



Maryland Center of Excellence on Problem Gambling

Statewide Gambling Prevalence in Maryland: 2022

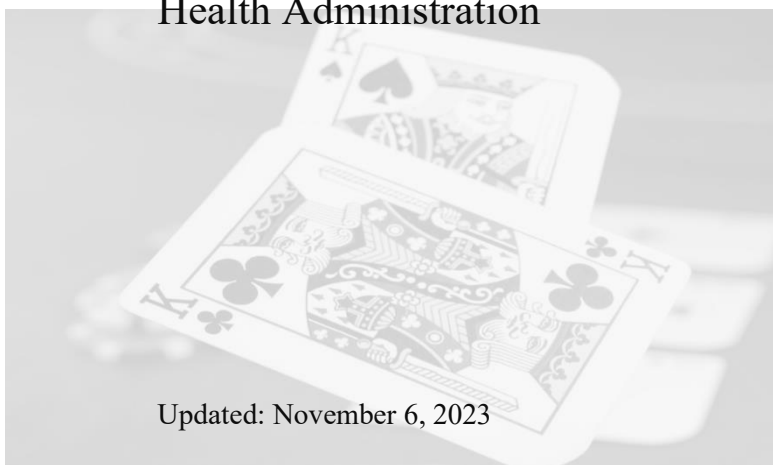
J. Kathleen Tracy, Ph.D.

Former Director of Research

Jessica P. Brown, Ph.D.

Director of Research (as of May 1st 2023)

Funding provided by Maryland Department of Health, Behavioral
Health Administration



Updated: November 6, 2023

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Executive Summary

The 2022 Statewide Gambling Prevalence in Maryland survey was conducted from April to July 2022 and aimed to provide updates on the prevalence of gambling and gambling behavior in the State. This is the fourth iteration of this survey, providing the state with data to identify any important changes in gambling behavior.

Over 4,000 Marylanders participated in the survey and were included in the analysis. Respondents were classified as gamblers if they had ever participated in any of the eleven forms of gambling (i.e., gambling at a casino, using gaming machines outside of a casino, spending money on lottery games, placing bets at horse races, placing bets at dog races, playing bingo outside of a casino, gambling on private games, betting on sports events or fantasy sports, wagering online, or any other kind of gambling activity). The overall percentage of Marylanders who reported in the 2022 survey that they had ever gambled (90.4%) was similar to the numbers reported in the 2010 (89.7%) survey and 2017 (87.0%) survey. It was, however, lower than the proportion of gamblers identified in the 2020 (92.3%) survey.

Amongst those who had ever gambled in their lifetime, the most frequently reported gambling types were lottery games and casino betting. Gambling on gaming machines outside of casinos was also frequently reported, with 33.4% of those who have ever gambled in their lifetime reporting use in 2022. Placing a bet on horse races was found to no longer be a popular gambling activity among Marylanders and since 2010 has decreased from 29.5% to 19.5% in 2022.

When respondents were asked to provide a reason for gambling, more than half of lifetime gamblers reported that entertainment or fun was very important to them (54.7%), followed by winning money (46.6%). These proportions were higher than the corresponding estimates reported in 2010, 2017, and 2020. The convenience or ease with which they could gamble was not important for 50% of gamblers, while 34.9% felt it was somewhat important.

Substance use, a frequent comorbidity of gambling, was more frequently reported amongst gamblers compared to non-gamblers, in the 12 months prior to being surveyed. Gamblers were more likely to use tobacco products, consume alcohol, including binge drinking, and illegal drugs. The use of prescription drugs other than prescribed was not prevalent in either group.

The NORC DSM-IV Screen for Gambling Problems was used to characterize respondents as “Low-Risk,” “At-Risk,” or “Disordered Gamblers.” Within the “Disordered Gambler” group, we further characterized respondents as “Problem Gamblers” (less severe) or “Probable Pathological Gamblers” (more severe). Following application of weighting to account for the sociodemographic distribution in the State of Maryland, probable pathological gamblers made up 1.6% (95% CI: 1.1% to 2.4%), while problem gamblers comprised 2.4% (95% CI: 1.7% to 3.4%). Therefore, 4.0% (95% CI: 3.1% to 5.2%) were identified as disordered gamblers. The weighted proportions of at-risk and low-risk gambling were and 6.9% (95% CI: 5.8% to 8.2%) and 80.2% (95% CI: 78.2% to 82.0%), respectively. The remaining 8.8% (95% CI: 7.6% to 10.3%) were non-gamblers, having never participated in any form of gambling in their lifetime. The current prevalence of gambling and gambling behavior is shown in the table below and compared to the rates from the previous prevalence studies.

Survey year	Have ever gambled in lifetime	Gambling behavior*				
		Low-risk gambler	At-risk gambler	Problem gambler	Probable pathological gambler	Disordered gambler
2010	89.7%	77.3%	9.0%	1.9%	1.5%	3.4%
2017	87.0%	80.3%	2.5%	0.7%	1.0%	1.7%
2020	92.3%	71.2%	11.5%	3.1%	5.5%	8.4%
2022	90.4%	80.2%	6.9%	2.4%	1.6%	4.0%

*The proportion of non-gamblers is not shown but can be derived by subtracting the proportion of low-risk, at-risk, and disordered gamblers from 100.

Low-risk: NODS score 0

At-risk: NODS score 1 to 2

Disordered gambler: Problem gambler (NODS score 3 to 4) and Probable pathological gambler (NODS score 5 or higher) combined

At-risk gamblers were almost equally divided between males and females (55.1% vs 44.9%), however, 67.4% of disordered gamblers were male while only 41.4% of low-risk gamblers were male. The majority (65.7%) of disordered gamblers were aged between 35 and 64 years, while only 5.3% were aged between 18 and 24 years (3.0%) and older than 75 years (2.3%). Almost half of all disordered gamblers were Black and African American, while more than half of at-risk and low-risk gamblers were White. Compared to

low-risk and at-risk gamblers, we see considerably more disordered gamblers who have a high school education or no diploma. A higher proportion of disordered gamblers resided in Eastern Maryland, while low-risk and at-risk gamblers tended to be equally spread out through the Central, Western, and Southern regions.

Sports gambling, the most recent expansion of gambling in the State, became available in casinos in 2021 and online in 2022. More than a third of Maryland gamblers had ever participated in sports gambling (30.1%), which included both traditional sports gambling and fantasy sports. The prevalence of disordered gambling was notably high amongst this group of individuals, with at least ten percent experiencing disordered gambling. At the time of conducting the study, sports gambling in casinos was available, but gambling online had yet to be made available and therefore still illegal. It is perhaps therefore not surprising that disordered gambling appears high amongst sports gamblers who may be seeking out more ways to gamble than at-risk, or low-risk gamblers, and that this may dissipate over time.

These current findings underscore the fact that gambling disorder is a substantial source of hardship for a meaningful number of Marylanders. Some of the sociodemographic groups affected most by problem gambling in Maryland are also marginalized with respect to other issues related to economics, substance use, and access to health care. Advocates for responsible gambling can do more to target at-risk and problem gamblers with information for how to prevent or seek help for serious gambling disorder.

CHAPTER 1 Introduction

The opportunity for legalized gambling has expanded at a rapid pace throughout the United States, supporting the financial and economic needs of the individual states. In Maryland, casinos, slot machines, table games, and most recently sports betting, have all been legalized within the last fifteen years. All of these except fantasy sports are available to anyone over the age of 21 years. Fantasy sports, along with several long-established forms of gambling such as lottery, horse racing, and gaming machines outside of a casino, have a minimum legal age of 18 years. Gambling is widely viewed as morally acceptable (Gallup, 2018) and for the majority of individuals it is a harmless recreational activity which can satisfy their psychological need for relaxation, excitement, mastery, autonomy, or connection (Parke et al., 2019). However, for a small proportion of individuals, gambling can lead to addictive and destructive behavior.

Gambling disorder is defined as a persistent and recurrent problematic gambling behavior that leads to clinically significant impairment or distress (Diagnostic and Statistical Manual of Mental Disorders, fourth edition DSM-IV). In 2013 it was reclassified from an impulse control disorder to a substance-related and addictive disorder to reflect evidence that it activates a similar reward system as drugs and produces behaviors comparable to those associated with substance-use disorders (Fauth-Buhler et al., 2017). It is a disorder which is routinely confounded with substance-use disorders including alcohol, tobacco, and drug (illicit and misuse of prescription drug) use (Diaz & Perez, 2021; Leino et al., 2023) and as with other addictive behaviors, gamblers can experience withdrawal and build a tolerance (Blaszczynski et al., 2008).

There is evidence that gambling behavior can have a social impact on the individual, their family, and their community. Gamblers are more likely to have a lower rates of productivity (Abbott, 2020), and higher rates of financial distress (Oakes et al., 2020), divorce (Black et al., 2013; Syvertsen et al., 2023), partner violence (Afifi, Brownridge, et al., 2010), and suicide (Hakansson & Karlsson, 2020). More recently the physical and mental health of gamblers has been examined with findings suggestive of an association between gambling and poorer physical and mental health (Afifi, Cox, et al., 2010; Erickson et al., 2005; Morasco et al., 2006).

