a survey that was part of the 2023 Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a nationally recognized health-related survey conducted by the Centers for Disease Control and Prevention (CDC) in collaboration with state health departments. It collects data on health behaviors, risk factors, and demographic variables, providing a comprehensive understanding of public health trends at both state and national levels. The BRFSS includes a core component consisting of a standardized set of questions included in every state survey and a state-specific component, which allows states to address public health priorities unique to their region. In 2023, the Oregon Health Authority's Problem Gambling Services program included six gambling-related questions in the Oregon-specific section to gather information on the following topics:

Engagement in gambling activities

Understanding the proportion of Oregon residents who participate in gambling activities helps establish baseline gambling engagement rates and identify trends over time. This is essential for monitoring the impact of gambling-related public health interventions and informing policies aiming to prevent gambling-related harm.

Participation in online gambling and the use of smartphone apps

The increasing accessibility of online and app-based gambling represents a significant shift in gambling behaviors over the last five years. Assessing the number of Oregonians engaging in these activities, the BRFSS reveals risks associated with digital platforms, such as their constant availability and ease of access. This information is critical for addressing the unique challenges posed by online gambling and apps, including its potential to encourage excessive gambling or attract younger demographics.

Primary use of unregulated wagering platforms or apps

Using unregulated platforms, such as offshore gambling websites, poses significant risks, including a lack of consumer protections, data privacy vulnerabilities, and financial harm. Assessing the prevalence of unregulated gambling in Oregon helps policymakers and regulators address gaps in enforcement, mitigate gambling-related harms, and promote safer, legal alternatives for individuals who choose to gamble.

Prevalence of at-risk or problem gambling

Problem gambling refers to a pattern of gambling behavior that disrupts or compromises personal, family, or vocational pursuits. It is characterized by an inability to control gambling despite negative consequences, often resulting in financial difficulties, strained relationships, and emotional distress. For some, problem gambling can co-occur with mental health issues, such as anxiety, depression, or substance use disorders, further compounding its impact. Problem gambling is a significant public health issue, with impacts extending beyond the individual to their families, workplaces, and communities. It is important to assess the number of individuals at risk for developing gambling problems or already experiencing gambling-related harm, especially among disproportionally affected populations. By addressing these key topics, this report seeks to significantly improve understanding of gambling behaviors and associated risks among Oregonians. The insights gained from this analysis will help inform public awareness, prevention, and treatment efforts for problem gambling.

BRFSS™
Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a health-related telephone survey that collects data on U.S. adult residents' risk behaviors, chronic conditions, and preventive service use.

Since its 1984 launch with 15 states, the BRFSS now operates in all 50 states, the District of Columbia, and three territories, conducting over 400,000 adult interviews annually.

Learn more about the BRFSS at https://www.cdc.gov/brfss/index.html

1.1: Methods

This report analyzes data from the 2023 Behavioral Risk Factor Surveillance System (BRFSS) for Oregon, which provides a comprehensive snapshot of public health information, including health-related risk behaviors, chronic health conditions, health-care access, and demographic information among adult (18 years and older) state residents. The dataset used for this analysis includes a sample size of 10,831 adults, representing the estimated 2023 Oregon adult population of 3,438,278 individuals. The BRFSS employs a complex survey design, incorporating stratified sampling and weighting, to ensure that results are representative of the state's adult population.

The Brief Biosocial Gambling Screen (BBGS) is a 3-item tool based on DSM-IV criteria for Gambling Disorder designed to screen gambling-related problems over the prior year. Independent evaluations have confirmed that the BBGS is psychometrically robust and aligns with the diagnostic changes introduced in the DSM-5. A positive response to at least one item indicates potential problem gambling. The Positive Predictive Value (PPV) of the BBGS is 0.37, meaning that one in three individuals who screen positive would be identified as having Gambling Disorder following comprehensive clinical assessment.

The analysis in this report relies on cross-tabulations to explore the relationships between four gambling-related topics, health-related variables, and demographic information contained in the BRFSS data set. 95% confidence intervals are contained in a companion EXCEL spreadsheet (BRFSS Gambling Activities Report - Confidence Intervals For Analysis Variables v2024.12.29.xlsx).

OREGON HEALTH AUTHORITY

Oregon Health Authority gambling topics added to the state-specific section of the BRFSS.

1. Engagement in gambling activities.
2. Participation in online gambling and use of smartphone apps.
3. Primary wagering on unregulated sites and apps.
4. Prevalence of at-risk problem gambling

The BRFSS data set includes a sample size of 10,831 adults, representing the estimated 2023 Oregon population of 3,438,278 adults.

ADULT GAMBLING BEHAVIORS IN OREGON

2.0: Gambling in Oregon

Oregon offers a wide range of legalized gambling options, including traditional lottery games, lottery-operated Keno, Video Lottery Terminals (VLTs), internet and mobile gambling, and pari-mutuel wagering. The state is also home to 10 tribal casinos operated by federally recognized Native American tribes. These casinos are located across nine counties and provide a variety of gambling options, including slot machines, table games, and poker rooms. In 2019, Oregon legalized sports betting and subsequently the Oregon State Lottery began offering online sports betting. In addition, three Indian gaming casinos offer in-person sports betting. A distinctive feature of Oregon's gambling environment is the availability of VLTs in commercial restaurants and bars, which significantly expands land-based gambling accessibility throughout the state.

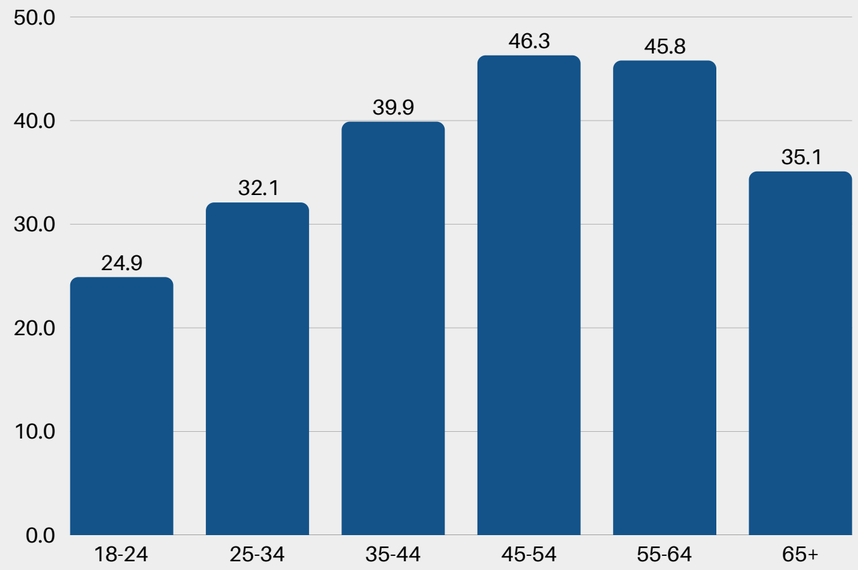
In 2023, just over a third (37.5%) of Oregonians reported gambling within the past year, indicating that gambling is a common, accessible, and attractive activity to many. This overall rate provides a valuable benchmark for assessing trends over time, particularly in relation to changes in Oregon's gambling landscape, economic conditions, and other influencing factors. As detailed in Appendix A, surveys conducted under the BRFSS system that include questions on gambling routinely find lower gambling participation rates compared to other general population gambling behavior surveys. Therefore, the finding that 37.5% of Oregonian adults gambled in the past year represents a benchmark against future Oregon BRFSS system surveys and may be an under-estimation of the true rate of past-year gambling participation.

2.1 Demographic Factors

Sex. The data reveal differences by sex, with males being 20% more likely to gamble than females (40.7% vs. 34.0%). This disparity is commonly observed in many surveys. It reflects social and cultural norms, differences in risk-taking behavior, and the appeal of gambling types that traditionally attract males, such as the growing popularity of online sports betting. This finding underscores the importance of considering sex differences when designing public awareness strategies.

Age. Age is a significant factor in gambling engagement, with the lowest rates observed among the youngest adults (18–24 years old). Engagement increases steadily with age, peaking in the 45–64 age group, before tapering off in the oldest age bracket (Chart 1). This pattern may reflect life stage differences in disposable income, free time, and access to gambling opportunities (e.g., most forms of gambling are not legally accessible to adults until the age of 21).

Chart 1. Gambling Engagement, by Age



*The sample is restricted to those who reported gambling in the past 12 months.

Gambling involves betting or risking anything of value on a game or event to win money or something of value. Examples include buying lottery scratch-off tickets, playing cards for money, betting on sporting events, paying money to enter a raffle or office pool, slot machines, and video lottery.

In 2023, 37.5% of Oregonians reported gambling in the past year.

Younger adults may gamble less due to financial constraints, while middle-aged adults may have more financial resources and exposure to gambling environments. The decline in gambling rates among those aged 65 and older could be linked to reduced mobility, health concerns, or shifts in priorities later in life.

Chart 2 demonstrates that the relationship between age and gambling engagement holds true for both males and females. The smallest difference in engagement rates is observed among young adults (18-24), with an 11% gap, while the largest gap occurs in the 35-44 age group, where male gambling engagement exceeds female engagement by 22%. This trend indicates that gender differences in gambling behavior become more pronounced in mid-adulthood, potentially reflecting differing social, cultural, or economic factors that influence gambling participation during this life stage.

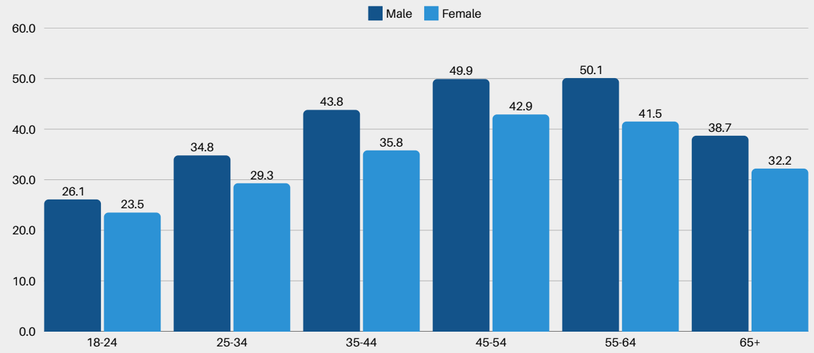
19.2% of individuals aged 18-20 reported gambling. While most U.S. states have clear age limits for all types of betting and gambling, the legal gambling age in Oregon depends on what you want to play. Persons aged 18-20 can buy lottery tickets but they can't enter a casino or bet on sports. It is unclear from the BRFSS data what forms of gambling this age group was engaged in.

Race and ethnicity. Chart 3 displays racial and ethnic disparities in gambling rates, with Native Hawaiian or Pacific Islanders (50.0%) and American Indians or Alaska Natives (43.2%) exhibiting the highest gambling rates, while Asians (29.5%) and Black or African Americans (28.5%) reported the lowest rates. These results underscore the complexity of gambling behavior across different racial and ethnic groups and highlight the importance of culturally sensitive public health strategies that address unique influences and risks within each community.

Marital status. Gambling rates also varied across marital status groups, with married and divorced individuals reporting the highest rates at 39.7%, while widowed individuals (34.4%) and those never married (31.8%) reported the lowest rates. This might reflect the impacts of social dynamics, family composition, and economic circumstances, though a key factor is the variation in average age within each marital group. Married or divorced individuals have an average age of 57, placing them in an age group with high gambling prevalence. In contrast, widowed individuals have an average age of 74, and those who have never married have the lowest average age of 36, both of which fall into age groups with lower gambling prevalence. Age may influence differences in gambling engagement rather than marital status itself being the determining factor.

R**egions with casinos**.
Oregon has nine federally recognized Indian tribes. Eight of these tribes operate casinos at 10 separate locations. Two of these locations are Class II casinos, which utilize bingo-based electronic games. The remaining eight locations are Class III casinos, which operate slot machines, table games, and, when authorized, may also operate Class II games. The average gambling engagement rate in counties with tribal casinos was 36.6%, slightly below the state average of 37.5%. This is not surprising, as gambling is highly accessible across the state through various avenues beyond casinos. There are about 2,500 Oregon retailers that offer video lottery gambling across Oregon in restaurants and bars and lottery tickets are sold at numerous retail locations, and online sports betting is available. These multiple gambling options distribute engagement across the state, reducing the extent to which casinos alone drive gambling behavior in counties where they are located.

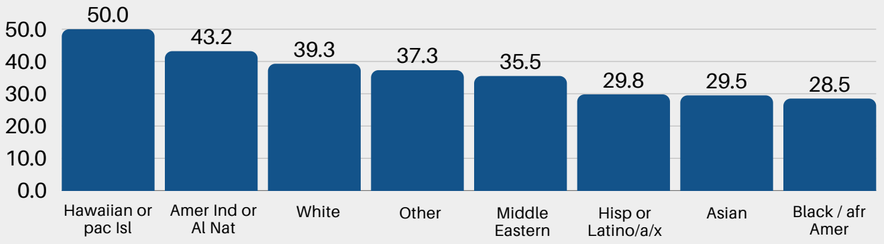
Chart 2. Gambling Engagement, by Age



*The sample is restricted to those who reported gambling in the past 12 months.

19.2% of Oregonians under the age of 21 reported gambling, raising concerns about the reach of gambling among the younger population.

Chart 3. Gambling Engagement, by Race / Ethnicity



*The sample is restricted to those who reported gambling in the past 12 months.

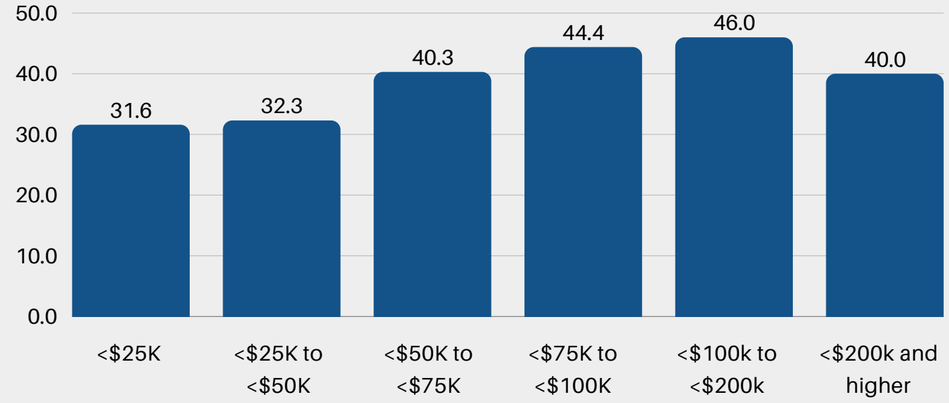
Household income. Gambling engagement rates by annual household income exhibit a similar pattern as age groups (Chart 4). The gambling rate is lowest among individuals with household incomes of less than $25,000 (31.6%), potentially due to financial constraints that limit discretionary spending on gambling activities. As income increases, gambling prevalence rises steadily, peaking at 46.0% among those with incomes between $100,000 and $200,000, before decreasing to 40.0% for incomes of $200,000 or more. The decline in gambling participation at the highest income levels may be influenced by age-related factors, differing leisure preferences, and greater financial literacy.