In the United States the prevalence of disordered gambling is estimated to be 0.5% (Potenza et al., 2019), however individual States have reported rates as high as 9.0% (Spectrum Gaming Group, 2009). The Maryland Department of Health conducts periodic gambling prevalence studies to monitor the prevalence

of disordered gambling in the State of Maryland. This report provides a review of the epidemiological literature on gambling and the prevalence of both lifetime gambling and disordered gambling in the state (Chapter 2).

A detailed description of the survey and the methodology used are provided in Chapter 3 while Chapter 4 provides an overview of those included in the sample. Chapter 5 compares non-gamblers to those who have ever gambled in their lifetime, while Chapter 6 takes a closer look at those who have ever gambled, including the type and frequency of games they have played in the past year, their typical monthly spending on these games, why they have gambled and who they are gambling with. Chapter 7 examines sports gambling, the most recent expansion of gambling in the state of Maryland. Chapter 8 compares those who are low-risk, at-risk, and disordered gamblers, and Chapter 9 looks at help seeking behavior. Finally, Chapter 10 provides a high-level comparison of results from this and previous years Statewide Gambling Prevalence in Maryland surveys. Unless noted, all results are weighted to reflect the population of the State.

The terms “problem” and “pathological gambling” are often used interchangeably or to report gambling disorder, the term used by the DSM-V (fifth edition). In the 2022 survey, the instrument used to classify an individual’s gambling behavior uses the terms “probable pathological” and “problem gambling”, with problem being the less severe of the two categories. These two categories will often be reported as a combined group representing disordered gambling. As in previous reports (Tracy et al., 2019; Tracy & Schluterman, 2021), the terms problem and pathological will not be used interchangeably.

CHAPTER 2 Review of the Epidemiological Literature on Gambling

This section summarizes the existing epidemiological research on gambling behaviors. Epidemiological studies are conducted to understand the distribution, patterns, or causes of a health problem or disease in a population. These findings are meant to inform efforts to prevent, control, and treat health problems. Gambling has been present across cultures and millennia (Hodgins et al., 2011). Over the past few decades, following legalization of gambling in many states in the United States, substantial expansion of commercial gambling has occurred (Potenza et al., 2019; Welte et al., 2015). Additionally, access to and availability of the Internet have increased the availability of online gambling. Most US states have legalized at least one form of gambling (Potenza et al., 2019).

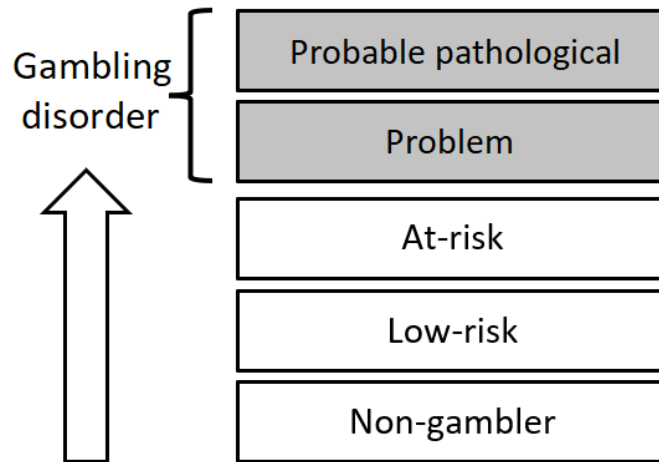
This chapter summarizes the existing literature on each of the following research areas:

- 1) Monitoring the prevalence and risk factors for disordered gambling, including sociodemographic, socioeconomic, biological, and behavioral determinants for disordered gambling.
- 2) Investigate the relationship between access/availability of gambling and disordered gambling, including impacts of legalizing casino gambling on gambling behaviors of a population.
- 3) Assess individual, familial, economic, and social impacts of disordered gambling, including the effect of gambling on vulnerable populations (e.g., young, elderly, and veterans).
- 4) Evaluate impacts of prevention, harm reduction, responsible gaming programs, and policies on gambling activities.
- 5) Summarize early evidence about the impacts of the COVID-19 pandemic on gambling behavior.

Prevalence and Risk Factors of Gambling Disorder

For comparability of results between studies, this section discusses statewide prevalence studies from around the United States that have used the NORC Diagnostic Screen for Gambling Problems (NODS) or the South Oaks Gambling Screen (SOGS) as a primary outcome measure. Both the NODS and the SOGS use the high-risk categories of “probable pathological gambler” (highest-risk behavior) and “problem gambler” (next highest risk). Here, we combine these top two risk categories into a “gambling disorder” category (Figure 2.1).

Figure 2.1: NODS and SOGS categories



Previous Results from Maryland

Four modern studies have sought to estimate the occurrence of gambling disorder in Maryland. These were conducted in 1989, 2010, 2017, and 2020. The findings of these four studies are summarized below.

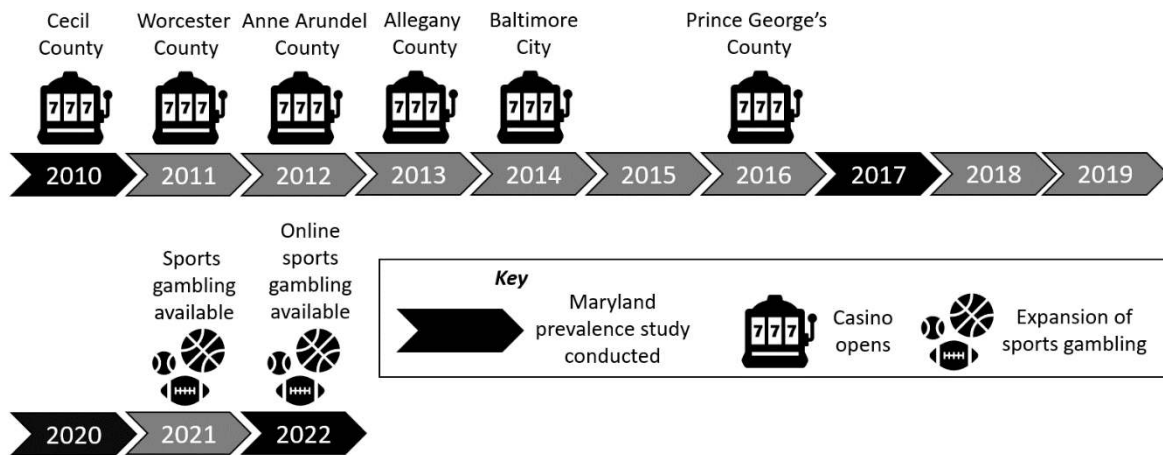
Table 2.1 Findings from previous statewide gambling prevalence studies in Maryland

Year	Prevalence of...			Screening test	Sampling strategy
	Problem gambling	Probable pathological gambling	Gambling disorder		
1989	2.4%	1.5%	3.9%	SOGS	Population-based
2010	1.9%	1.5%	3.4%	NODS	Population-based
2017	0.7%	1.0%	1.7%	NODS	Population-based
2020	3.1%	5.5%	8.4%	NODS	Existing panels, advertisements

See Chapter 8 for the 2022 prevalence of gambling behavior.

Figure 2.2. puts the most recent three of these studies, plus the current study, into the context of the recent expansion of gambling opportunities in Maryland. This period saw the opening of the state’s six casinos in 2010-2016 and the legal availability of sports gambling in 2021, as well as online sports gambling the following year.

Figure 2.2 Timeline of studies of gambling disorder and the expansion of gambling opportunities in Maryland, 2010-2022



“Prevalence Estimates of Pathological Gambling in New Jersey and Maryland,” 1989

In Maryland, the first prevalence study on gambling disorder was conducted by the National Institute of Mental Health in 1989. This survey aimed to investigate the experiences of respondents with different types of gambling, gambling-related problems, and demographic characteristics associated with gambling. The sample size of 750 was randomly drawn from a population-based sample frame, and the SOGS was used to assess risky gambling behavior (Volberg & Steadman, 1989).

The survey found that approximately 89% of Marylanders had ever participated in any form of gambling. The lifetime prevalence of problem and probable pathological gambling was reported as 2.4% and 1.5%, respectively. The rates of lifetime gambling participation and gambling disorder in Maryland were similar to those measured in other East Coast states—New York, Massachusetts, and New Jersey—surveyed by the same group in this effort. The prevalence of problem and pathological gambling was higher among males, non-Whites, and people with a lower education level (Volberg & Steadman, 1989).

“Gambling Prevalence in Maryland: A Baseline Analysis,” 2010

The second study to estimate the prevalence of disordered gambling in Maryland—and the first to use the NODS—was conducted in 2010 (Shinogle et al., 2011). The timing of this study was meant to estimate the baseline prevalence before the planned 2010s expansion of casino gambling in the state. The prevalence of problem gambling and probable pathological gambling were 1.9% and 1.5%, respectively. The overall prevalence was similar to that observed in 1989. The identified factors associated with higher likelihood of disordered gambling were also similar to 1989, including young age, male gender, African American, or other non-White races.

Respondents were asked about their gambling behavior in the past year, about 15.3% and 21.9% of respondents reported that they gambled weekly and monthly, respectively. Casino gambling was the most prevalent form of gambling, played by more than two-thirds of the respondents (67.5%). A sizeable proportion of people also gambled on sporting events (32.9%), private games (30.2%), horse racing (29.5%), “other forms,” (e.g., charity gambling; 27.5%), bingo (24.8%), and slot machines outside of casinos (21.3%).

Among gamblers, the average amount of money spent on gambling in a typical month was \$189. The amount spent differed by gambling frequency, with frequent gamblers spending more money than the people who did not gamble frequently.

“Statewide Gambling Prevalence in Maryland,” 2017

In 2017, a third statewide prevalence study was conducted (Tracy et al., 2019). This was the first report on the estimates of gambling behavior following the 2010s expansion of casino gambling in Maryland. Again, the NODS was used to categorize gambling behavior. The overall results were similar to those observed in the previous two surveys. The prevalence of problem gambling and probable pathological gambling were 0.7% and 1.2%, respectively. Males, African Americans, and people with low educational attainment had higher likelihood of gambling disorder.

Purchasing lottery tickets and casino gambling were the two most reported forms of gambling, played by 78% and 74% of the respondents, respectively. Horse races (31%), sports (29%), private games (29%), and bingo for money (27%) were other popular forms of gambling.

The average amount of money spent in a month also differed by type of gambling and frequency of gambling. It was as high as \$570 for dog races and as low as \$33 for purchasing lottery tickets, among those who participated in those gambling modes.

The impact of expanded gambling was evaluated by trends in income, unemployment rate, bankruptcies, and foreclosure rates in the counties where casinos are located; however, none of these indicators showed that opening casinos negatively impacted the economy.

“Statewide Gambling Prevalence in Maryland,” 2020

The next major expansion of gambling opportunities in Maryland was the legal availability of sports gambling in 2021-22. To assess the trends in gambling behavior just before the legal arrival of sports gambling, another statewide survey was conducted in the summer of 2020. This coincided with the first easing of social-distancing restrictions on casino gambling in Maryland during the COVID-19 pandemic. The 2020 prevalence study differed from others in Maryland in that its sampling frame consisted of respondents found in a combination of consumer lists and voter rolls obtained from political and election-oriented sources; as such, the sampling frame did not necessarily comprise a population-based sample. The resulting sample may have over-represented problem gamblers, which allowed for a more rigorous assessment of the risk factors for, and consequences of, gambling disorder.

Of this sample, 92.3% reported that they had ever gambled. The lifetime proportions of problem and probable pathological gambling were 3.1% and 5.5%, respectively. As with the other surveys, males, Black and African Americans, and people with low educational attainment had higher likelihood of gambling disorder. Age also showed a strong relationship with gambling disorder, with much higher proportions measured among the younger adult age groups.

The most common gambling types were the lottery (76.8% of the entire sample reported that they had ever gambled on lottery games), casinos (70.3%), and gaming machines outside of casinos (42.1%). Sports

gambling was reported by 35.5% of the sample in their lifetimes, and daily fantasy sports gambling was reported by 13.3%.

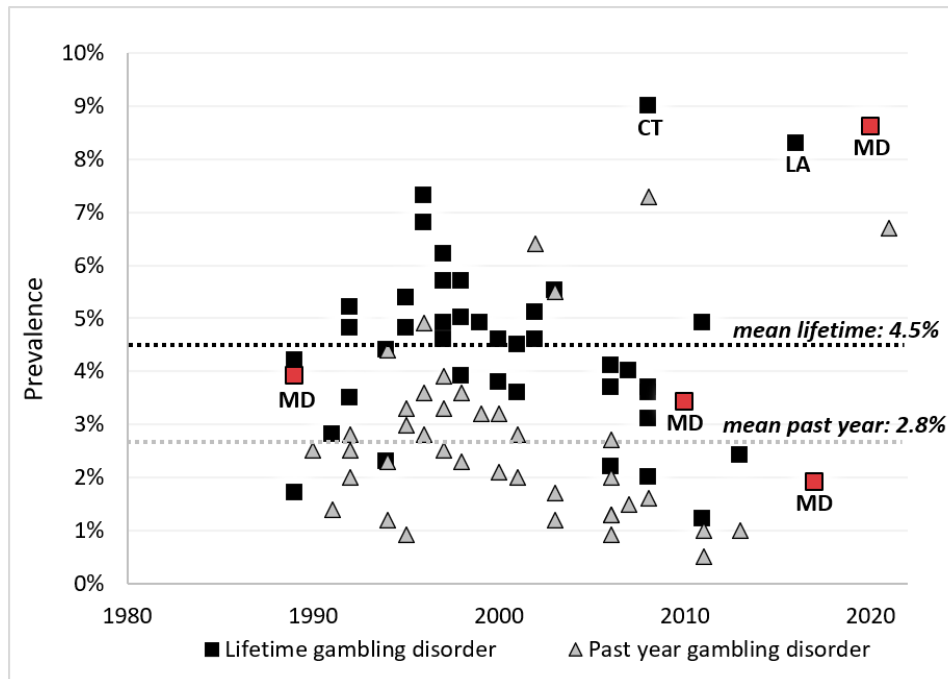
Among those participating in each type of gambling, \$212 was spent per person per month in casinos, and \$22 per month was spent on lottery games. Those who participated in traditional sports gambling and fantasy sports gambling spent an average of \$46 and \$94, respectively, on those activities.

Prevalence Studies from Other States

To put the current results and other recent Maryland prevalence surveys into context, a literature review collected reports and journal articles from studies that measured statewide prevalence of gambling disorder in any U.S. state. To maximize comparability between studies, this review focused on studies that used either the NODS (as does the current study and the other three most recent Maryland studies) or the SOGS, which produces comparable categories of problem gambling and probable pathological gambling.

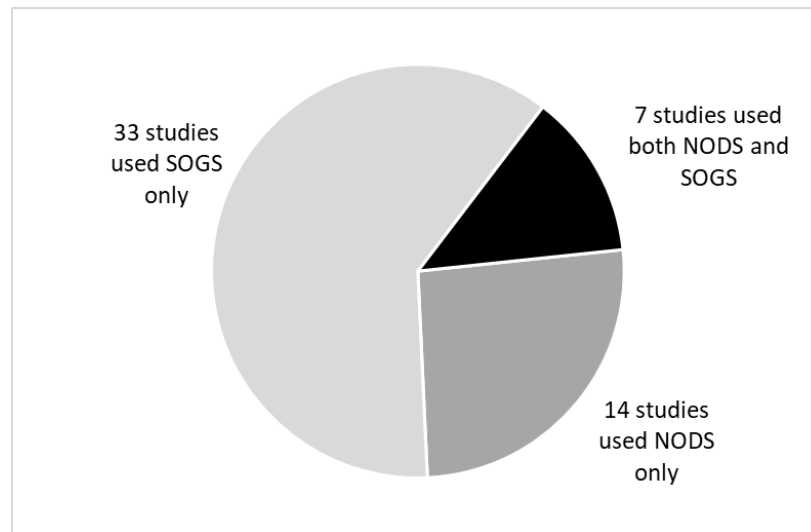
The review collected results from 54 studies from 26 states, including the four Maryland prevalence studies mentioned above, conducted from 1989 to 2022. A summary of the prevalence estimates from these studies is shown in Figure 2.3. An average of 4.5% of participants in these studies were assessed to have had gambling disorder during their lifetime; 2.8% were assessed to have a gambling disorder within the past year of their interview. At the time of publication, Maryland was the only state to have conducted and published a statewide survey to determine the prevalence of disordered gambling.

Figure 2.3 Prevalence of gambling disorder measured in statewide surveys around the United States, 1988-2022.



The 2020 Maryland prevalence study was one of three surveys from around the country that has shown a lifetime occurrence of gambling disorder of more than 8%. The two others were a 2008 sub-study in Connecticut (Spectrum Gaming Group, 2009) and a 2016 study in Louisiana (Biggar et al., 2017). The Louisiana study lacks a clear explanation for why its results differed substantially from a previous effort in 2008, but the Connecticut study clearly shows how sampling technique and mode of data collection can affect the ultimate results. The 2008 Connecticut study consisted of two parallel arms (counted as separate studies in this analysis): an online panel recruited through consumer research outreach and a telephone sample selected via random-digit dialing. Despite identical inclusion and exclusion criteria, the online panel in Connecticut had a measured prevalence of gambling disorder of 9.0%, significantly higher than the 3.7% found in the telephone survey.

Figure 2.4 Use of the NODS and SOGS in statewide prevalence studies of gambling disorder, including those conducted in Maryland, 1988-2022



The SOGS was used as the sole primary outcome measure by 33 studies, the NODS was used solely by 14, and 7 used both (Figure 2.4). Studies that used the SOGS have, on average, yielded higher prevalence estimates for gambling disorder than those that used the NODS (Figure 2.5). Surveys using the SOGS found a mean lifetime prevalence of 4.8%, versus 3.8% for the NODS. For current prevalence of gambling disorder, the mean SOGS prevalence was 3.0%, versus 1.3% for NODS.