Education. Chart 5 illustrates the relationship between the highest level of educational attainment and gambling engagement rates. Among demographic factors, education demonstrates one of the strongest associations with gambling behavior, showing an almost linear increase in engagement rates from individuals with virtually no formal education (14.0%) to those who completed one to three years of college (42.7%). However, this trend reverses for individuals with a college degree or higher, whose rates decline to 36.0%.

This upward-then-downward (inverted V-shaped) pattern suggests a complex relationship between education and gambling engagement. The presence of similar inverted V-shaped patterns for age and income suggests that these three variables are interconnected and may serve as both mediating and confounding variables to each other. The interrelationships should be considered when analyzing gambling behavior and designing public health interventions to reduce gambling-related harm.

These overlapping associations complicate the interpretation of how education influences gambling behavior, as age, income, and education levels may serve as both mediating and confounding variables in relation to each other. The findings underscore the need to account for these interrelationships when analyzing gambling behavior and designing public health interventions aimed at reducing gambling-related harm.

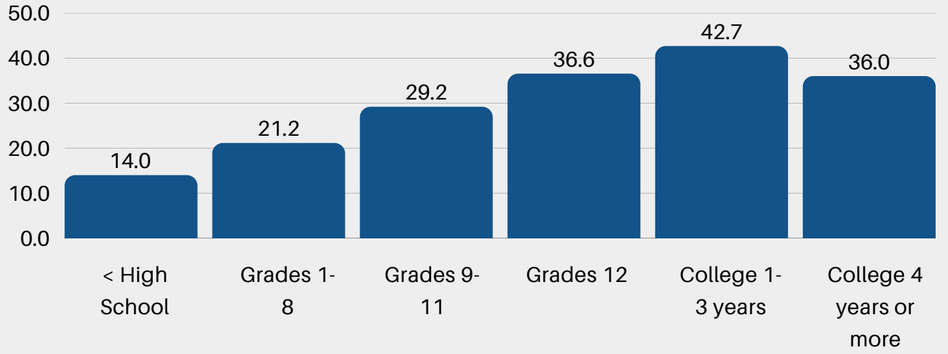
Chart 4. Gambling Engagement, by Income



*The sample is restricted to those who reported gambling in the past 12 months.

Educational attainment has one of the strongest association with gambling participation rates.

Chart 5. Gambling Engagement, by Education

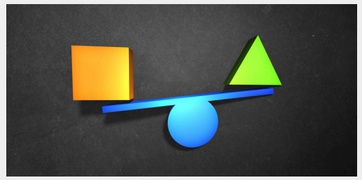


*The sample is restricted to those who reported gambling in the past 12 months.

Work status. Oregonians who are currently working report the highest rate of gambling (41.2%), while students have the lowest rate (18.6%). This aligns with previous findings on the relationships between age, income, and gambling engagement, as working individuals tend to have greater disposable income and more opportunities to participate in gambling activities than students. Retirees have the second-highest gambling engagement rate (36.2%), closely matching the engagement rate for Oregonians aged 65 and older (35.1%). In addition, Oregonians who are currently out of work or unable to work report gambling at a rate of 33.2%, which is 4.3 percentage points below the state average of 37.5%

Military veteran status. Finally, veterans are 26.5% more likely to gamble compared to non-veterans, with a prevalence of 46.0% versus 36.5%. This difference may reflect unique factors associated with veteran populations, such as possible increased exposure to gambling opportunities on military bases where gambling machines are often available. Additionally, gambling may serve as a recreational activity or a coping mechanism for stress, trauma, or mental health challenges, such as post-traumatic stress disorder (PTSD), which disproportionately affect veterans.

In summary, gambling engagement rates in Oregon vary across demographic groups, highlighting the influence of these factors on gambling behavior. However, these influences are rarely straightforward. Demographic factors often overlap and interact, creating confounding and complex relationships. In addition, it is important to recognize that demographic information serves primarily as labels or proxies, rather than direct explanations for gambling engagement rates. For example, individuals with higher levels of education may gamble less, not because they hold a four-year degree, but because higher education often increases awareness of gambling risks and promotes more cautious decision-making. This distinction highlights the importance of understanding the underlying mechanisms that enable changes in gambling participation rates.



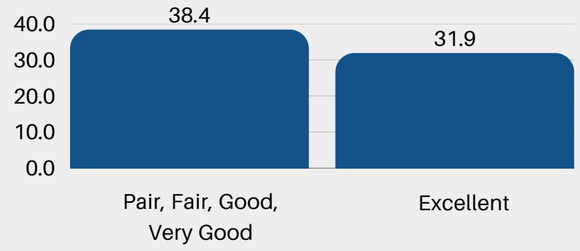
Several demographic variables are strongly associated with gambling rates. However, demographic factors often overlap and interact, creating confounding and complex relationships.

2.2: Health-related Factors

In this section, we will examine the relationships between an individual's health status and gambling participation rates. Participants were asked whether they had gambled within the past 12 months, but unfortunately, questions regarding health status do not align with this time frame. For example, some questions refer to an individual's current health status or status within the past 30 days, while others pertain to lifetime health conditions or events. Nonetheless, these analyses may still be relevant if it is assumed that the responses to the health status questions, in the aggregate, reflect a relatively stable or time-invariant characteristic related to gambling engagement. For instance, feelings of depression reported during the last 30 days may, on average, indicate a general tendency toward depression that extends over the longer 12-month period. Similarly, self-reported health conditions experienced at any point in life might reflect enduring health challenges that could influence gambling behavior. These analyses identify associations between health status and gambling engagement by viewing these responses as proxies for broader health trends. Nevertheless, caution must be exercised when interpreting these findings due to the time inconsistency across the questions. (Note, the Appendix contains a list of all BRFSS questions referenced in this report.)

Chart 6 shows the relationship between an individual's perception of their general health and their reported gambling engagement. The data indicates that individuals who view themselves as being in excellent health are 17.0% less likely to have gambled in the past 12 months than those with any lesser perception of general health (e.g., poor, fair, good, or very good). This finding suggests that self-perceived excellent health may be associated with behaviors or lifestyles that reduce the likelihood of gambling. Individuals in excellent health may be more likely to engage in alternative leisure activities that promote well-being, such as exercise, outdoor recreation, or social activities that do not involve gambling. Additionally, these individuals may have better emotional and financial stability, factors that can reduce the appeal of gambling. Conversely, individuals with lower perceptions of their general health may be more prone to engage in gambling as a coping mechanism for stress, boredom, or other challenges associated with their health status. Perceptions of poor health may also correlate with other risk factors for gambling engagement, such as financial insecurity or limited recreational options.

Chart 6. Gambling Engagement, by General Health Perception



*The sample is restricted to those who reported gambling in the past 12 months.

The survey also asked individuals how many days during the past 30 days their **physical** health "was not good" and, in a separate question, how many days their **mental** health "was not good" due to "stress, depression, or problems with emotions." When analyzing the detailed data on the number of poor health days, no clear or consistent relationship with gambling engagement rates emerged. However, summarizing the data into a simple indicator of the occurrence of any number of poor health days, the data suggest a 11% higher gambling engagement rate compared to those who had no health issues. In other words, the presence of any health issues, regardless of frequency, appears to be positively associated with an increase in gambling participation rates.

This finding aligns with earlier results showing that generally better health is associated with lower gambling engagement. However, the relationship cannot be quantified simply in terms of the number of poor health days; it is more complex and likely involves multiple intervening factors, such as the many factors discussed in this report.

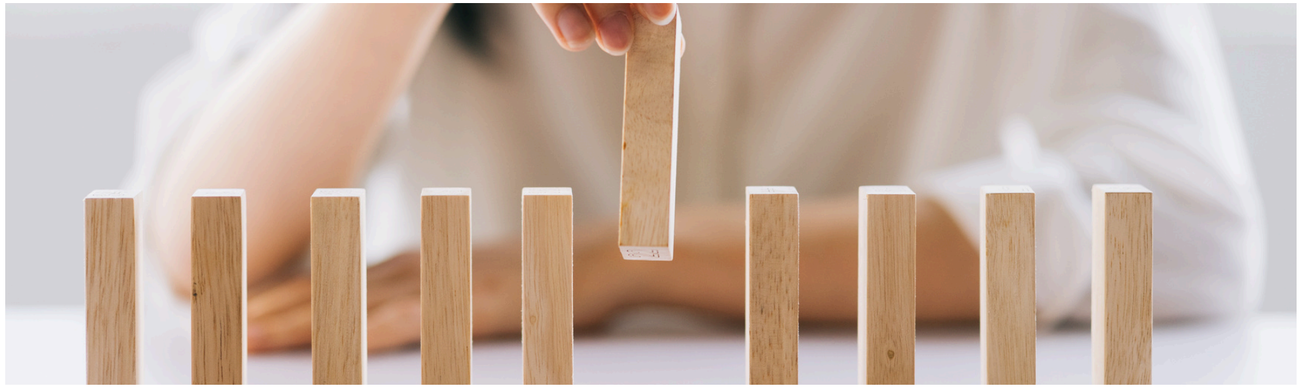
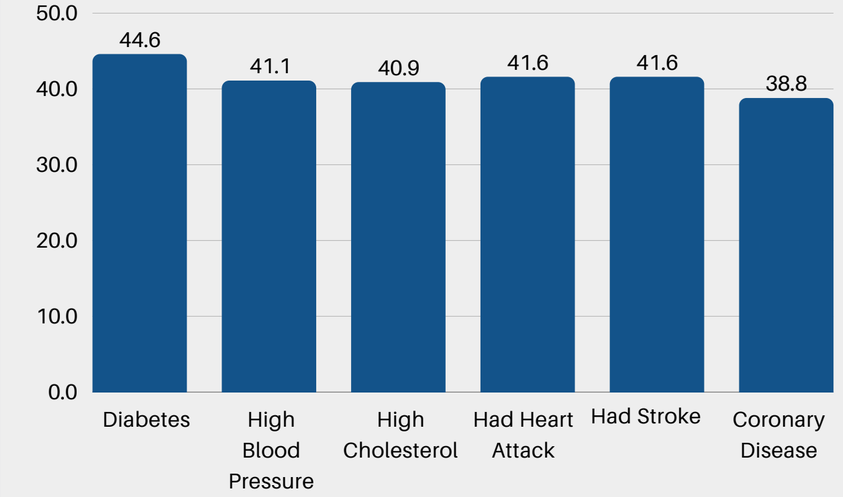


Chart 7 displays gambling engagement rates by health conditions. The data reveal that, in all cases, individuals with a health condition or who have experienced one of the listed health events are more likely to engage in gambling compared to those without these conditions; although having coronary heart disease is only slightly higher than the overall average of 37.5%. This pattern suggests that underlying health challenges may play a role in influencing gambling behavior, potentially acting as stressors that drive individuals toward gambling as a coping mechanism or as a form of escape from health-related difficulties.

Among the conditions analyzed, diabetes stands out with the largest difference in gambling engagement rates, with an increase of 21.9% compared to those without diabetes. This finding may reflect the broader impact of this chronic condition on daily life. Diabetes often requires ongoing management, which can lead to heightened stress levels, financial strain, and emotional fatigue. However, the relationship between health conditions and gambling engagement may be bidirectional - gambling-related financial stress and lifestyle choices could exacerbate certain health conditions.

Chart 7. Gambling Engagement, by Health Conditions



*The sample is restricted to those who reported gambling in the past 12 months.

The survey included questions about cognitive impairments, focusing on issues related to memory, understanding, learning, concentration, and communication. Chart 8 displays mixed results: three impairments showed gambling participation rates above the state average of 37.5%, two below, and one approximately at the state average. The two impairments with lower gambling participation rates - communication and learning challenges - may make gambling less enjoyable or harder to engage in. Gambling often requires cognitive skills such as understanding rules, managing wagers, and making decisions under uncertainty. Individuals with these difficulties may find such tasks overwhelming, reducing their participation.

Conversely, the three impairments with higher-than-average participation rates may reflect challenges specific to memory issues. Individuals with memory impairments may struggle to fully comprehend the risks and consequences of gambling, leading to more frequent or higher-stakes participation. Memory difficulties can also cause individuals to forget past losses, underestimating the cumulative financial and emotional costs. Additionally, cognitive impairments can contribute to social withdrawal or isolation, making online or app-based gambling a more accessible and appealing form of entertainment.

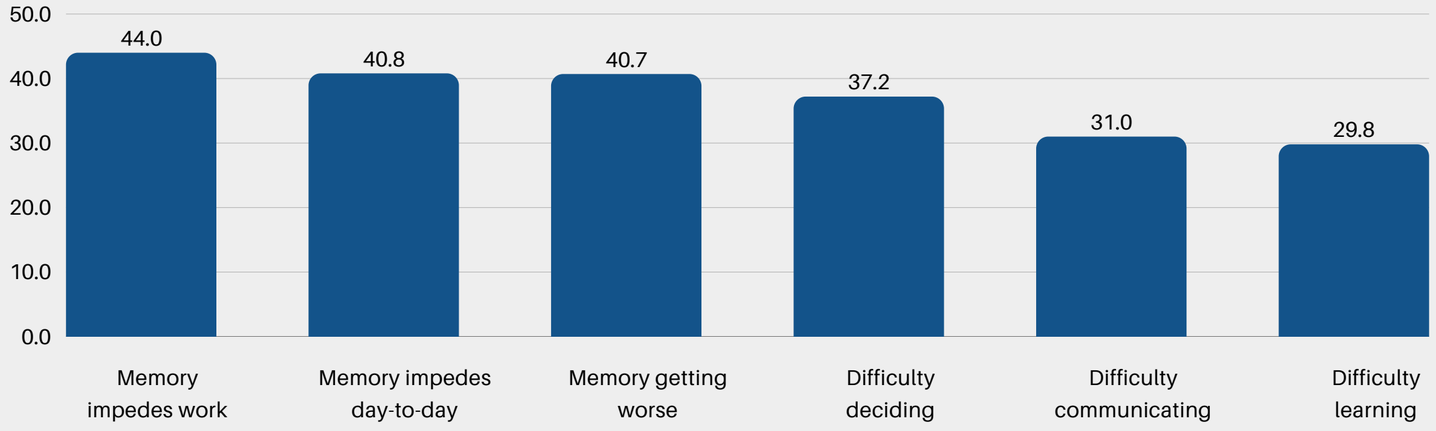
The survey asked participants several questions regarding specific mental health issues. One question asked whether individuals had ever been told by a healthcare professional that they had a depressive disorder, including depression or dysthymia. Those who responded affirmatively were slightly less likely to report gambling compared to those who had not been diagnosed (36.3% versus 37.9%, respectively).