Only three of the 54 studies, including the 2020 Maryland prevalence study, found in this review used at least some online data collection. Despite this small number, these three studies produced estimates that were statistically significantly higher ($p=0.02$) for “past year” prevalence than other studies; for lifetime prevalence, the three online studies produced estimates that were somewhat higher, but this difference was of borderline statistical significance ($p=0.06$) (Figure 2.6).

Figure 2.5 Weighted, by the number of people in each study, mean prevalence of gambling disorder measured by the SOGS and NODS using data from all prior state studies (including those conducted by Maryland).

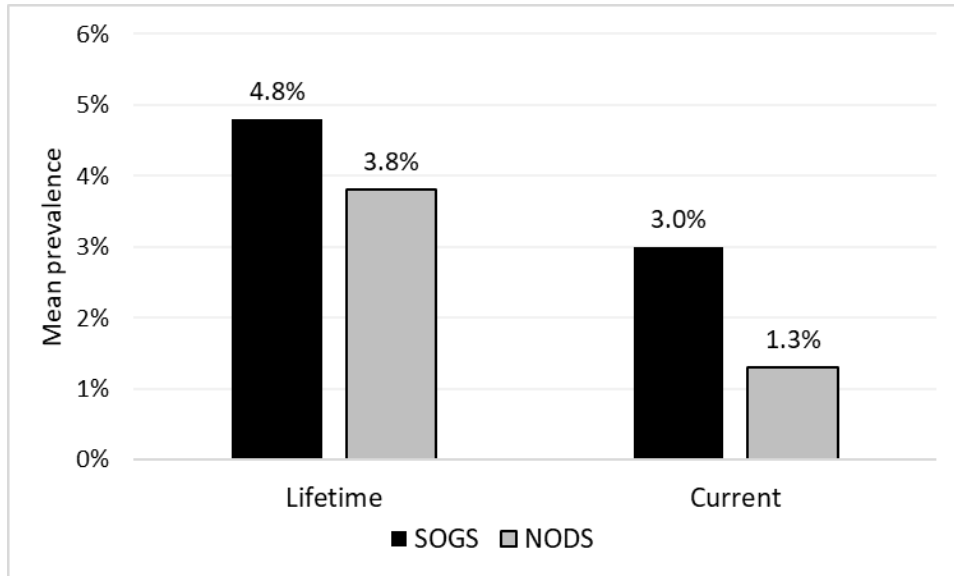
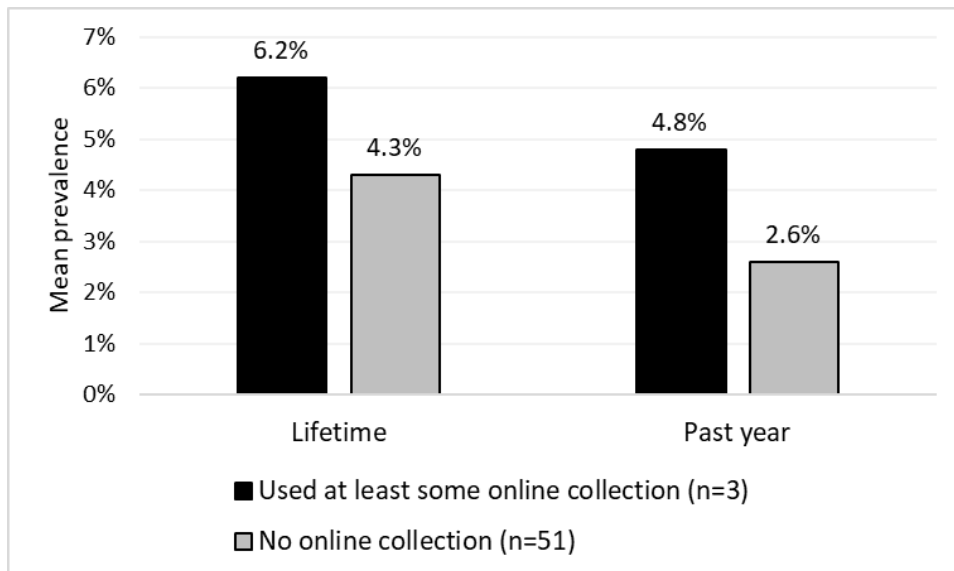


Figure 2.6 Weighted, by the number of people in each study, mean prevalence of gambling disorder measured by all prior state studies which did and did not include online data collection (including those conducted by Maryland).



Relationship Between Access/Availability and Disordered Gambling

Many studies have evaluated the impacts of casino opening on gambling behavior (Abott, 2017; Hodgins et al., 2011; Potenza et al., 2019). The exposure theory has been used to examine this relationship. According to this theory, the availability of the object of an addiction, such as gambling, can increase the risk for the disorder (Jacques & Ladouceur, 2006). However, empirical studies so far have not found or have failed to establish a causal relationship between access to gambling and occurrence of problematic gambling behavior (Jacques & Ladouceur, 2006; Latvala et al., 2019).

The “regional exposure model” proposed by Shaffer, Labrie, and LaPlante could also be used to explain this relationship (Shaffer et al., 2004). According to this model, the social adaptation capacity of gamblers following exposure to gambling changes their behavior initially. This model states that although increasing gambling opportunities may increase the incidence and prevalence of disordered gambling in the beginning, the incidence/prevalence may level off after several years (Jacques & Ladouceur, 2006; Shaffer et al., 2004). The leveling off may occur due to social adaptation following gambling’s availability.

Following the development of the regional exposure theoretical framework to explain the prevalence of gambling behavior, real-world positive associations between the availability of gambling options and the prevalence of gambling problems have been found in a variety of settings (LaPlante et al., 2019; Philander et al., 2019).

Impacts of Gambling

By any estimate presented above, several million Americans suffer from gambling disorder (Potenza et al., 2019; Skywood Recovery, 2021). Like many other addiction or mental health issues, gambling disorder may be difficult to recognize, as many people are uncomfortable admitting their gambling issues and may not seek treatment (Fong, 2005; Potenza et al., 2019). Many people with disordered gambling assume that they can handle the situation on their own without any treatment, but this denial phase likely prolongs problematic behavior and magnifies the negative consequences of gambling (Braun et al., 2014; Hodgins et al., 2011).

Disordered gambling may have serious adverse effects on individuals, families, and communities. Personal mental health consequences may include depression, anxiety, mood disorders, and suicidal ideation (Becona et al., 1996; Bergamini et al., 2018; Fong, 2005; Hakansson & Karlsson, 2020; Hodgins et al., 2011; Potenza et al., 2019). Comorbid addiction behaviors are also common, as disordered gamblers tend to be more likely than the general population to smoke tobacco, misuse alcohol, or suffer from substance use disorders (Diaz & Perez, 2021; Fong, 2005; Leino et al., 2023; Potenza et al., 2019). The rates of unemployment, bankruptcy, foreclosures or forced home sales, and crime are higher among people with disordered gambling (Fong, 2005; Potenza et al., 2019). People with disordered gambling also may face relationship problems, including divorce (Black et al., 2012; Syvertsen et al., 2023). Children in such families may suffer emotional neglect and abandonment (Gerstein et al., 1999; Hodgins et al., 2011; Potenza et al., 2019) and have higher risks of addictions as well as disordered gambling (Potenza et al., 2019). These findings reflect the wide array of negative consequences problem gambling can have on the individual and his/her family.

Promoting Prevention, Harm Reduction, and Responsible Gaming Programs

Many public health efforts to reduce the burden of gambling disorder have been proposed or implemented across the world, with varying degrees of evidence for their effectiveness. Tanner et al. (Tanner et al., 2017) and Harris & Griffiths (Harris & Griffiths, 2017) have conducted systematic review to examine the impact of harm reduction interventions for gambling disorder. The harm reduction strategies included flashing warning messages about excess time or money spent at a machine, limiting the maximum bet to reduce the potential amount of money that can be lost, removing, or limiting large note ATMs in the casino, reducing casino operating hours, and banning smoking in the casino. The overall findings were mixed. For instance, gaming revenues appeared to decrease at locations that reduced their opening hours; however, caps on electronic gaming machines had no significant effect on gaming expenditure. Banning smoking inside casinos did not appear to reduce expenditures (Tanner et al., 2017).

Studies have also investigated the effectiveness of personalized feedback interventions (PFIs), which consisted of brief interactions with feedback about gamblers' behavior (Marchica & Derevensky, 2016). PFIs had previously been found to be effective for reducing alcohol abuse and other addictive behaviors (Bryant et al., 2013; Collins et al., 2014). First indications are that PFIs may also be effective in reducing gambling expenditures and problematic gambling behaviors (Marchica & Derevensky, 2016).

McMahon and colleagues (McMahon et al., 2019) conducted an umbrella review on existing published systematic reviews of different gambling interventions. The authors divided the interventions into several domains: supply reduction, demand reduction, and harm reduction. Supply reduction strategies, such as limiting opening hours, tended to reduce gaming expenditures but not the prevalence of problematic gambling. Demand reduction interventions included reflective motivation programs and smoking bans were often effective in reducing disordered gambling. Harm reduction interventions such as self-exclusion, pre-commitment, or removal of ATM machines were also effective.