Participants were also asked whether they "have serious difficulty with the following: mood, intense feelings, controlling your behavior, or experiencing delusions or hallucinations." In contrast to the depressive disorder findings, those who responded affirmatively to this question reported slightly higher gambling activity rates, 38.2% versus 37.4%.

During the past 12 months....

- Have you experienced difficulties with thinking or memory that are happening more often or are getting worse? (**Memory getting worse**)
- Have your difficulties with thinking or memory interfered with day-to-day activities, such as managing medications, paying bills, or keeping track of appointments? (**Memory impedes day-to-day**)
- Have your difficulties with thinking or memory interfered with your ability to work or volunteer? (**Memory impedes work**)
- Do you have serious difficulty learning how to do things most people your age can learn? (**Difficulty learning**)
- Using your usual (customary) language, do you have serious difficulty communicating (for example understanding or being understood by others)? (**Difficulty communicating**)
- Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? (**Difficulty deciding**)
- Ever told you had a depressive disorder (including depression, major depression, dysthymia, or minor depression)? (**Depression**)
- Do you have serious difficulty with the following: mood, intense feelings, controlling your behavior, or experiencing delusions or hallucinations? (**Mood**)

Chart 8. Gambling Engagement, by Cognitive Impairments



⁎The sample is restricted to those who reported gambling in the past 12 months.

The findings in this section highlight the nuanced relationship between physical, cognitive, and mental health statuses and gambling engagement. The results suggest that lower self-perceived general health and the presence of physical health conditions are associated with higher gambling engagement rates. In contrast, cognitive and mental health issues show mixed effects: some are linked to increased gambling, while others are associated with decreased engagement. These findings underscore the complex and varied relationships between health status and gambling behavior.

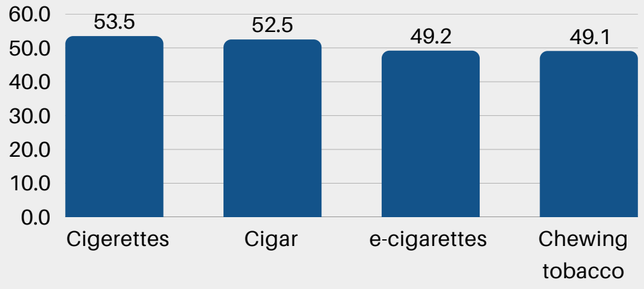
It is important to reiterate that these relationships could be bidirectional. Poor physical or mental health may drive individuals to gamble as a form of escape or stress relief but gambling itself - especially excessive or problematic gambling - can also exacerbate health conditions through financial stress, social isolation, and emotional strain. This bidirectional dynamic adds another layer of complexity to interpreting the findings, as the observed patterns likely reflect two-way associations.

2.3: Tobacco, Cannabis, and Alcohol Use Factors

The BRFSS asked participants about their usage of tobacco products, including cigarettes, e-cigarettes, chewing tobacco, and cigars. Approximately 28.1% of participants reported smoking cigarettes, 8.5% used e-cigarettes, 3.3% used chewing tobacco, and 2.5% smoked cigars. Chart 9 displays the relationship between tobacco usage and gambling participation rates; the data suggests that using tobacco products is strongly associated with gambling behavior. 53.5% of individuals who smoke cigarettes also gamble, compared to 37.1% of those who do not smoke – a 27.9% difference in gambling engagement.

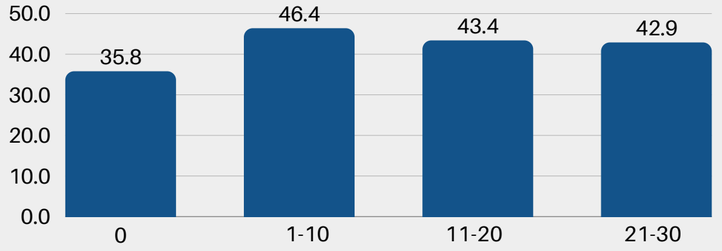
As recreational cannabis use was legalized in Oregon in 2015, there is interest in exploring any relationship between cannabis use and gambling. The survey asked participants whether they had used marijuana or cannabis in the past 30 days, with 19.8% responding affirmatively. Chart 10 displays gambling engagement rates by the number of days cannabis was used during the previous month. The data indicate that cannabis use is associated with an increase in gambling participation rates. However, the relationship does not show an increasing trend; in other words, more days of cannabis use does not correspond to increasingly higher gambling participation rates.

Chart 9. Gambling Engagement, by Tobacco Use



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 10. Gambling Engagement, by Days of Cannabis Use



*The sample is restricted to those who reported gambling in the past 12 months.

Mental health issues can act both as barriers to and enablers of gambling activities.

- Do you now smoke cigarettes every day, some days, or not at all. (**Cigarettes**)
- Do you currently use chewing tobacco, snuff or snus every day, some days, or not all? (**Chewing tobacco**)
- Do you now use e-cigarettes or other electronic vaping products every day, some days, or not at all? (**e-cigarettes**)
- Have you smoked a full-sized or a smaller-sized cigar or cigarillo in the last month? (**Cigar**)

Note, the variables in parenthesis represent whether participants engage in the activity at all. Also, the use of full-sized and smaller-sized cigars have been combined into one category.

Tobacco use and cannabis use are both associated with higher rates of gambling participation.

This finding suggests that while cannabis use is associated with gambling behavior overall, the frequency of cannabis use does not appear to have a straightforward impact on gambling participation. Individuals who use cannabis may share underlying traits or environmental factors - such as social settings or risk-taking tendencies - that predispose them to gamble, but heavier cannabis use does not seem to amplify this likelihood.

The participants were asked about their alcohol consumption, and 55.9% reported consuming alcohol within the previous 30 days. Chart 11 displays gambling engagement rates in relation to the number of days alcohol was consumed during this period. The pattern is, in one sense, similar to that observed for cannabis usage, as the most significant increase in gambling participation occurs between non-drinkers and drinkers. Specifically, gambling engagement rises by 41%, from 30.1% among non-drinkers to 42.4% among those who consumed alcohol on 1 to 10 days during the last month.

However, unlike cannabis usage, gambling engagement rates continue to increase with higher levels of alcohol consumption. The association peaks (48.0%) among those who consumed alcohol 11-20 days during the 30-day period, before declining among those who reported drinking more frequently. This trend may reflect the social environments where alcohol consumption and gambling often overlap. For example, alcohol is readily available and consumed in establishments where electronic gambling machines are permitted, fostering opportunities for both behaviors to co-occur. In contrast, cannabis use is generally restricted to private settings.

The decline in gambling engagement among the heaviest drinkers (those consuming alcohol on 21 or more days) might be explained by several factors. Heavy alcohol use can lead to physical and cognitive impairments that reduce the ability or inclination to participate in gambling. Alternatively, frequent alcohol use may coincide with other lifestyle factors that limit access to gambling opportunities, such as financial constraints.

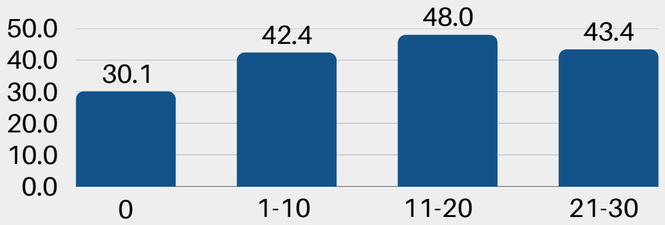
The survey asked participants about the number of alcoholic drinks typically consumed on days when they have at least one alcoholic beverage. Results reveal a clear upward association between the number of drinks consumed and gambling participation (Chart 12).

The results suggest that while the frequency (number of days) of alcohol consumption provides some insight into gambling participation rates, the average number of alcoholic beverages consumed on those days is a much stronger indicator. Heavier drinking may lower inhibitions or impair judgment, potentially increasing the likelihood of gambling.

This section highlights the strong associations between the usage of tobacco, cannabis, and alcohol and gambling participation. Across all substances examined, individuals who use these products are significantly more likely to engage in gambling compared to non-users. However, as with the health-related associations discussed in the previous section, the relationships between substance use and gambling participation may be bidirectional. Individuals may turn to both gambling and substance use as coping mechanisms for managing stress, boredom, or emotional challenges. At the same time, gambling environments, such as casinos or bars, often facilitate or encourage the use of substances like alcohol, creating a reinforcing cycle that further strengthens gambling behaviors.

By understanding the multifaceted relationships between substance use and gambling, public health professionals and policymakers can create more targeted and effective strategies to address gambling-related harms and promote healthier behaviors.

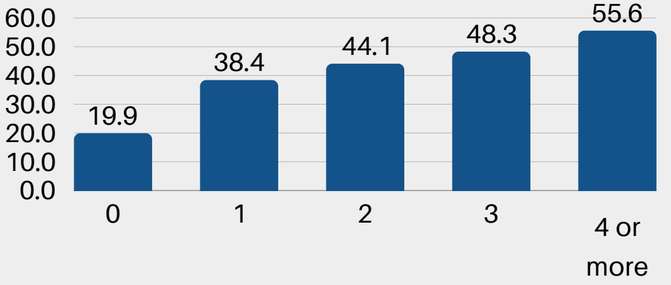
Chart 11. Gambling Engagement, by days of Alcohol Use



*The sample is restricted to those who reported gambling in the past 12 months.

Alcohol use is associated with increases in gambling engagement rates. Non-drinkers were about 42% less likely to gamble compared to those that consumed alcohol in the past month.

Chart 12. Gambling Engagement, by Avg # of Drinks



*The sample is restricted to those who reported gambling in the past 12 months.

Adverse Childhood Experiences (ACE) Factors

The survey asked participants about their exposure to adverse childhood experiences (ACE), a range of potentially traumatic events that occur during childhood. The specific experiences included in this report are described in the sidebar. Childhood exposures to illegal drugs, incarceration, alcohol, and physical harm were related to an increased likelihood of gambling as an adult (Chart 13). On average, gambling participation increased by 22.0% for individuals with these ACEs.

One of the most notable findings was the significant impact of exposure to illegal drug use or the abuse of prescription medications in childhood. Among participants who reported this experience, 46.2% engaged in gambling, compared to 35.9% of those who did not—a substantial increase of 28.8%. This highlights the profound influence that specific ACEs can have on gambling behaviors later in life.

These findings also suggest that adverse childhood experiences may contribute to gambling engagement through several mechanisms. ACEs are associated with an increased risk of mental health challenges, such as anxiety, depression, and post-traumatic stress disorder. Gambling may be one method of coping or escape. Additionally, exposure to substance abuse during childhood may normalize risk-taking or self-medicating behaviors, potentially fostering a predisposition toward gambling. Furthermore, individuals with ACEs may face socioeconomic challenges, such as lower income or unstable living conditions, which can heighten the appeal of gambling as a perceived opportunity for financial gain.

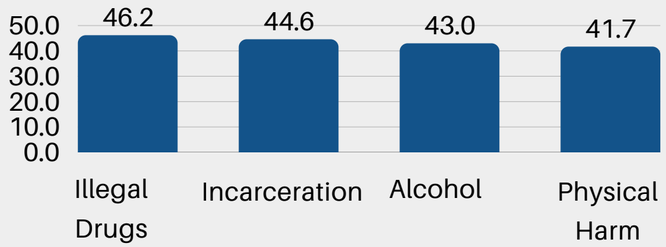
This report also examined two additional adverse childhood experiences relating to the presence of an adult who either made a child feel safe and protected or, in a separate question, actively attempted to ensure that the child's basic needs were met (see Appendix B for descriptions). In both cases, the lack of presence of a supportive adult was related to a decrease in gambling participation rate, particularly in the case of adults who attempted to provide for basic needs. If such an adult were present, at least sometimes, the gambling engagement was 37.9%, while if they were never present, the rate decreased 33.1% to 25.3%.

These findings may seem counterintuitive, as one might expect the presence of a supportive adult during childhood to mitigate the risk of engaging in potentially harmful behaviors like gambling. However, the observed increase in gambling engagement could be related to broader socioeconomic or contextual factors. For instance, it is possible that children who required adults to ensure their basic needs were met grew up in environments of financial instability or emotional strain, even with the presence of supportive adults. These early experiences could normalize risk-taking behaviors or contribute to a belief in the value of seeking external means (such as gambling) to achieve financial security.

This section highlights the significant role that adverse childhood experiences (ACEs) play in influencing gambling behavior later in life. The consistent association between various ACE factors and increased gambling engagement underscores their importance in understanding the root causes of gambling behaviors. Whether it is exposure to substance abuse, lack of safety or protection during childhood, or the presence of adults ensuring basic needs are met, these experiences appear to be associated with patterns of behavior later on.

Given the multifaceted nature of these relationships, it is critical that ACE factors are considered in the development of gambling prevention and intervention programs. Tailored approaches that address the long-term effects of childhood trauma, while accounting for the complexity of these influences, will be essential to effectively mitigating gambling-related harms. These findings also emphasize the need for continued research to better understand the pathways through which ACEs impact gambling behavior and to inform more targeted public health strategies.

Chart 13. Gambling Engagement, by Adverse Childhood Experiences



*The sample is restricted to those who reported gambling in the past 12 months.

Adverse Childhood Experiences

- Did you live with anyone who used illegal street drugs or who abused prescription medications? (**Illegal drugs**)
- Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility? (**Incarceration**)
- Do you live with anyone who was a problem drinker or alcoholic? (**Alcohol**)
- Not including spanking, (before age 18), how often did a parent or adult in your home every hit, beat, kick, or physically hurt you in anyway? (**Physical Harm**)
- For how much of your childhood was there an adult in your household who made you feel safe and protected? (**Safe**)
- For how much of your childhood was there an adult in your household who tried to make sure your basic needs were met? (**Basic Needs**)

Adverse Childhood Experiences (ACE) are significantly associated with higher gambling rates. Children who live with anyone who used illegal drugs or who abused prescription medications are 28.8% more likely to engage in gambling activities as adults.