Some states and Canadian provinces have wrapped their gambling harm reduction approaches into a single suite of tools with a consistent brand. GameSense, for instance, was developed by provincial agencies in British Columbia and is currently used in Massachusetts; it is a branded package of interventions that includes in-casino counselors, educational responsible gambling literature, spending limits, and self-exclusions.

In Maryland, most of these tools are available in most casinos and other gambling venues, but without a consistent brand across the state. Some venues use casino-branded materials; others use materials purchased from third-party vendors.

Effects of the COVID-19 Pandemic on Gambling Behavior

The onset of the COVID-19 pandemic introduced many factors with the potential to influence gambling behaviors, including social distancing and the physical closure of gambling establishments, widespread disruptions in employment, and the social, emotional, and financial stressors of a global health emergency. Three years later, as both the World Health Organization and U.S. government have declared that COVID-19 no longer constitutes an emergency, we can track the impact of both the initial lockdown period and the resumption of more typical societal patterns on gambling behaviors.

For the general population, the result of the pandemic seems to have been a sustained, though minor, reduction in gambling. At the outset of the pandemic, physical closure of casinos and sports leagues predictably resulted in gamblers reducing their gambling, some to the point of cessation (Lugo et al., 2021). By the end of 2020, gambling prevalence had rebounded, but typically not to the baseline level

(Otis et al., 2022). Few estimates of gambling prevalence in 2021 and 2022 are available; whether these reductions have persisted is therefore unclear.

CHAPTER 3 Methods

Ethical Review

The Institutional Review Board (IRB) of the University of Maryland, Baltimore approved the research protocol for this prevalence study, including the sampling and interview procedures, questionnaires, consent forms, and analysis plan. The IRB review process ensured that the selection of subjects was equitable, subject privacy was protected, informed consent was obtained, and appropriate safeguards were in place to protect the data.

Questionnaire Development

The 2010 baseline gambling prevalence survey and subsequent 2017 and 2020 prevalence surveys made use of the same questionnaire, with similar wording and skip patterns (Shinogle et al., 2011; Tracy et al., 2019; Tracy & Schluterman, 2021). The 2022 survey substantially maintained the phrasing and structure of the survey questionnaire used in previous years. Some alterations were made to improve question flow and clarity.

Differences between the 2022 questionnaire and the 2020 questionnaire include the following:

- Questions regarding the location of gambling were expanded to ask about all state(s) or location(s), rather than asking about the single location in which the respondent most recently gambled.
- The definition of what constitutes a private game was expanded.
- A question about yearly fantasy sports gambling was added.
- Questions which previously asked about “[gambling] on the Internet and World Wide Web” now ask about “[gambling] online on casino-style games”.
- The question about substance use was updated from asking about “illicit” to “illegal” drugs; the list of drugs was unchanged.
- The question about prescription drug use was updated from “[using] prescription drugs for non-medical use” to “[using] prescription drugs other than how they were prescribed or [using] prescription drugs that were not prescribed to you”.

- The question about marital status was updated from listing all response options in the question text to “What is your marital status?”; response options were unchanged.
- The question about religious beliefs was removed.
- The question about gender was moved from the final survey question to being grouped with other demographic questions.
- The list of responses to the question about respondent’s gender was expanded to include “another gender identity not listed here”.

Questionnaire Structure

The general structure of the questionnaire is provided in Table 3.1 and the details in subsequent sections.

Table 3.1 The 2022 gambling prevalence survey question structure

Section	Theme	Outcome
A	Gambling Involvement	Respondents detail the types and frequency of gambling behaviors, the location(s) in which they gamble, and the amount of money spent on gambling. Respondents are classified as “Gamblers” and “Non-gamblers”, and gambling frequency is assessed (Table 3.2)
B	Questions for Non-Gamblers	For individuals who have seldom or never gambled, rating the importance of motivations for not gambling.
C	General Gambling Questions	Respondents provide details about their gambling behaviors, including favorite gambling activity, usual gambling partners, amount of travel, duration of gambling, reasons for gambling, history with gambling, motivations for gambling, and help-seeking behaviors. NODS assessment classifies gamblers as low-risk, at-risk, problem, and pathological gamblers.

D	Attitudes Towards Gambling	Respondents detail their attitudes towards gambling, awareness of problem gambling resources in the state of Maryland, alcohol and substance use behaviors, mental health, and household and demographic characteristics.
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Section A: Gambling Involvement

Respondents were asked whether they had ever gambled in the following ways:

1. In a casino
2. On a gaming machine outside of a casino
3. Spending money on lottery games
4. Betting on horse races
5. Betting on dog races
6. Playing bingo for money outside of a casino
7. At a private game (e.g., cards, dice, or dominoes)
8. Betting on sports outcomes, not including daily fantasy sports
9. Playing daily fantasy sports
10. Playing yearly fantasy sports
11. Playing online casino-style games
12. Any other kind of game

For those who indicated they had ever gambled on one of the above, respondents were asked how frequently they had gambled that way in the past 12 months (Table 3.2), in which state(s) or location(s) the gambling took place, and how much they spent on that type of gambling in a typical month. If relevant, additional questions were asked about the types of games entailed (e.g., casino gamblers were asked about which specific casino game they play).

Table 3.2 Definitions of Gambling Frequencies

Frequency Category	Definition
1 (Least Frequent)	Not at all in the past 12 months
2	Only a few days all year (1 to 5 times per year)
3	Once a month or less (6 to 12 times per year)
4	Several times a month (3 to 5 times per month)
5	Several times a week (6-29 times per month)
6 (Most Frequent)	Daily (30+ times per month)

Section B: Questions for Non-Gamblers

Respondents who indicated in Section A that they had participated in gambling fewer than 5 days in their lives were asked to rate four reasons for their not gambling as either very important, somewhat important, or not important at all. This subset of respondents then proceeded to Section D.

Section C: General Gambling Questions

Respondents who indicated in Section A that they had participated in gambling 5 days or greater in their lives were asked additional questions related to gambling and other substance and addictive disorders. The first group of questions concerned their typical gambling behavior. They were asked to name their favorite gambling activity, gambling companion, distance from home traveled to gamble, and duration of time spent gambling when engaged in their usual gambling behavior.

The second group of questions investigated the participant's reasons for gambling and history with gambling. They were asked to rate seven reasons for gambling as very important, somewhat important, or not important at all to them. Respondents were also asked about their age and the type of game they played the first time they gambled. Finally, respondents were asked to rate whether gambling was very important, somewhat important, or not important at all when compared to other recreation or social activities.

The third group of questions concerns problem gambling. A single standard screening instrument for the identification of at-risk, problem, and pathological gambling was administered: the NORC Diagnostic Screen for Gambling Problems (NODS).

The NODS is a 17-item questionnaire (Gerstein et al., 1999) that results in a score from 0-10 and a risk group assignment based on the score (Table 3.3). The NODS has been used in all previous Maryland prevalence studies, which allows the trend in problem gambling to be tracked over time. The NODS is based on the clinical diagnostic criteria for pathological gambling listed in the DSM-IV.

Table 3.3 Classification Criteria for NODS

Score	NODS Risk Group	Collapsed NODS Risk Group
0	Low-risk	Low-risk
1-2	At-Risk	At-Risk
3-4	Problem Gambler	Disordered Gambler
5-10	Probable Pathological Gambler	

In addition to the NODS questions, participants were asked about whether they had sought help for a gambling problem, from whom they sought help, and whether they were able to obtain help.

Section D: Attitudes Towards Gambling

Both non-gamblers and gamblers were asked all questions in this section.

- **Attitudes Towards Gambling**

Participants were asked to rate how strongly they agreed or disagreed with eight statements about gambling.

- **Awareness of Problem Gambling Resources and Help-Seeking**

Participants were asked about the availability in their community of resources for problem gamblers seeking help, as well as sources of information on responsible gambling. They were also asked about substance use.

- **Mental Health**

Participants were asked about their mental health, as well as household debt, personal history with bankruptcy, personal arrest history, and personal incarceration history.

- **Demographics**

Participants were asked about their demographics, including marital status, gender, sexuality, education, employment status, date of birth, race and ethnicity, primary language, armed services history, household income, and ZIP code.

Mailed Survey

The University of Maryland Baltimore (UMB) Center for Excellence on Problem Gambling contracted with Wilder Research at Amherst H Wilder Foundation to carry out the 2022 gambling prevalence in Maryland survey.

A two-stage sampling strategy was used for obtaining a representative sample of adults living in the State of Maryland. For the first stage of sampling, a random, proportionate sample of county residential addresses was purchased from Marketing Systems Group (MSG), a national sampling vendor. Address-based sampling was used to ensure that all households would have an equal chance of being sampled for the survey, regardless of their phone status. MSG obtained the list of addresses from the U.S. Postal Service.