GAMBLING ONLINE OR USING AN APP

3.0: Gambling online or using an app

This section delves into gambling behaviors over the past 30 days, with a specific focus on online gambling and the use of mobile apps. As technology continues to transform the gambling landscape, online platforms and mobile apps have become increasingly accessible and convenient, offering users opportunities to gamble anytime and anywhere. These changes raise important questions about how technology impacts gambling participation and its potential risks.

The survey's question, "During the last 30 days, have you done any gambling or placed any bets online or using an app?" serves as the basis for this analysis. By examining responses to this question, this section explores the prevalence of online and app-based gambling in Oregon, highlights key demographic patterns, and assesses the associations between online gambling behaviors and other factors. Understanding these trends is essential for tailoring prevention, education, and treatment efforts to address the unique challenges posed by digital gambling platforms.

The results in this section pertain to survey participants who reported gambling in the past 12 months. Therefore, the reference population is the 37.5% of adult Oregonians who reported gambling, not the entire Oregon population. Readers should preface all results with “Of those adults who reported gambling,” unless explicitly stated otherwise for clarity. By narrowing the reference population to those who gamble, the analysis directly reflects the preferences or behaviors of individuals who gamble. This helps clarify whether a low engagement rate for a particular activity is due to disinterest in that activity or low overall gambling participation in the group.

Of those who reported gambling, 13.8% of survey participants reported gambling or placing bets online or using an app during the past 30 days. This is a little over one third of the 37.5% of Oregonians who reported engaging in any form of gambling activity. In other words, 5.2% of the Oregon adult population reported gambling on these platforms during the past 30 days.

13.8% of adult Oregonians who reported gambling over the past 12 months also engaged in gambling activities online or using an app within the last 30 days.

3.1: Demographic Factors

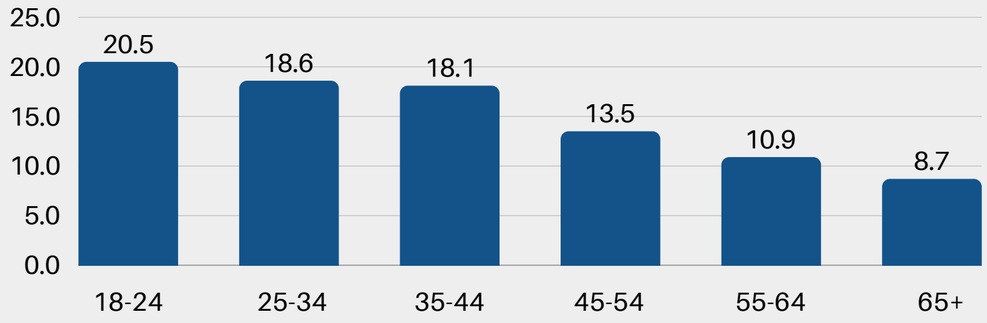
Males were significantly more likely than females to engage in these gambling activities, with a participation rate that was 40% higher (15.9% of males compared to 11.3% of females). This might be related to these gambling platforms emphasizing sports betting, poker, and other competitive games that resonate more with male audiences.

The average age of participants in these activities is 45; however, as illustrated in Chart 14, engagement consistently declines with age. This trend highlights the generational shift in gambling preferences.

Among racial and ethnic groups, Asians and American Indian or Alaska Natives had the highest participation rates using these platforms, at 19.4% and 18.2%, respectively, reflecting distinct patterns of engagement across demographic groups.

Homemakers were the least likely to engage in online gambling or apps, with only 5.8% reporting participation in such activities. This low engagement rate can be attributed, in part, to the demographic composition of homemakers, 91% of whom identified as female. Additionally, homemakers had the third oldest average age (behind retirees and individuals unable to work). Both these groups have been shown to have low participation rates in online gambling and app platforms.

Chart 14. Placing bets Online Or Using An App, by Age



*The sample is restricted to those who reported gambling in the past 12 months.

As illustrated in Chart 15, there is no clear relationship between income level and online gambling participation. Individuals in both the lowest income bracket and the highest income bracket reported some of the highest engagement rates. Conversely, those in the $25,000 to $50,000 income range had the lowest reported participation rate. This unexpected dip in engagement within this specific income category may warrant further investigation to uncover potential contributing factors, such as accessibility, attitudes toward gambling, or discretionary income constraints.

Veterans were only slightly more likely to engage in these activities (14.9% compared to 13.7%)

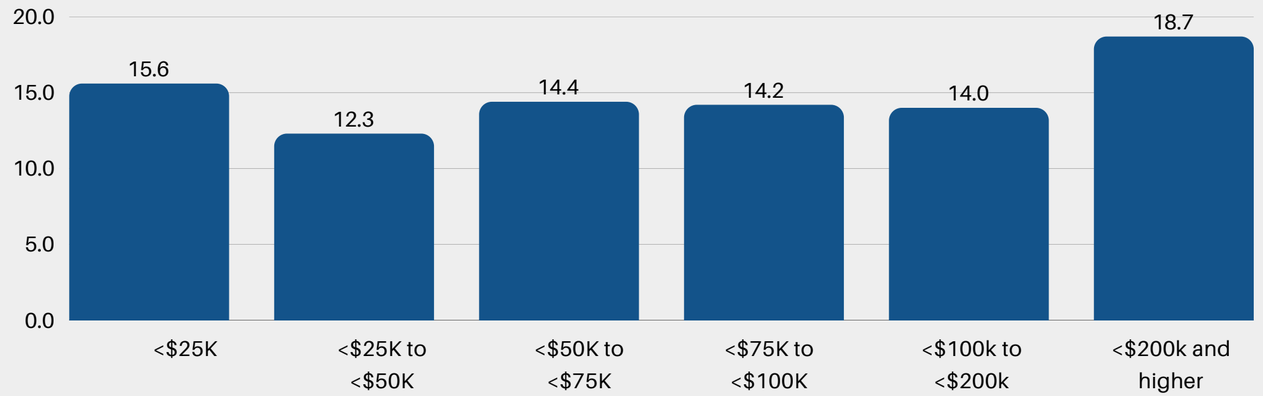
3.2: Health-related factors

Individuals who reported poor or fair general health were more likely to engage in online or app-based gambling activities, with a participation rate of 15.6% compared to 13.4% among those with better health perceptions. Similarly, individuals who reported experiencing at least one poor physical or mental health day within the past 30 days were more likely to engage in these activities (15.0% versus 12.2%). These findings reinforce previous results indicating that poorer perceived health is associated with increased gambling participation.

As illustrated in Chart 16, most cognitive impairments were significantly linked to engaging in these activities. All of the cognitive challenges, except for perceptions of increased memory issues, were associated with higher engagement with these activities, compared to the overall average of 13.8%. These cognitive impairments may drive individuals toward remote gambling platforms and apps, which offer convenience, accessibility, and allows users to gamble in the privacy of their homes.

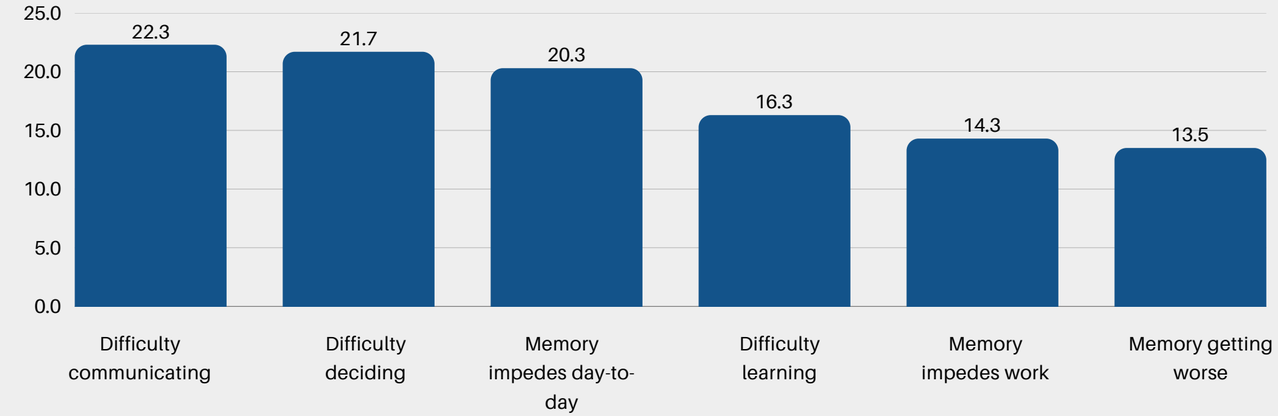
This preference for remote gambling could also reflect a desire to avoid the logistical and social challenges of in-person gambling environments, particularly for individuals with cognitive or emotional challenges. Individuals diagnosed with a mood disorder were 55.4% more likely to engage in online or app-based gambling compared to those without such a diagnosis. This result further suggests that online gambling platforms and apps might disproportionally attract individuals facing mental health challenges.

Chart 15. Placing bets Online Or Using An App, by Income



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 16. Placing bets Online Or Using An App, by Congnitive Impairments



*The sample is restricted to those who reported gambling in the past 12 months.

Individuals who reported cognitive difficulties were more likely to place bets online or through an app compared to other Oregonians who engaged in gambling activities.

3.3: Tobacco, cannabis, and alcohol usage

Using e-cigarettes and smoking traditional cigarettes were both strongly associated with participation in online or app-based gambling activities, with reported rates of 20.8% and 19.4%, respectively. These associations may stem from shared risk-taking or impulsivity traits, or from co-occurring environments, such as social settings where both activities are prevalent.

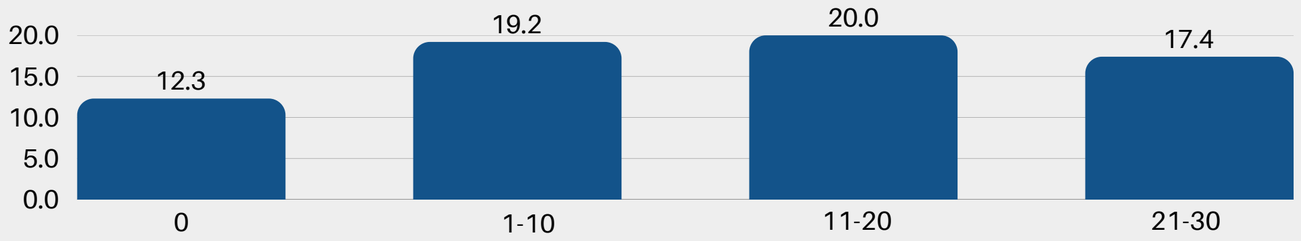
Chart 17 illustrates the relationship between cannabis usage frequency in the past month and engagement in online and app-based gambling. Individuals who did not use cannabis at all reported the lowest participation rate (12.3%). Participation rates increased sharply to 19.2% (a 56% increase) among individuals who used cannabis between 1 and 10 days a month and remained comparable at 20.0% for those who used cannabis 11 to 20 days a month. However, rates decreased to 17.4% among individuals who reported using cannabis 21 or more days, displaying an inverted V-shaped relationship that aligns with similar patterns observed elsewhere in this report. This trend suggests that factors associated with non-cannabis users may also discourage gambling, while moderate cannabis use might share common psychological traits or behaviors that align with gambling activities.

The average number of alcoholic drinks consumed on days when any alcohol was consumed showed the strongest and most consistent pattern with engaging in these gambling activities, as illustrated in Chart 18.

Individuals who consumed fewer than one alcoholic beverage on days they drank reported the lowest engagement rate in online gambling and app usage (8.6%). Engagement rates increased as the average number of drinks consumed rose, peaking at 21% for those who consumed four or more drinks. This phenomenon can partly be explained by the fact that males, who are more likely to engage in these activities than females, make up an increasingly larger proportion of individuals consuming higher numbers of drinks, as shown in Chart 19.

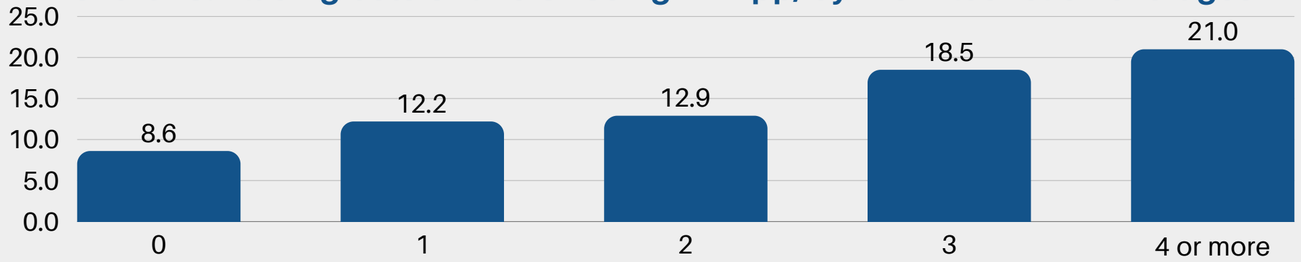
In this section, the data show that tobacco, marijuana, and alcohol usage are all positively associated with engagement rates in online gambling and app-based activities. These results may be influenced by factors such as the ease of use and accessibility of online platforms, cultural norms that normalize both substance use and gambling, and targeted advertising that appeals to individuals engaging in these behaviors.

Chart 17. Placing bets Online Or Using An App, by Cannabis Use



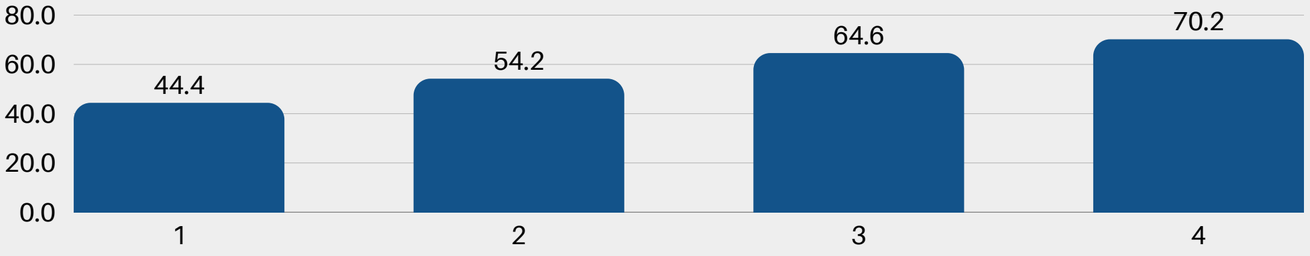
*The sample is restricted to those who reported gambling in the past 12 months.

Chart 18. Placing bets Online Or Using An App, by # of Alcoholic Beverages



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 19. Average # of alcohol beverage consumed -Males



*The sample is restricted to those who reported gambling in the past 12 months.

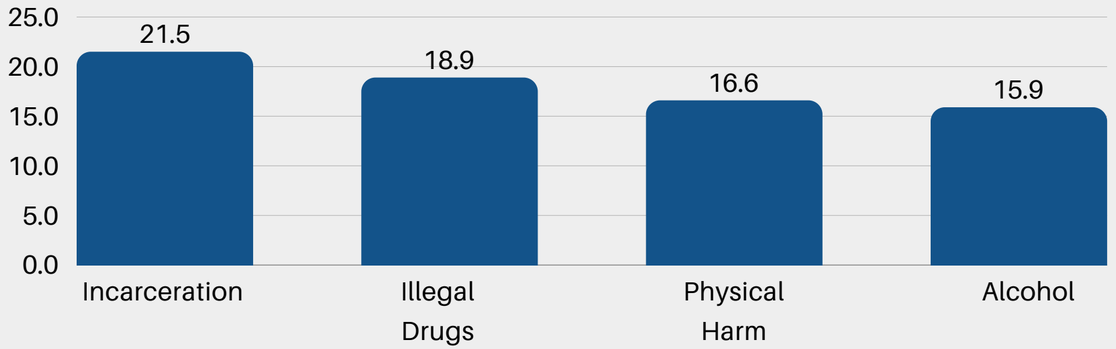
3.4: Adverse Childhood Experiences (ACE)

Chart 20 displays the associations between Adverse Childhood Experiences (ACE) and placing bets online or using an app. Individuals exposed to someone who had been incarcerated or exposed to illegal drugs use during childhood were the most likely to engage in these activities, followed by those who experienced physical harm or lived in a household with alcoholism. It is possible that individuals with these adverse childhood experiences may be more inclined to gamble in private settings due to comfort or anonymity, or because they face barriers to physical travel that make online gambling or app more accessible options.

These findings highlight the lasting impact of early life stressors, such as Adverse Childhood Experiences (ACEs), that might lead to preferences for gambling activities that put individuals at greater risk for experiencing harm from problem gambling.

Children who lived with anyone who was incarcerated were 55.7% more likely to engage in online gambling or using an app, compared to the Oregon state average of 13.8%.

Chart 20. Placing bets Online Or Using An App, by ACE



*The sample is restricted to those who reported gambling in the past 12 months.

PROPORTION OF ADULT OREGONIANS PRIMARY WAGERING WITHIN THE UNREGULATED INTERNET MARKET

4.0: Primary wagering site or app unregulated in Oregon

This section of the report focuses on Oregonians who reported that their primary wagering site or app was unregulated within the state of Oregon. One of the central arguments for expanding legalized internet gambling in Oregon has been to provide the public with legal options for wagering online. However, prior to this survey question no data has been collected to quantify the scope of Oregonians who engage in the unregulated online gambling market.

Understanding the number of people who primarily gamble within unregulated sites is important as unregulated sites often lack consumer protections, transparency, and oversight. These platforms may expose users to higher risks, such as fraud and predatory practices. Additionally, unregulated sites typically do not contribute to state revenue through taxes or licensing fees, nor do they invest in programs to mitigate gambling harm. Understanding the usage patterns of those engaging with unregulated platforms can provide valuable insights into addressing regulatory gaps and informing public education efforts.

The survey question, 'During the past 30 days, was the primary wagering site or app you gambled on unregulated in Oregon, for example, an offshore casino site or poker room?' was administered to anyone who reported gambling online or with apps. As noted in the previous section, 13.8% of those who gambled (equivalent to 5.2% of the adult Oregon population) reported engaging in these activities. After removing unusable data, the resulting sample size was 425, of which 25 responded affirmatively. The small sample size makes it challenging to generate reliable results when analyzing specific subgroups, such as those identified in previous sections. Consequently, analysis of this variable will be used sparingly and only when the insights it provides are deemed sufficiently important to report.

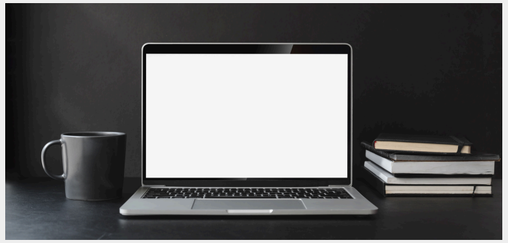
Among adult individuals who reported gambling online or with apps, 5.2% identified their primary wagering site or app as unregulated in Oregon. This represents 0.27% of the overall Oregon population, reflecting a small subset of gamblers engaging with these unregulated platforms.

Males were 2.6 times more likely than females to use these unregulated gambling platforms, highlighting a notable gender disparity in platform preference. Additionally, Oregonians aged 18-20 were 3.2 times more likely than the overall average, with 16.7% indicating they primarily use these platforms. This disproportionately high engagement among younger gamblers raises concerns about the accessibility and appeal of these platforms to populations at a higher risk of experiencing gambling problems.

Students reported the highest rate of engagement, with 33.3% identifying unregulated platforms as their primary online or app-based gambling method - nearly 6.4 times higher than the average. Similarly, individuals with a household income of less than $10,000 were 4.7 times more likely to rely on unregulated platforms, and those with less than a high school education were 3 times more likely. As previously noted, these subgroups - younger adults, students, and individuals with lower educational attainment – often demonstrate overlapping associations.

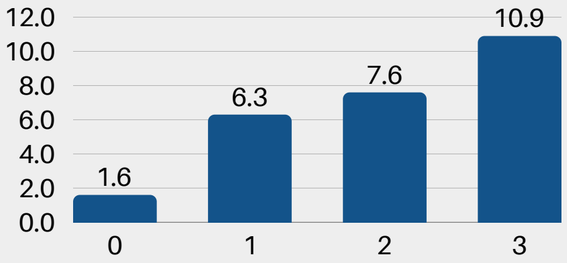
Oregonians who use e-cigarettes were 3.6 times more likely to primarily use unregulated gambling platforms. Moreover, Chart 21 highlights a strong positive association between the average number of alcoholic beverages consumed on drinking occasions and reliance on these platforms.

In this section, we briefly discussed factors associated with a higher incidence of unregulated platforms being used as primary online or app-based gambling options. Despite the small sample size, which increases sampling variance and limits the ability to identify definitive trends, plausible associations were observed. The observed associations have implications for focused interventions. Identifying specific groups with higher incidences of unregulated platform usage can help guide regulatory efforts and public awareness campaigns.



Among individuals reporting to gamble online, 1 in 17 reported their preferred site was unregulated. This represents 0.27% of the overall Oregon population .

Chart 21. Primary Wagering Sites And Apps Are Unregulated, by Avg # of Alcoholic Beverages



⁎The sample is restricted to those who reported gambling online.

⁎⁎Based on days that at least one alcoholic beverage is consumed.

AT-RISK PROBLEM GAMBLING

5.0: At-risk and Problem Gambling

Understanding at-risk and problem gambling is a critical component of assessing the broader impact of gambling on individuals and communities. While gambling can be a recreational activity for many, for some individuals, it can escalate into harmful behaviors that negatively affect their financial stability, relationships, mental health, and overall well-being. Measuring the prevalence of at-risk and problem gambling provides essential insights into the extent of these issues, helps identify disproportionally affected populations, and informs strategies to mitigate gambling-related harm.

This section of the report focuses on at-risk and problem gambling among Oregon residents, as measured by responses to the Brief Biosocial Gambling Screen (BBGS). This instrument asks participants, who reported that they have gambled in the past 12 months, whether they have experienced any of the following over the past 12 months:

Have you become restless, irritable or anxious when trying to stop or cut down on gambling?
Have you tried to keep your family or friends from knowing how much you gambled?
Did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends, or welfare?

A "yes" response to any one of the BBGS items indicates potential gambling-related problems and the need for additional evaluation. As in the previous section, the following results refer to survey participants who reported gambling in the past 12 months. Therefore, the reference population is the 37.5% of Oregonians who reported gambling, not the entire Oregon population. Readers should preface all results with "Of those who reported gambling," unless explicitly stated otherwise for clarity.

Among adult Oregonians who reported gambling in the previous 12 months, 3.5% endorsed a BBGS gambling-related problem. When extended to the entire population, including those who have not gambled, this translates to 1.3% of Oregonians being classified as along the problem gambling continuum anywhere from at-risk to disordered.

This result can be compared to a 2021 study that reported a 17.8% rate of potential gambling-related problems among Oregonians who had gambled (8.3% for the entire population) using the same BBGS instrument However, that study utilized a different survey methodology, which has been observed to produce higher estimates of problem gambling prevalence (See Appendix A). Additionally, the 12-month look-back period for the BBGS in the 2021 study coincided with the peak of the COVID-19 pandemic - a period marked by changes in gambling behaviors due to limited accessibility to gambling venues, heightened stress, isolation, and financial uncertainty. These contextual differences may explain the stark differences in problem gambling estimates.

5.1: Demographic Factors

3.6% of females were screened positive on the BBGS, compared to 3.3% of males - a 10% higher rate. This finding is notable because, as discussed in the previous section, females are generally less likely to gamble compared to males. However, among those who do gamble, females appear to be at a higher risk of developing problem gambling behaviors.

The Brief Biosocial Gambling Screen (BBGS) is a three-question screening tool designed to identify gambling-related problems. It assesses the impact of gambling on personal, social, and financial aspects of life, providing a quick way to detect at-risk or problematic gambling behavior.

Based on the BBGS, 3.5% of adult Oregonians who report gambling fall into the at-risk or problem gambling category.

Women in Oregon who gamble are 10% more likely to screen as at-risk for problem gambling.

Chart 23 displays the positive screening rates for problem gambling risk by age group. Generally, problem gambling risk rates decline with age, with a slight but noticeable increase for adults aged 65 and older. This trend suggests that younger individuals are at greater risk of problem gambling behaviors, potentially due to heightened impulsivity, exposure to emerging gambling platforms (such as online gambling and sports betting), or a lack of awareness about gambling-related risks. Also notable is that individuals in the 18-20 age group exhibit a positive screening rate of 7.6% - more than double the state average.

This finding is particularly alarming, as it highlights the vulnerability of young adults to gambling-related harm. The high screening rate among underage individuals underscores the urgent need for focused prevention and education efforts. Programs aimed at this age group should address the risks of gambling, promote healthy coping mechanisms, and provide resources for those who may already be experiencing harm. Additionally, these findings call for further investigation into the accessibility and appeal of gambling to young adults and the role of digital platforms in facilitating this behavior.

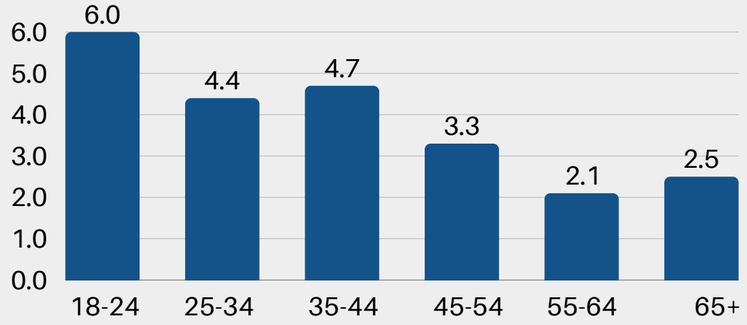
Among racial and ethnic groups, Black or African American, Hispanic or Latino/a/x, and American Indian or Alaska Native individuals had the highest at-risk rates for problem gambling, at 10.5%, 7.0%, and 4.3%, respectively. Recall from the previous section that American Indian or Alaska Native individuals were 33.4% more likely to gamble than the average Oregonian. In this analysis, they have been found to be 23.1% more likely to screen positive for problem gambling. When these two factors are combined, the results indicate that American Indian or Alaska Native individuals are 64.2% more likely to screen as at-risk for problem gambling compared to the overall population.

Individuals who are married are the least likely to screen positive for problem gambling, with an incidence rate of 1.8%. Widowed individuals have the second lowest rate, at 2.3%. In contrast, individuals who are separated exhibit a markedly higher incidence rate of 9.7%, the highest among marital status groups, while those who are never married have the second highest rate at 6.9%. These findings suggest that marital status may play a role in influencing the likelihood of problem gambling. Being married may provide social or emotional stability, which could act as a protective factor against gambling-related harms. Married individuals, for example, may benefit from shared financial responsibilities and emotional support, reducing the need to rely on gambling as a coping mechanism or a source of excitement.

Conversely, individuals who are separated, never married, or widowed may face different social or economic pressures that contribute to higher rates of problem gambling. Separated individuals, who exhibit the highest rates, might experience heightened emotional distress, financial instability, or social isolation following the dissolution of a relationship, which could increase vulnerability to gambling-related harm. Similarly, those who have never married may have fewer financial or social constraints and could engage in gambling more frequently as a recreational activity, increasing the likelihood of developing gambling-related problems.

1.4% of veterans were screened as engaging in at-risk problem gambling, a rate that is 63.4% below the state average. This finding is somewhat surprising, as veterans are known to be at significantly higher risk for developing mental health issues, such as PTSD and depression, compared to the general population. These conditions are often associated with behaviors like gambling, which can serve as a coping mechanism for stress or emotional difficulties.

Chart 23. Problem Gambling At-risk Rates, by Age



*The sample is restricted to those who reported gambling in the past 12 months.

Married individuals are least likely to screen positive for at-risk problem gambling.

The lower-than-expected rate may reflect differences in reporting behaviors, where veterans might be less likely to disclose gambling-related issues due to stigma, concerns about judgment, or fear of how their behavior might be perceived. Alternatively, it may suggest that support systems available to veterans, such as counseling services or community programs, could mitigate their gambling risk. Further research is needed to better understand these findings and to ensure that potential problem gambling among veterans is not underreported or overlooked.