For the second stage of sampling, the “most recent birthday” method of within-household respondent selection was used to specify one adult from each selected household to complete the survey. The purpose of within-household randomization is to ensure a better gender and age balance among the survey respondents.

Inclusion criteria for the survey required that the respondent:

- 1) Had a residential address in the state of Maryland
- 2) Was at least 18 years of age

The total sample contained 40,000 randomly selected addresses in Maryland, which were proportionally selected based on the number of households in the state for each of four sampling areas (strata):

- **Central:** Baltimore City, Baltimore, Harford, and Howard counties (N = 13,683)

- **Western:** Garrett, Allegany, Washington, Frederick, Carroll, and Montgomery counties (N = 11,332)
- **Southern:** Anne Arundel, Prince George’s, Calvert, Charles, and St. Mary’s counties (N = 11,855)
- **Eastern:** Cecil, Kent, Queen Anne’s, Caroline, Talbot, Dorchester, Somerset, Wicomico, and Worcester counties (N = 3,130)

A breakdown of the aggregate sample and response rate is provided in Table 3.5 and similarly by region is provided in Table 3.6

Table 3.5 Aggregate sample and complete totals

Sample released	40,000
<i>Undeliverable</i>	1,754
Total eligible	38,246
<i>Refusals</i>	38
<i>Returns not included as completes</i>	545
Total completes	4,355
<i>Mail completes</i>	2,951
<i>Web completes</i>	1,404
Response rate^a	11.39%
Return rate^b	12.81%

Response dispositions calculated according to the American Association for Public Opinion Research (AAPOR) Response Rate 1 for mailed surveys.

^a Includes only analyzable completes, see Chapter 4 for details

^b Includes all returned surveys

Table 3.6 Sample and complete totals by reporting strata

Reporting area (strata)	Sample released	Number of eligible addresses	Number of completed surveys^a	Return rate^b	Response rate^c	Margin of error
Central	13,683	12,968	1,454	12.77%	11.21%	±2.6%
East	3,130	2,973	385	14.53%	12.95%	±5.0%
Western	11,332	10,933	1,383	14.12%	12.65%	±2.6%
South	11,855	11,372	1,133	11.15%	9.96%	±2.9%
Total	40,000	38,246	4,355	12.81%	11.39%	±1.5%

Response disposition disaggregated by the four sampling strata.

^a Combined total of paper, web, and phone completes

^b Includes all returned surveys

^c Includes all analyzable surveys, see Chapter 4 for details

Data collection

Wilder Research used a “modified Dillman” method of survey mailing as follows: An initial survey packet that included a cover letter, survey instrument, and a postage-paid return envelope was mailed on April 8, 2022 to 40,000 sampled households. In all of the mailings, respondents were also given information to log in to a web-based system (Voxco Acuity) or scan a QR code to complete the survey online if they preferred that approach. A toll-free survey center phone number was also provided in the mailing materials so participants could call in for help completing the survey if needed. A letter was also included in the packet in Spanish indicating that a respondent can request a survey in Spanish or call the survey center to speak with a bilingual survey interviewer who would help them complete the survey over the phone. A \$2 bill was sent along with the survey packet to thank people for taking the survey.

One week after the first survey packets were mailed (April 15, 2022), a postcard was sent to all sampled households, reminding those who had not yet completed a survey to do so, and thanking those who had already responded.

Two and a half weeks after the reminder postcards were mailed (May 11, 2022), another full survey packet was sent to all households that still had not returned the survey. To boost the number of responses, an additional postcard was sent on June 15, 2022.

The remaining completed surveys were received over the next four weeks. Data collection ended on July 15, 2022. Completed paper surveys were returned to the scanning vendor, ADAPT, for scanning before being returned to UMB.

Data Cleaning, Analysis, and Weighting

All completed mailed surveys were tracked and scanned by ADAPT. ADAPT also provided a file with the word-processed open-ended questions. Once scanning was complete, a Wilder Research analyst used SPSS to create a data file and performed quality tests to ensure accuracy.

Wilder staff combined the responses from the web and paper surveys into one SPSS data file with variable and value labels which was provided to UMB. UMB cleaned the data to exclude responses which did not meet the previously stated inclusion criteria or did not answer enough of the gambling related questions to be included in the calculation of the prevalence of disordered gambling for the state. This cleaned version of the data set was used for weighting.

Wilder's consulting partner, Mansour Fahimi PhD, created the weights. Dr Fahimi used the most recent American Community Survey data available (ACS 2020) from the U.S. Census Bureau to develop the weights based on the differential probability of selection, and the select demographic variables: age, gender, ethnicity, race, education, income, marital status, armed service status, and geographical region.

Data from each of the sampling areas were weighted back to the population of that sampling area using an iterative proportional fitting procedure, commonly known as "raking." Survey data for the demographic questions involved in weighting often include some missing values. A hierarchical hot-deck imputation procedure was used to impute the missing demographic values. Finally, adjusted weights were put through a series of quality control checks to detect extreme outliers and to prevent any computational or procedural errors. The final de-identified data file, with all original and created variables, and a data

dictionary were provided to UMB in an SPSS format.

Survey weights ensure that the sample of individuals who responded to the survey are representative of the Maryland population with regard to the select demographic variables mentioned above. All data analyses presented in this report are therefore weighted unless otherwise stated.

CHAPTER 4 The 2022 Sample

There was a total of 5,094 responses to the 2022 Statewide Gambling Prevalence in Maryland survey. Of those who responded, 213 did not confirm that they were at least 18 years of age (14 indicated that they were younger than 18 years of age and 199 did not complete this question) and 194 of the responses came from households which had previously submitted responses. In addition, there were 92 individuals who did not respond to the question about frequency of gambling in their lifetime and 253 individuals who did not respond to at least fourteen of the sixteen (allowing for a 10% incompleteness rate) NODS questions, both of which are essential for determining the prevalence of gambling in the State. There were therefore 4,355 responses which meet the criteria for inclusion and met the analytical goals of the survey (Figure 4.1).

Figure 4.1 CONSORT diagram of 2022 gambling prevalence in Maryland survey responses

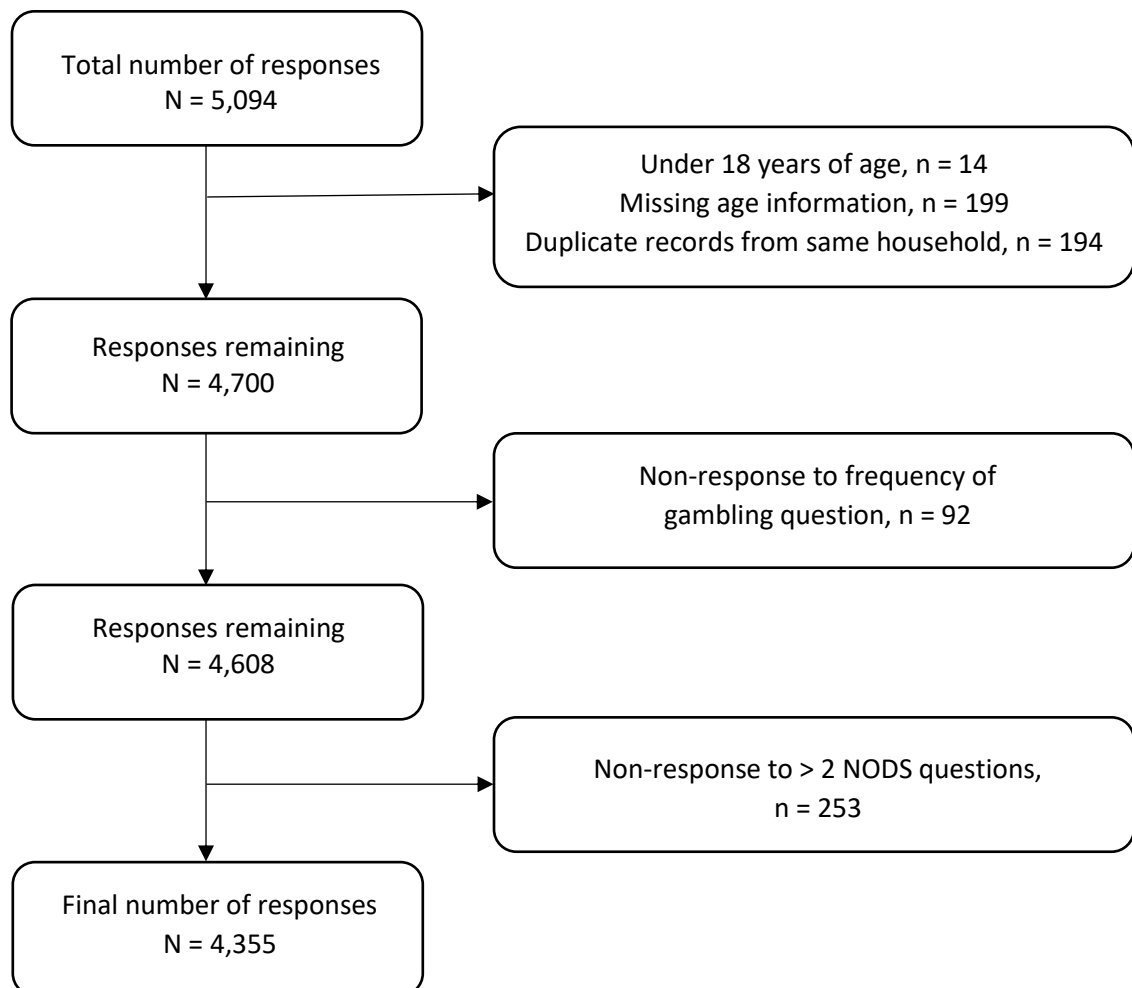


Table 4.1 describes the unweighted and weighted characteristics of the 2022 sample who met the inclusion criteria and were included in the analysis. The majority of respondents were female (58.6%), White (75.8%), non-Hispanic (96.5%) and aged 55 years or above (65.5%). Almost every respondent had some schooling (98.0%). The survey sample was weighted to reflect the sociodemographic distribution of the State of Maryland. The sample after the application of weighting is used to derive the population-level estimates of gambling activities in the State of Maryland.