The survey also highlighted work status as an important indicator of at-risk problem gambling behavior. Unemployed individuals exhibited the highest at-risk rate at 9.5% - 2.7 times the state average. Unemployment may lead to heightened financial and emotional stress, often linked to being out of work. The pressure to recover lost income or alleviate stress could drive unemployed individuals to gamble more frequently or engage in riskier gambling behaviors. This finding aligns with broader research indicating that financial instability is a key factor associated with increased gambling-related harm.

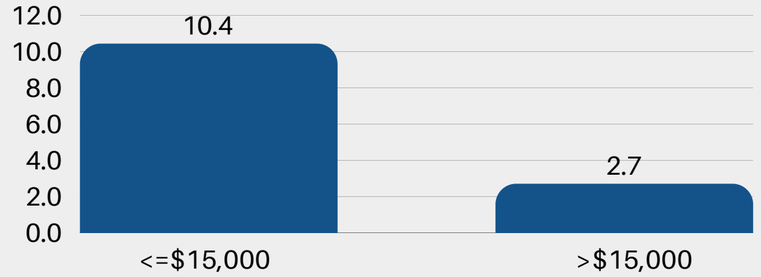
Students also reported a relatively high at-risk rate of 6.3%. This may reflect unique stressors faced by this group, such as academic pressure, financial insecurity, and exposure to gambling through digital platforms like online sports betting or apps. Additionally, being a student is correlated with younger age groups, which tend to exhibit higher at-risk gambling rates. In contrast, retirees and homemakers reported the lowest rates of at-risk gambling, at 2.2% and 1.2%, respectively, possibly reflecting greater financial stability and fewer gambling-related stressors in these groups.

In general, higher levels of average household income and higher levels of education attainment are associated with lower levels of at-risk problem gambling. Interestingly, the relationship between these demographic variables and at-risk gambling rates have threshold values, after which at-risk gambling significantly declines. (See Charts 24 and 25). For average household income, that threshold rate is $15,000 or less: Oregonians who are in that income category have a positive screening rate of 10.4% versus 2.7%. For educational attainment, the threshold is high school graduation: those who did not graduate from college have an at-risk rate of 10.1% versus 3.0% for those who do.

Notably, there is only a 1.5% overlap between these two groups in the sample, meaning the thresholds for income and education appear to operate independently rather than being solely explained by overlap between the two groups. This distinction highlights the unique role that both income and education play in influencing gambling behaviors, each contributing as independent protective factors against problem gambling.

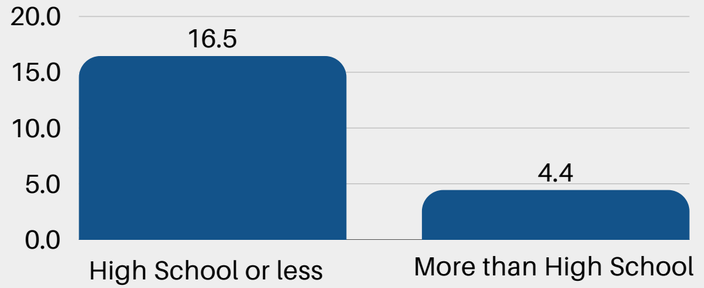
This section highlights the significant role that demographic factors play in influencing the likelihood of screening positive for at-risk problem gambling. The analysis reveals that specific groups - categorized by age, gender, race/ethnicity, marital status, income, and education - are disproportionately affected. Similar to their associations with gambling participation rates, the relationships between these factors and problem gambling risk are complex, with many variables co-varying and interacting in ways that make isolating their individual effects challenging. It is therefore important to exercise careful consideration of the results and avoid oversimplification.

Chart 24. Problem Gambling At-risk Rates, by Income



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 25. Problem Gambling At-risk Rates, by Education Attainment



*The sample is restricted to those who reported gambling in the past 12 months.

Lower income and educational attainment are factors strongly associated with at-risk problem gambling screening rates.

5.2: Health-related Factors

Chart 26 illustrates the relationship between an individual's perception of their general health and their likelihood of screening positive for at-risk problem gambling. The data reveal that participants who self-report poor or fair general health are significantly more likely to screen as at-risk for problem gambling. As a group, they have an incidence rate of 6.1%, compared to 2.3% for those with higher levels of general health – a rate 2.1 times higher. This pattern aligns with the threshold characteristic observed for income and educational attainment, where at-risk gambling rates drop substantially after a certain point.

The relationship between the number of reported poor physical health days and the screening rate for problem gambling takes on an inverted V-shape. Rates are initially low, increase to a peak, and then decline. The explanation for this pattern is unclear but could reflect a complex interplay between physical health challenges, gambling behavior, and other mediating factors such as an inability to engage in excessive gambling on account of physical impairment.

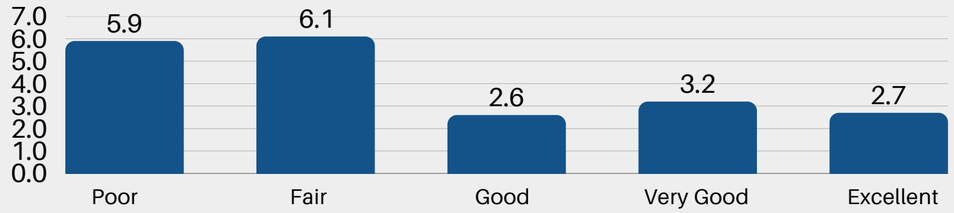
In contrast, the relationship between poor mental health days and at-risk gambling behavior is more straightforward (Chart 27). Individuals with no reported poor mental health days have a relatively low at-risk screening rate of 1.8%. However, as the number of poor mental health days increases, the rate rises steadily, peaking at 10.1% for individuals reporting 21 or more poor mental health days. This clear positive association, which was also observed with gambling participation rates, underscores the strong link between mental health challenges and gambling-related harm.

Individuals experiencing frequent mental health struggles, such as stress, anxiety, or depression, may be more vulnerable to using gambling as a coping mechanism or escape. This heightens their risk of developing problem gambling behaviors, illustrating how mental health challenges can compound the harmful effects of gambling.

Chart 28 illustrates the relationship between health conditions and at-risk problem gambling rates. Individuals with high blood pressure, diabetes, and a history of surviving a stroke exhibit the highest incidence rates of at-risk problem gambling, all around 4.3%. Those with high cholesterol have a lower incidence rate of 3.5% - the overall state average. Interestingly, having coronary artery disease or a history of a heart attack is associated with a reduced likelihood of screening as at-risk for problem gambling. This is particularly notable for individuals who have suffered a heart attack, where the incidence rate drops by 60% (1.4% compared to 3.5%).

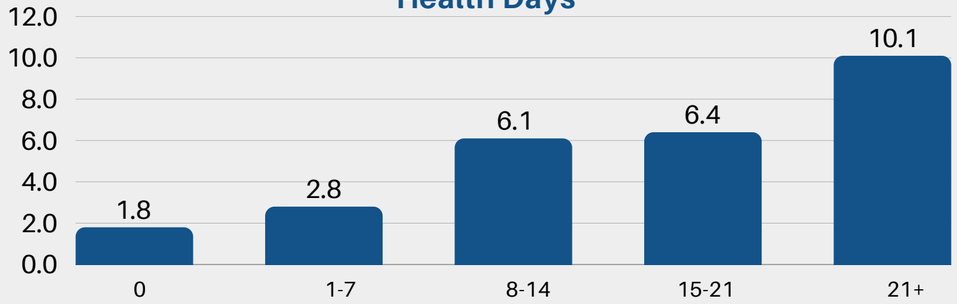
These findings suggest a complex relationship between physical health conditions and problem gambling risk. Conditions like high blood pressure, diabetes, and stroke may increase gambling risk due to the stress, lifestyle challenges, or financial burdens often associated with managing chronic illnesses. On the other hand, the reduced risk observed among individuals with coronary artery disease or a history of a heart attack may reflect significant lifestyle changes or health interventions following such serious events. After a heart attack, individuals may become more focused on managing their health, reducing behaviors like gambling excessively that could exacerbate stress or financial strain.

Chart 26. Problem Gambling At-risk Rates, by General Health Perception



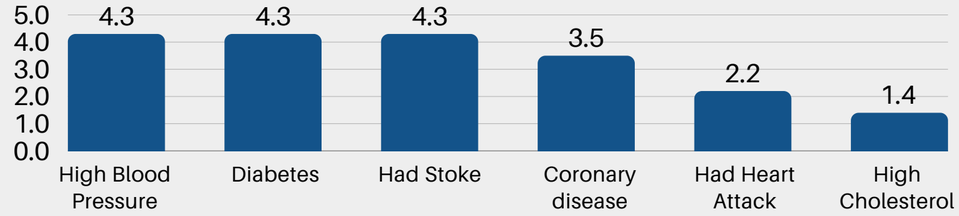
*The sample is restricted to those who reported gambling in the past 12 months.

Chart 27. Problem Gambling At-risk Rates, by # Poor mental Health Days



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 28. Problem Gambling At-risk Rates, by # Health Condition



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 29 illustrates the relationship between perceived cognitive impairments and the incidence of screening positive for at-risk problem gambling. Among the factors examined, cognitive impairments demonstrate some of the strongest associations with problem gambling risk.

Specifically, difficulties with concentration and memory, memory issues interfering with day-to-day activities, and difficulty learning age-appropriate tasks show the highest incidence rates, at 11.2%, 11.2%, and 10.4%, respectively. These findings highlight the significant role cognitive impairments may play in heightening an individual's vulnerability to gambling-related harm. Cognitive challenges, such as memory or concentration difficulties, can impair an individual's ability to make informed decisions about gambling or recognize when their behavior has become problematic. For instance, these impairments may hinder effective management of financial resources, reduce the ability to assess risk, and limit understanding of the potential consequences of gambling.

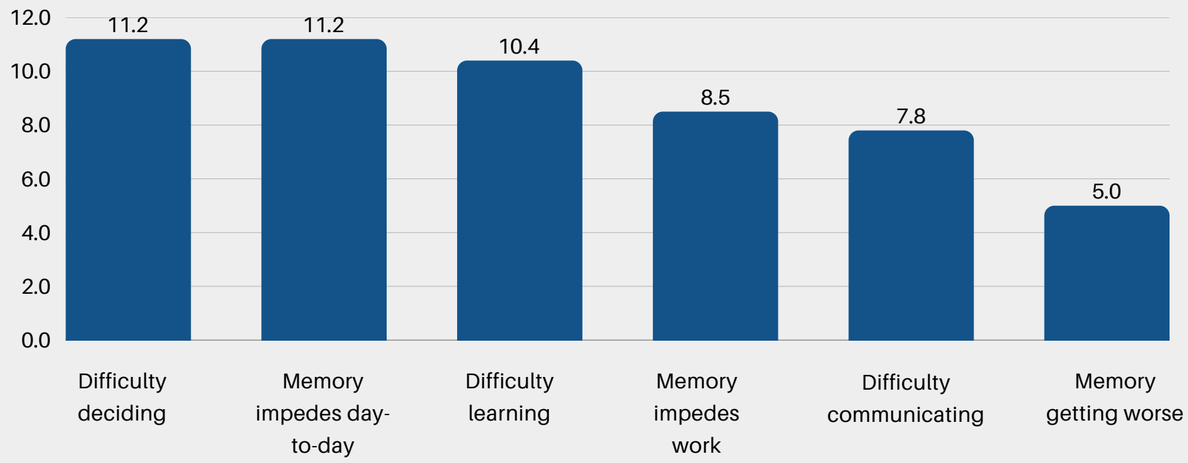
The data also reveal that mental health conditions are strongly associated with at-risk problem gambling. Individuals with a diagnosed depressive disorder, such as depression, have an incidence rate of 10.7%, while those experiencing serious difficulty with mood, intense feelings, controlling behaviors, or delusions have a rate of 6.5%. These findings underscore the interplay between mental health challenges and gambling-related harm, suggesting that emotional and psychological vulnerabilities may contribute to heightened gambling risks.

This section discussed the relationships between health status, significant life events, and at-risk problem gambling rates. The data indicate strong associations between these factors, highlighting often complex interplay between physical and mental well-being and problem gambling. It is important to reiterate that the survey data reflect associations, not causal relationships. The results do not establish that these health-related factors cause problem gambling, nor do they confirm that gambling behaviors directly lead to these health conditions. Instead, they provide valuable insights into the potential correlations and overlapping vulnerabilities that warrant further investigation.

5.3: Tobacco, Cannabis, and Alcohol Use Factors

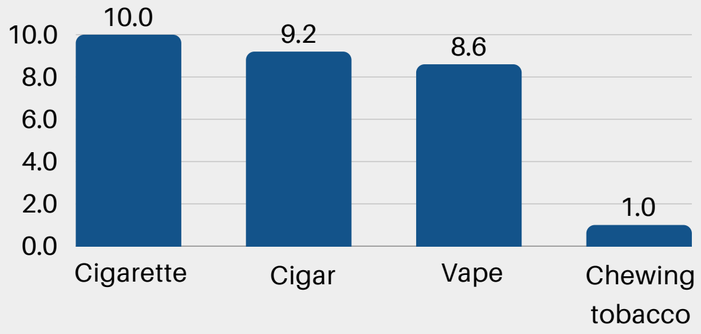
Chart 30 illustrates the relationship between the usage of tobacco products and at-risk problem gambling rates. The data clearly show that, with the exception of chewing tobacco products, the use of these products is significantly associated with higher likelihood of screening positive for at-risk gambling, similar to the associations observed with gambling participation rates.

Chart 29. Problem Gambling At-risk Rates, by Cognitive Impairments



*The sample is restricted to those who reported gambling in the past 12 months.

Chart 30. Problem Gambling At-risk Rates, by Substance Use



*The sample is restricted to those who reported gambling in the past 12 months.

Smoking cigarettes, cigars, and e-cigarettes are associated with 2.9 , 2.6, and 2.5 times higher problem gambling at-risk rates than the average Oregonian.

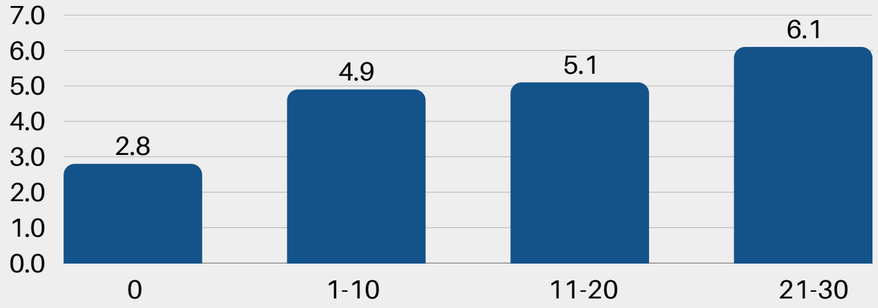
This finding aligns with general findings that certain substance use behaviors, such as smoking and vaping, often co-occur with gambling-related harm. These behaviors may share common risk factors, such as impulsivity, stress, or social influences, that make individuals more susceptible to both substance use and gambling. Addressing these co-occurring behaviors in prevention and treatment programs could enhance their effectiveness. For instance, integrating smoking cessation support into problem gambling interventions may help address shared underlying risk factors and improve outcomes for individuals struggling with both behaviors.