The unweighted and weighted samples were similar in terms of gender, with a slightly higher proportion of females compared to males. In terms of age, the survey respondents included a greater proportion aged 65-74, 25.1%, compared to 14.4% in the weighted sample. The respondents had a greater proportion aged 75 or older, 20.0%, compared to 10.0% in the weighted sample. In addition, there was a lower proportion in the unweighted sample aged 25-34, 7.0% compared to 16.6%. The racial distribution of the unweighted sample has a higher proportion of White individuals, 75.8%, compared to the weighted sample, 58.5%, and a lower proportion of Black and African American individuals, 16.6%, compared to the weighted sample, 27.1%. The respondents had a lower proportion with a high school diploma, 11.7%, compared to 21.7% in the weighted sample. The respondents had a greater proportion with a Masters degree, 24.2%, compared to 14.7% in the weighted sample. The respondents had a lower proportion working full-time, 42.6%, compared to 51.1% in the weighted sample. The respondents had a greater proportion not working in the last week, 32.1%, compared to 24.1% in the weighted sample. The unweighted and weighted samples were similar in terms of income, region, gender, military service, and language. Of the respondents, a lower proportion have never been married, 15.4%, compared to 28.3% in the weighted sample.

Table 4.1 Unweighted and weighted sample sociodemographic characteristics

	Unweighted		Weighted	
	n	%	n	%
Gender*				
Male	1,803	41.4%	1,887	43.3%
Female	2,552	58.6%	2,468	56.7%
Age (in years)*				
18-24	68	1.6%	288	6.6%
25-34	307	7.0%	721	16.6%

35-44	525	12.1%	728	16.7%
45-54	603	13.8%	735	16.9%
55-64	889	20.4%	820	18.8%
65-74	1,091	25.1%	629	14.4%
75+	872	20.0%	435	10.0%
Race*				
Asian	215	4.9%	278	6.4%
Black and African American	723	16.6%	1,181	27.1%
White	3,303	75.8%	2,546	58.5%
Other	114	2.6%	350	8.0%
Ethnicity*				
Hispanic	153	3.5%	306	7.0%
Non-Hispanic	4,202	96.5%	4,049	93.0%
Highest level of education*				
No diploma	89	2.0%	282	6.5%
High school diploma	510	11.7%	947	21.7%
Some college	523	12.0%	807	18.5%
Associate degree or vocational, technical, or trade school	470	10.8%	329	7.6%
Bachelor's degree	1,236	28.4%	1,070	24.6%
Master's degree	1,054	24.2%	641	14.7%
Postgraduate degree (PhD, MD, or JD)	473	10.9%	280	6.4%
Work status for previous week				
Working full-time	1,855	42.6%	2,227	51.1%
Working part-time	416	9.6%	429	9.8%
Not working last week	1,410	32.4%	1,051	24.1%
Prefer not to answer or missing	674	15.5%	649	14.9%
Total household income*				
Up to \$15,000	152	3.5%	256	5.9%
\$15,001 - \$25,000	178	4.1%	165	3.8%
\$25,001 - \$35,000	226	5.2%	192	4.4%
\$35,001 - \$50,000	398	9.1%	371	8.5%
\$50,001 - \$75,000	584	13.4%	602	13.8%

\$75,001 - \$100,000	622	14.3%	566	13.0%
\$100,001 - \$125,000	552	12.7%	487	11.2%
\$125,001 - \$150,000	421	9.7%	396	9.1%
Over \$150,000	1,222	28.1%	1,320	30.3%
Maryland region*				
Central	1,454	33.4%	1,376	31.6%
Western	1,383	31.8%	1,289	29.6%
Southern	1,133	26.0%	1,315	30.2%
Eastern	385	8.8%	375	8.6%
Ever been in the armed services*				
Yes	605	13.9%	428	9.8%
No	3,750	86.1%	3,927	90.2%
Main language spoken in the home				
English	3,981	91.4%	3,873	88.9%
Spanish	52	1.2%	123	2.8%
Other	79	1.8%	120	2.7%
Prefer not to answer or missing	243	5.6%	239	5.5%
Marital Status*				
Married	2,497	57.3%	2,279	52.3%
Widowed	483	11.1%	286	6.6%
Divorced	658	15.1%	466	10.7%
Separated	48	1.1%	92	2.1%
Never Married	669	15.4%	1,231	28.3%

*Imputed and used in the weighting procedure

CHAPTER 5 Gamblers in Maryland

An individual is considered to be a gambler if they have ever in their lifetime gambled at a casino, at a gaming machine outside of a casino, played the lottery or any of its associated games, placed a bet on a horse or dog race, played bingo for money outside of a casino setting, gambled on a private game, bet on the outcome of a sporting event, including fantasy sports, wagered online on casino style games, or any other type of game such as raffles, sweepstakes, baby pools, pull-tabs, dogfights, or cockfights.

Based on the above definition, 90.4% of individuals residing in the State of Maryland have gambled in their lifetime (Table 5.1). For a small percentage (<1%) of individuals we were unable to determine if they were gamblers or not as they did not answer any of the questions about whether they had ever gambled by one of the methods listed.

Table 5.1 Weighted prevalence of lifetime gambling

	n	%
Have gambled in their lifetime (gamblers)	3,937	90.4%
Have never gambled in their lifetime (non-gamblers)	382	8.8%
Missing	36	0.8%
Total	4,355	100.0%

Gamblers vs non-Gamblers

In Table 5.2, we examine the sociodemographic characteristics of gamblers and non-gamblers. Compared to non-gamblers, considerably fewer gamblers were aged 18-24 years (13.2% vs 5.8%) and to a lesser extent, over 75 years (12.0% vs 9.8%). Only 5.5% of gamblers were Asian compared to 14.3% of non-gamblers and 5.8% had no diploma compared to 13.3% of non-gamblers. Over half of gamblers (52.4%) were working full-time in the week prior to completing the survey compared to only 38.5% of non-gamblers, while 40.1% of gamblers had a household income of more than \$125,000 compared to only 32.4% of non-gamblers. A lower proportion of gamblers reside in Western Maryland (29.0% vs 36.5%) while a higher proportion have been, or are currently, in the armed services (10.3% vs 4.9%).

Table 5.2 Comparison of the weighted sociodemographic characteristics of gamblers and non-gamblers.

Sociodemographic	Gamblers (N = 3,937)		Non-gamblers (N = 382)	
	n	%	n	%
Gender*				
Male	1,721	43.7%	154	40.4%
Female	2,217	56.3%	228	59.6%
Age (in years)*				
18-24	229	5.8%	50	13.2%
25-34	657	16.7%	61	15.9%
35-44	679	17.2%	49	12.7%
45-54	676	17.2%	55	14.3%
55-64	744	18.9%	63	16.4%
65-74	568	14.4%	59	15.4%
75+	385	9.8%	46	12.0%
Race*				
Asian	217	5.5%	55	14.3%
Black and African American	1,055	26.8%	109	28.5%
White	2,353	59.7%	180	47.2%
Other	312	7.9%	38	10.0%
Ethnicity*				
Hispanic	287	7.3%	18	4.6%
Non-Hispanic	3,651	92.7%	364	95.4%
Highest level of education*				
No diploma	228	5.8%	51	13.3%
High school diploma	864	21.9%	74	19.3%
Some college	746	18.9%	55	14.4%
Associated degree or vocational, technical, or trade school	294	7.5%	34	8.8%
Bachelor's degree	967	24.5%	91	23.7%
Master's degree	594	15.1%	44	11.5%
Postgraduate degree	245	6.2%	34	9.0%