Chart 31 illustrates the relationship between the frequency of cannabis use and screening positive for at-risk problem gambling. Unlike the pattern observed for gambling participation rates, where the primary factor was simply whether or not an individual used cannabis, the data here indicate that increasing the frequency of cannabis use is associated with higher rates of at-risk gambling behaviors. This suggests that more frequent cannabis users may be at an elevated risk, possibly due to overlapping factors such as impulsivity and lifestyle choices that make gambling more accessible or appealing.

In contrast, the relationship between the number of days alcohol was consumed in the past 30 days and at-risk problem gambling is less pronounced. While the data show a slight increase in risk for individuals who reported drinking on 21 or more days, the association is not as robust across the range of drinking frequency. The weaker association between drinking frequency and at-risk gambling may indicate that simply consuming alcohol regularly does not necessarily drive risky gambling behaviors. Instead, the context and quantity of alcohol consumed may be more influential. Chart 32 demonstrates this point. The chart shows that the degree of alcohol consumption—measured as the average number of drinks consumed on days when an individual drinks—shows a clear positive association with at-risk problem gambling. As the number of drinks per drinking occasion increases, especially 4 or more beverages, so does the likelihood of screening positive for at-risk gambling. This suggests that heavy drinking behaviors may share common underlying risk factors with problem gambling, such as poor impulse control, heightened risk-taking tendencies, or the use of both behaviors as coping mechanisms for stress or emotional challenges.

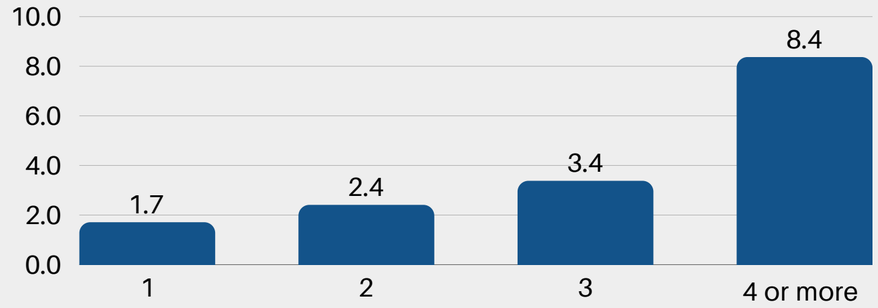
This section highlights the significant associations between substance use behaviors and at-risk problem gambling. These findings suggest shared underlying mechanisms, such as impulsivity, stress coping, or exposure to environments that promote both behaviors, influencing these relationships. However, the lack of a strong association for some substances, such as chewing tobacco, indicates that not all substance use behaviors contribute equally to gambling risk. Overall, the co-occurrence of substance use and at-risk gambling behaviors highlights the need for integrated prevention and treatment strategies that address both issues simultaneously, recognizing the intertwined nature of these challenges.

Chart 31. Problem Gambling At-risk Rates, by Cannabis Use



⁎The sample is restricted to those who reported gambling in the past 12 months.

Chart 32. Problem Gambling At-risk Rates, by # Of Alcohol Beverages Consumed Daily



⁎ Sample is restricted to those who reported gambling in the past 12 months.

⁎⁎Based on days that at least one alcoholic beverage is consumed.

5.4: Adverse Childhood Experiences (ACE) Factors

Chart 33 illustrates the relationship between adverse childhood experiences (ACE) and the incidence rates of at-risk problem gambling. Similar to the findings regarding gambling participation rates, individuals who have experienced ACEs are significantly more likely to engage in at-risk gambling behaviors. However, the impact of ACEs on at-risk gambling behaviors is far more pronounced compared to their impact on general gambling participation. While the average increase in gambling participation associated with ACE was 22%, the average increase in at-risk gambling behavior is a substantial 145.4%.

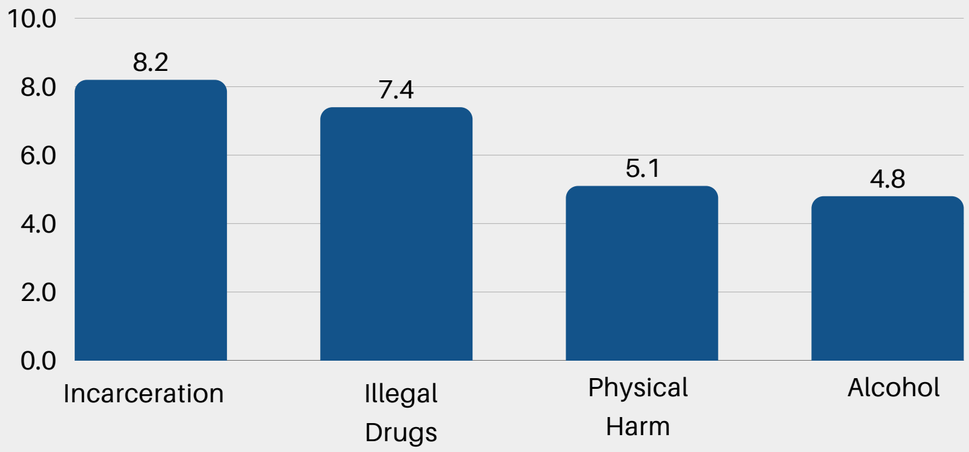
This striking difference underscores the role of ACEs as a critical risk factor for problem gambling. ACEs, such as exposure to abuse, neglect, or household dysfunction, may predispose individuals to coping mechanisms that increase their vulnerability to addictive behaviors, including gambling. These early-life stressors can have long-lasting psychological and behavioral effects, such as increased impulsivity, difficulty managing stress, and a greater likelihood of engaging in high-risk behaviors.

The heightened impact on at-risk problem gambling behaviors suggests that ACEs do more than just influence gambling participation - they exacerbate the severity and potential harm of gambling. Individuals with a history of ACEs may gamble not just recreationally but in a way that is more compulsive or harmful, potentially as a means of coping with unresolved trauma or emotional distress.

Finally, the study examines the presence of an adult during childhood who "made you feel safe and protected" or, in a separate question, "tried to ensure your basic needs were met." The data reveal that the absence of such an adult - either to provide feelings of safety or to meet basic needs - is associated with higher rates of at-risk problem gambling: 4.5% and 10%, respectively.

This section highlights the substantive relationship between adverse childhood experiences (ACEs) and at-risk problem gambling. The findings consistently show that individuals with a history of ACEs, such as exposure to household dysfunction, substance abuse, or incarceration, are significantly more likely to screen positive for at-risk gambling behaviors. Notably, the impact of ACEs on at-risk gambling far exceeds their effect on general gambling participation, underscoring the deep and lasting influence these experiences have on the development of harmful gambling patterns. Early interventions aimed at reducing childhood adversity, providing stable caregiving environments, and addressing the long-term effects of ACEs could significantly lower the risk of problem gambling in adulthood. Moreover, incorporating ACE-related assessments into behavioral health treatment programs could help identify individuals at risk for gambling-related problems.

Chart 33. Problem Gambling At-risk Rates, by ACE Factors



Children who lived with anyone who was incarcerated were 2.4 times more likely to screen as at-risk problem gambling

CONCLUSION

6.0: Conclusion

The ability to link demographic, health-related, substance use, and ACEs variables to gambling activities and at-risk problem gambling rates is significant because it enables more targeted and effective strategies for prevention, intervention, and policy development. Identifying specific factors, such as age, income, education, substance use, cognitive impairments, and childhood experiences, sheds light on the underlying dynamics that contribute to gambling behaviors. For instance, the strong association between alcohol consumption and gambling suggests a need to address co-occurring behaviors, while the impact of ACEs highlights the long-term influence of childhood trauma on adult risk-taking and coping mechanisms.

Understanding these variables provides a nuanced perspective on gambling behavior, which is essential for developing tailored approaches to address their associated harms. By recognizing that some cognitive impairments are associated with lower gambling participation rates while others increase it, interventions can be designed to address specific vulnerabilities, such as impaired risk comprehension or underestimation of consequences. Similarly, identifying populations with higher gambling participation rates, such as younger individuals and those with lower incomes, allows for the design of public awareness campaigns and educational programs that resonate with these groups.

This knowledge also informs screening and early detection efforts, allowing healthcare providers to identify individuals at higher risk for problem gambling based on their demographic or health profiles. For example, screening tools could incorporate questions about substance use, cognitive challenges, or ACE histories to flag at-risk individuals before gambling behaviors escalate. Moreover, linking these variables to gambling behaviors enables policymakers to create regulations that address vulnerabilities, such as limiting alcohol marketing near gambling platforms or ensuring online gambling apps implement protective measures for at-risk users.

Overall, these findings support a holistic approach to problem gambling prevention and treatment by integrating knowledge of its intersections with broader health, social, and economic factors. Recognizing the complexity of these relationships allows for more comprehensive public health strategies that not only mitigate gambling harms but also address the underlying issues contributing to them. This approach ensures that interventions and policies are not one-size-fits-all but are instead tailored to the needs of specific populations and risk factors.

APPENDIX A

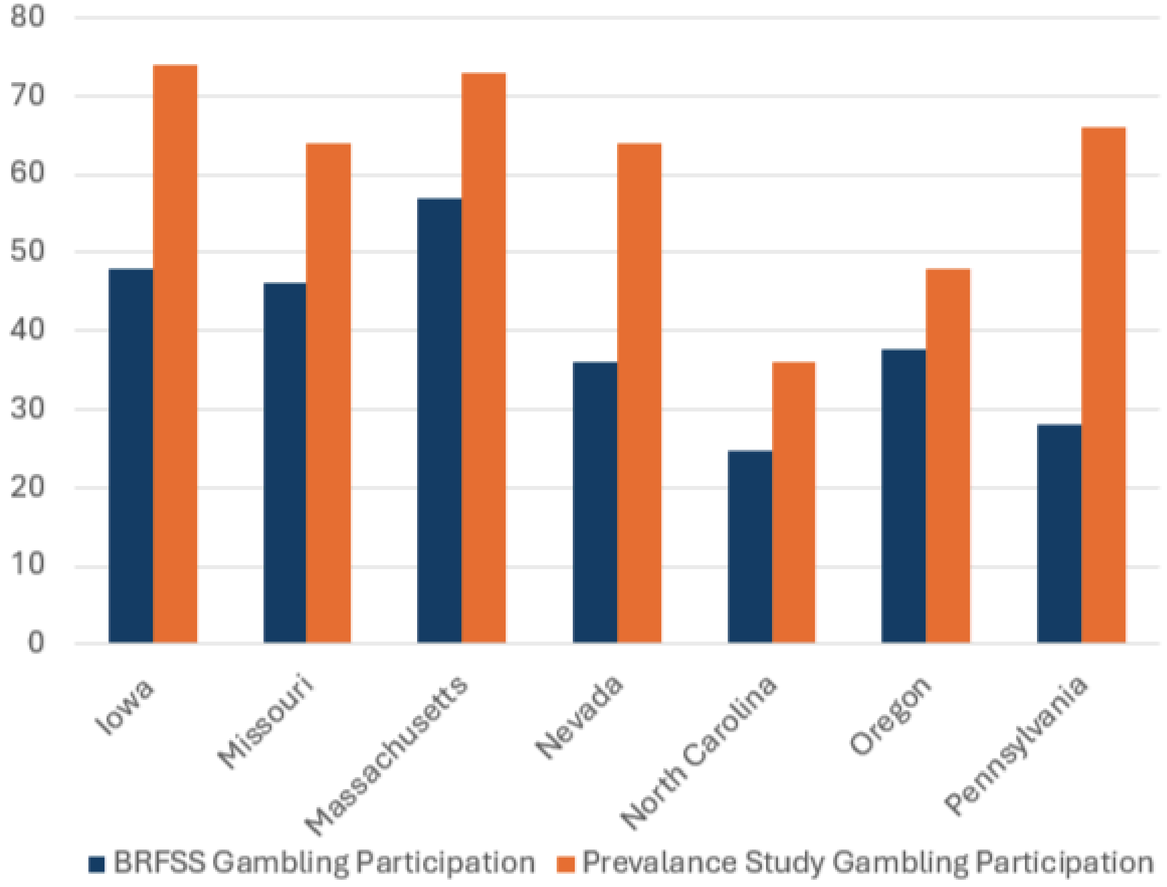
The Impact of Survey Methods on Gambling Behavior Findings

BRFSS Prevalence Rates of Gambling Participation and At-risk Problem Gambling Compared to Other General Population Survey Methodologies

BRFSS Appears to Systematically Under-Estimate Gambling Participation and Problem Gambling At-Risk Rates

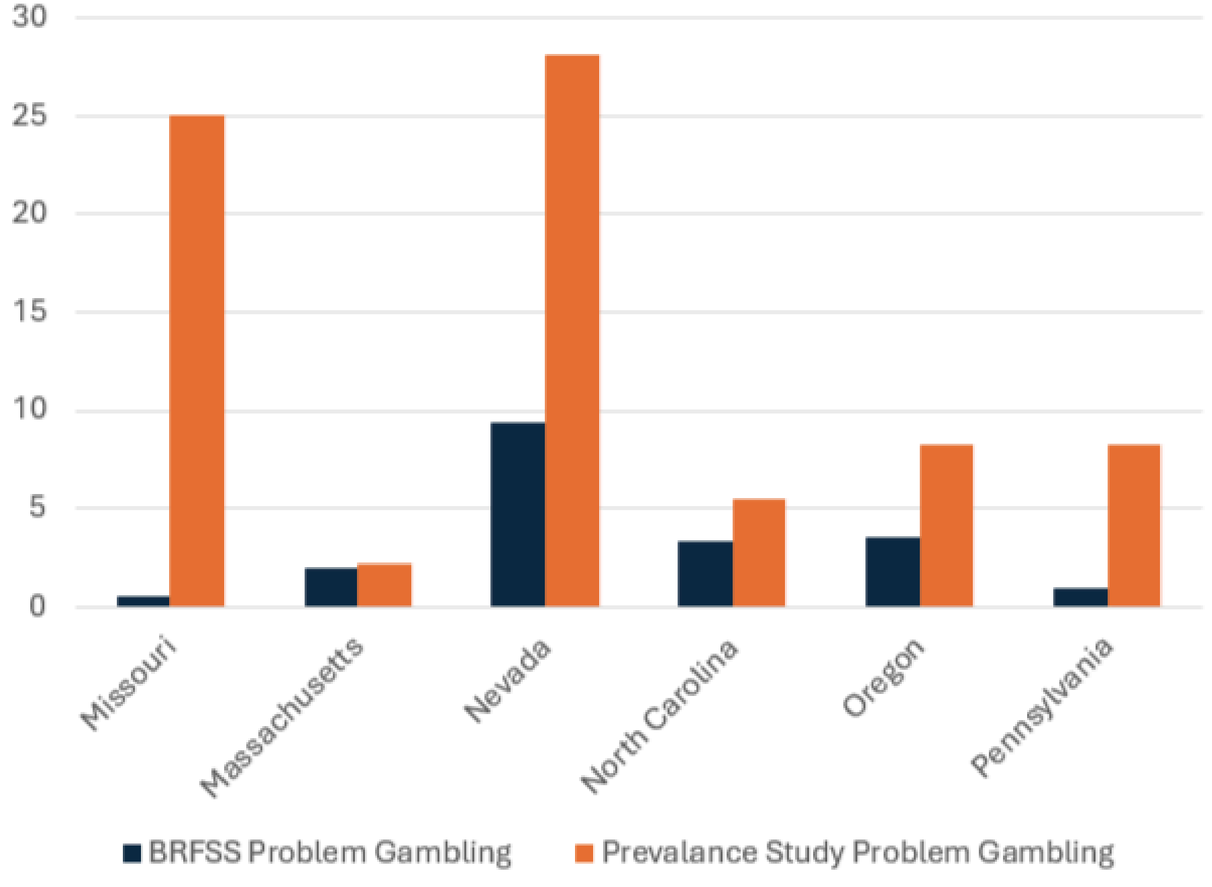
- BRFSS consistently reports lower past-year participation rates than other general population survey methods averaging about 33% lower rate.
- There are significant differences between BRFSS at-risk problem gambling rates compared to other general population surveys in five of the six example states.

BRFSS **Past 12-months Gambling Prevalence** Rates
Compared to Other Within State General Population Surveys



Note: *Other than Nevada, all other within state comparisons between the BRFSS findings and other survey findings where not conducted the same year. See Table A for survey years and Appendix A References for source materials.*

BRFSS Past 12-months **Problem Gambling Positive Screening** Rates
Compared to Other Within State General Population Surveys



Note: *Only Oregon used the same problem gambling screening instrument (BBGS) between the two in-state surveys. All other states used different problem gambling screening measures between their BRFSS survey and other general population survey*

Table A. States that have added gambling questions to the BRFSS & conducted other gambling behavior general population surveys

State	Gambling Participation & PG Risk Assessed in BRFSS	Survey Type & Measure	Gambling Participation & PG Risk Assessed Elsewhere	Survey Type & Measure
Iowa	In 2021, 48% of Iowa adults reported having gambled in the past 12 months (IDHHS).[1]	BRFSS	In 2018, a General Population Prevalence Study found 73.8% of a sample of Iowa adults reported having gambled in the past 12 months .[2]	Prevalence survey
Missouri	In 2016, 46% of Missouri adults reported having gambled in the past 12 months. Among the full sample of adults, money spent on gambling led to financial problems was 0.6 percent. [3]	BRFSS	In 2022, 64.1% of a sample of Missouri adults reported having gambled in the past 12 months. The overall prevalence of GD within Missouri is 4.1% with a further 20.8% At-Risk for GD. Thus, 24.9% are either At-Risk for GD or are currently probable for a GD diagnosis.[4]	Prevalence survey, sampling methodology not specified. Asked the nine DSM-5 GD criteria.
Massachusetts	2013, past year gambling prevalence of 57%. 1.2% of the 2013 Massachusetts BRFSS gambling module sub-sample endorsed the withdrawal criterion of the BBGS, 1.1% endorsed the lying criterion, and 0.1% endorsed the financial trouble/financial bailout criterion. Data about the percent of respondents who screened positive for gambling-related problems (i.e., by endorsing at least one BBGS criterion) are unavailable.[5]	BRFSS BBGS	2014 Baseline General Population Survey using Address Based Sampling to generate probability sampling with 9,581 participants. 73.1% past year gambling. Problem gambling rate reported at 2.2% using the PGSI.[6]	Prevalence survey PGSI
Nevada	In 2022, 36.2% reported gambling in the past 12 months. 26.03% of gamblers, translating to 9.4 % of the full sample, endorsed at least one positive response on the NODS-CLiP.[7]	BRFSS NODS-CLiP	In 2022, 64% of a sample reported gambling in the past year. Using the PGSI, 28.16% of the full sample scored in the moderate to severe range.[8]	Probability based panel survey PGSI
North Carolina	In 2023, 24.7 of North Carolina adults reported having gambled in the past 12 months, 3.5% have tried to cut down or control their gambling; 0.77% lied to family members or friend about their gambling; 1.8% spent a lot of time thinking about gambling or planning future gambling .[9] 2014, 3.35% were classified as problem/pathological gamblers according to the NODS-CLiP.[11]	BRFSS BBGS NODS-CLiP	In 2024, 36% of adults age 18+ have legally bet on sports since in became legalized 6 months prior to te poll.[10]	News poll of 900 participants.
Oregon	In 2023, 37.5% of Oregon adults reported having gambled in the past 12 months. 3.5% screened positively on the BBGS.[12]	BRFSS BBGS	In 2021, 48% reported having gambled at least once during the past 2 years. 8.3% of Oregonians scored positively on the BBGS.[13]	Probability based panel survey BBGS
Pennsylvania	2020, 28% gambled in the past 12-months; 2012, 1% endorsed "Money spent gambling led to financial problems".[14]	BRFSS	2024 General Population Survey. 66% reported gambling in the past 12-months. The potential population prevalence of at-risk or problem gambling among Pennsylvania adults is likely in the range of 7.8-8.7%.[15]	Prevalence survey BPGS & PPGM

Appendix A: References to BRFSS Prevalence Rates of Gambling Participation and At-risk Problem Gambling Compared to Other General Population Survey Methodologies

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APPENDIX B

BRFSS Survey Questions Used For the 2023 Oregon Adult Health Survey Special Report on Gambling

Health Status

Variable	Description	Response						
GENHLTH	Would you say that in general your health is:	1 Excellent	2 Very Good	3 Good	4 Fair	5 Poor	7 Don't know / Not sure	9 Refused
PHYSHLTH	Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?	_ _ Number of days [01-30]	88 None	77 Don't know / Not sure	99 Refused			
MENTHLTH	Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?	_ _ Number of days [01-30]	88 None	77 Don't know / Not sure	99 Refused			

Health Conditions

Variable	Description	Response						
BPHIGH6	Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?	1 Yes	2 Yes, but female told only during pregnancy	3 No	4 Told borderline high or pre-hypertensive or elevated blood pressure	7 Don't know / Not sure	9 Refused	
DIABETE4	(Ever told) (you had) diabetes?	1 Yes	2 Yes, but female told only during pregnancy	3 No	4 No, pre-diabetes or borderline diabetes	7 Don't know / Not sure	9 Refused	
TOLDHI3	Have you ever been told by a doctor, nurse or other health professional that your cholesterol is high?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CVDCRHD4	(Ever told) (you had) angina or coronary heart disease?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CVDINFR4	Ever told you that you had a heart attack also called a myocardial infarction?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CVDSTRK3	(Ever told) (you had) a stroke?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			

Demographics

Variable	Description	Response						
AGE	What is your age?	_ _ Code age in years	07 Don't know / Not sure	09 Refused				
SEX								
MARITAL	Are you…	1 Married	2 Divorced	3 Widowed	4 Separated	5 Never married	6 A member of an unmarried couple	7 A member of a Registered Domestic Partnership
		9 Refused						
EDUCA	What is the highest grade or year of school you completed?	1 Never attended school or only attended kindergarten	2 Grades 1 through 8 (Elementary)	3 Grades 9 through 11 (Some high school)	4 Grade 12 (High school graduate)	7 GED (did not graduate high school, instead obtained a GED)	5 College 1 year to 3 years (Some college or technical school)	6 College 4 years or more (College graduate)
		9 Refused						

Demographics

Variable	Description	Response						
EMPLOY1	Are you currently… ?	1 Employed for wages	2 Self-employed	3 Out of work for 1 year or more	4 Out of work for less than 1 year	5 A Homemaker	6 A Student	7 Retired OR
		8 Unable to work	9 Refused					
INCOME3	Is your annual household income from all sources…	01 Less than $10,000?	02 Less than $15,000? ($10,000 to less than $15,000)	03 Less than $20,000? ($15,000 to less than $20,000)	04 Les than $25,000? ($20,000 to less than $25,000)	05 Less than $35,000? ($25,000 to less than $35,000)	06 Less than $50,000? ($35,000 to less than $50,000)	07 Less than $75,000? ($50,000 to less than $75,000)
		08 Less than $100,000? ($75,000 to less than $100,000)	09 Less than $150,000? ($100,000 to less than $150,000)	10 Less than $200,000? ($150,000 to less than $200,000)	11 $200,000 or more?	77 Don't know / Not sure	99 Refused	
VETERAN3	Have you ever served on active duty in the United States Armed Forces, either in the regular military or in a National Guard or military reserve unit?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CTYCODE2	In what county do you currently live?	_ _ _ ANSI County Code	777 Don't know / Not sure	999 Refused	888 County from another state			

Substance Use

Variable	Description	Response						
SMOKDAY2	Do you now smoke cigarettes every day, some days, or not at all?	1 Every day	2 Some days	3 Not at all	7 Don't know / Not sure	9 Refused		
ECIGNOW2	Do you now use e-cigarettes or other electronic vaping products every day, some days, or not at all?	1 Never used e-cigs in your entire life	2 Every day	3 Some days	4 Not at all (right now)	7 Don't know / Not sure	9 Refused	
CIGARLARGE	Have you smoked a full-sized cigar in the last month? Examples would be Dutch Master, White Owl, King Edward, or Muriel.	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CIGARSMALL	Have you smoked a smaller-sized cigar or a cigarillo in the last month? Examples would be Swisher Sweets, Cheyenne, or Winchester.	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
USENOW3	Do you currently use chewing tobacco, snuff or snus every day, some days, or not at all?	1 Every day	2 Some days	3 Not at all	7 Don't know / Not sure	9 Refused		

Substance Use

Variable	Description	Response						
ALCDAY4	During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?	1 _ _ Days per week	2 _ _ Days in the past 30 days	888 No drinks in the past 30 days	777 Don't know / Not sure	999 Refused		
AVEDRNK3	One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?	_ _ Number of drinks	88 None	77 Don't know / Not sure	99 Refused			
MARIJAN1 MJ30X2	During the past 30 days, on how many days did you use marijuana or cannabis?	_ _ Number of days (01-30)	77 Don't know / Not sure	88 None	99 Refused			

Cognitive Impairments

Variable	Description	Response						
CIMEMLO1	The next few questions ask about difficulties in thinking or memory that can make a big difference in everyday activities. We want to know how these difficulties may have impacted you.	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
DECIDE	Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
DIFFLEARN	Do you have serioius difficulty learning how to do things most people your age can learn?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
DIFFUNDER	Using your usual (customary) language, do you have serious difficulty communicating (for example understanding or being understood by others)?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CDHOUS1	During the past 12 months, have your difficulties with thinking or memory interfered with day-to-day activities, such as managing medications, paying bills, or keeping track of appointments?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
CDSOCIA1	During the past 12 months, have your difficulties with thinking or memory interfered with your ability to work or volunteer?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			

Mental Health

Variable	Description	Response						
ADDEPEV3	(Ever told) (you had) a depressive disorder (including depression, major depression, dysthymia, or minor depression)?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
DIFFMOOD	Do you have serious difficulty with the following: mood, instense feelings, controlling your behavior, or experiencing delusions or hallucinations?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			

Adverse Childhood Experiences (ACE)

Variable	Description	Response						
ACEDRINK	Did you live with anyone who was a problem drinker or alcoholic?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
ACEDRUGS	Did you live with anyone who used illegal street drugs or who abused prescription medications?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
ACEPRISN	Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?	1 Yes	2 No	7 Don't know / Not sure	9 Refused			
ACEHURT1	Not including spanking, (before age 18), how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Was it…	1 Never	2 Once	3 More than once	7 Don't know / Not sure	9 Refused		
ACEADSAF	For how much of your childhood was there an adult in your household who made you feel safe and protected? Would you say never, a little of the time, some of the time, most of the time, or all of the time?	1 Never	2 A little of the time	3 Some of the time	4 Most of the time	5 All of the time	7 Don't know / Not sure	9 Refused
ACEADNED	For how much of your childhood was there an adult in your household who tried hard to make sure your basic needs were met? Would you say never, a little of the time, some of the time, most of the time, or all of the time?	1 Never	2 A little of the time	3 Some of the time	4 Most of the time	5 All of the time	7 Don't know / Not sure	9 Refused

Gambling-related Questions

Variable	Description	Response					
GAMBL1	Have you done any of these things or other gambling activities in the past 12 months?	1 Yes	2 No	7 Don't know / Not sure	9 Refused		
GAMBL2	During the past 12 months, have you become restless, irritable or anxious when trying to stop or cut down on gambling?	1 Yes	2 No	7 Don't know / Not sure	9 Refused		
GAMBL3	During the past 12 months, have you tried to keep your family or friends from knowing how much you gambled?	1 Yes	2 No	7 Don't know / Not sure	9 Refused		
GAMBL4	During the past 12 months, did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends, or welfare?	1 Yes	2 No	7 Don't know / Not sure	9 Refused		
GAMBL5	Now I am going to ask you about your gambling in the last 30 days. During the last 30 days, have you done any gambling or placed any bets online or using an app?	1 Yes	2 No	7 Don't know / Not sure	9 Refused		
GAMBL6	We are interested in understanding if Oregonians are gambling on sites not required to have player protections. During the past 30 days, was the primary wagering site or app you gambled on unregulated in Oregon, for example, an offshore casino site or poker room?	1 Yes	2 No	7 Don't know / Not sure	9 Refused		