Work status for previous week				
Working full-time	2,064	52.4%	147	38.5%
Working part-time	393	10.0%	30	7.8%
Not working last week	934	23.7%	108	28.2%
Prefer not to answer or missing	546	13.9%	97	25.4%
Total household income *				
Up to \$15,000	206	5.2%	45	11.8%
\$15,001 - \$25,000	145	3.7%	18	4.6%
\$25,001 - \$35,000	176	4.5%	16	4.2%
\$35,001 - \$50,000	337	8.6%	34	8.9%
\$50,001 - \$75,000	541	13.7%	48	12.6%
\$75,001 - \$100,000	521	13.2%	42	11.1%
\$100,001 - \$125,000	431	11.0%	55	14.5%
\$125,001 - \$150,000	366	9.3%	29	7.6%
Over \$150,000	1,213	30.8%	95	24.8%
Maryland region *				
Central	1,252	31.8%	107	28.1%
Western	1,142	29.0%	139	36.5%
Southern	1,203	30.5%	102	26.7%
Eastern	341	8.7%	33	8.7%
Ever been in the armed services *				
Yes	404	10.3%	19	4.9%
No	3,534	89.7%	363	95.1%
Main language spoken in the home				
English	3,553	90.2%	291	76.3%
Spanish	121	3.1%	1	0.2%
Other	71	1.8%	48	12.6%
Prefer not to answer or missing	193	4.9%	42	11.0%
Marital Status*				
Married	2,098	53.3%	174	45.4%
Widowed	253	6.4%	31	8.2%
Divorced	418	10.6%	44	11.6%

Separated	90	2.3%	2	0.6%
Never Married	1,078	27.4%	131	34.3%

*Imputed and used in the weighting procedure

Gambling and Substance Use

While gamblers were more likely to use tobacco products, alcohol, and illegal or prescription drugs other than prescribed, in the 12 months prior to being surveyed, than non-gamblers, the frequency of use followed similar patterns among gamblers and non-gamblers (Table 5.3). For example, gamblers were twice as likely to use tobacco products daily, however both gamblers and non-gamblers had higher rates of daily use of tobacco products than that of less frequent use. While both groups used prescription drugs other than prescribed, these numbers were far smaller than those who used illegal drugs in the past 12 months.

Table 5.3 Comparison of the weighted substance use, in the 12 months prior to being surveyed, of gamblers and non-gamblers

Substance use in the last 12 months*	Gamblers (N = 3,937)		Non-gamblers (N = 382)	
	n	%	n	%
Cigarettes, chewing tobacco, or snuff				
Daily	324	8.2%	18	4.6%
Several times a week	46	1.2%	1	0.3%
Several times a month	64	1.6%	3	0.9%
Once a month or less	52	1.3%	0	0.0%
Only a few days all year	119	3.0%	7	1.9%
Never	3,264	82.9%	334	87.4%
Alcohol use				
Daily	182	4.6%	4	1.0%
Several times a week	619	15.7%	14	3.6%
Several times a month	816	20.7%	47	12.3%
Once a month or less	550	14.0%	38	10.0%
Only a few days all year	790	20.1%	54	14.0%

Never	913	23.2%	207	54.1%
Binge drinking (6 or more drinks on one occasion)				
Daily	27	0.7%	0	0.0%
Several times a week	75	1.9%	0	0.1%
Several times a month	180	4.6%	9	2.4%
Once a month or less	244	6.2%	20	5.3%
Only a few days all year	621	15.8%	26	6.9%
Never	2,705	68.7%	308	80.7%
Illegal drug use				
Daily	142	3.6%	5	1.4%
Several times a week	85	2.2%	1	0.4%
Several times a month	66	1.7%	0	0.0%
Once a month or less	63	1.6%	0	0.0%
Only a few days all year	173	4.4%	2	0.5%
Never	3,336	84.7%	351	91.7%
Prescription drug use				
Daily	37	1.0%	0	0.0%
Several times a week	11	0.3%	0	0.1%
Several times a month	31	0.8%	0	0.0%
Once a month or less	13	0.3%	0	0.1%
Only a few days all year	97	2.5%	6	1.6%
Never	3,679	93.4%	347	90.9%

***A proportion of respondents did not provide answers to each of these questions. This proportion was higher amongst non-gamblers.**

Daily is 30 or more times per month; Several times a week is 6-29 times per month; Several times a month is 3-5 times per month; Once a month or less is 6-12 times per year; Only a few days all year is 1-5 times per year.

Gambling and Health

A larger proportion of non-gamblers perceived their health to be excellent compared to gamblers (16.6% vs. 25.6%) However, when combined with those who perceived their health as very good, there is no

difference between gamblers and non-gamblers. What is more notable is that gamblers more often rate their health as poor compared to non-gamblers (4.5% vs 1.1%).

Table 5.4 Comparison of the weighted perceived health status, in the 12 months prior to being surveyed, of gamblers and non-gamblers

Health status in the last 12 months	Gamblers (N = 3,937)		Non-gamblers (N = 382)	
	n	%	n	%
Health status				
Excellent	653	16.6%	98	25.6%
Very good	1,367	34.7%	99	25.8%
Good	1,256	31.9%	115	30.2%
Fair	481	12.2%	46	12.1%
Poor	100	2.5%	4	1.1%

Gambling Opinions

Table 5.5 Weighted opinion of non-gamblers as to reasons why they do not gamble

	Inconvenient or lives too far away	Moral or ethical objections	Fear of losing money	Simply not interested
	n (%)	n (%)	n (%)	n (%)
Very important	20 (6.0%)	178 (53.8%)	229 (68.7%)	237 (69.8%)
Somewhat important	17 (5.1%)	44 (13.3%)	51 (15.2%)	16 (4.7%)
Not at all important	293 (88.9%)	109 (32.9%)	54 (16.2%)	86 (25.2%)

Non-gamblers were asked about the reasons for why they had never gambled, while gamblers were asked about the importance of gambling compared to other recreational activities. The majority of non-gamblers reported that the location and/or the convenience of being able to gamble was not at all important (88.9%, Table 5.5). While a substantial proportion reported that their fear of losing money (68.7%), their lack of interest (69.8%), and their moral or ethical objections (53.8%) were very important

to them. The majority of gamblers reported that gambling was not at all important to them compared to other recreational activities (85.8%), with the remainder reporting that it was important (somewhat important: 11.9%, very important: 2.3%).

CHAPTER 6 Gambling in Maryland

In this chapter we take a closer look at gamblers in Maryland and examine the type and frequency of gambling they are taking part in, the amount of money they are spending by gambling type, their reasons for gambling, and who they are primarily gambling with. This chapter focuses solely on the respondents who had gambled in their lifetime according to the definition provided in Chapter 5.

Type and Frequency of Gambling Activity

The Statewide Gambling Prevalence in Maryland 2022 survey asked respondents about their participation in a number of gambling activities. If a respondent indicated that they had ever taken part in such an activity they were then asked follow-up questions about their frequency of play and their spending on this activity in a typical month, in the past 12 months. Table 6.1 examines the proportion of gamblers who have ever participated by gambling type and frequency of play, which could include not having played, in the past 12 months. Table 6.2 takes a closer look at those who did participate in the past 12 months and what they typically spent on this activity in a month.

Amongst those who have ever gambled in their lifetime, lottery games were the most frequently reported gambling activity (82.7%, Table 6.1), closely followed by casinos (74.1%). However, in the 12 months prior, only 17.8% of respondents who had ever gambled and played lottery games reported frequent play (daily, several times a week or several times a month) with the majority (52.1%) playing as little as once a month or only a few days out of the year. Of those who indicated they had previously gambled at casinos, 68.5% had not gambled at a casino in the previous 12 months and 23.2% had gambled at a casino only a few days all year.

Other gambling types were significantly less popular, with approximately one third of respondents who gambled using gaming machines outside a casino, betting on sports, betting on private games, or playing bingo outside of a casino setting. Similar to casino play, the majority of respondents reported not participating in these types of gambling either at all or only a few days in the previous 12 months. Dog races, which are illegal in the state of Maryland and would require travel, were the least popular form of

gambling activity with only 3.1% of gamblers having ever participated and almost all (90.9%) did not take part in the past 12 months.

Table 6.1 Weighted proportion of gamblers who have participated in each gambling activity and their frequency of play in the past 12 months.

Gambling activity	Ever participated in this gambling type	Frequency of play in last 12 months				
		Daily or several times a week	Several times a month	Once a month or less	Only a few days all year	Not at all
Lottery games	3,256 (82.7%)	220 (6.8%)	358 (11.0%)	464 (14.2%)	1,235 (37.9%)	905 (27.8%)
Casino	2,917 (74.1%)	33 (1.1%)	66 (2.3%)	107 (3.7%)	676 (23.2%)	1,997 (68.5%)
Any other kind of game	1,455 (36.9%)	8 (0.6%)	18 (1.2%)	66 (4.6%)	641 (44.1%)	706 (48.5%)
Gaming machine outside a casino	1,316 (33.4%)	35 (2.7%)	60 (4.6%)	77 (5.9%)	375 (28.5%)	736 (55.9%)
Sports	1,185 (30.1%)					
Sports		20 (1.7%)	59 (5.0%)	67 (5.6%)	448 (37.8%)	585 (49.4%)
Online sports		20 (1.7%)	19 (1.6%)	20 (1.7%)	83 (7.0%)	1,030 (87.0%)
Private game	1,091 (27.7%)	17 (1.5%)	50 (4.6%)	66 (6.0%)	302 (27.7%)	639 (58.6%)
Bingo outside of a casino	1,084 (27.5%)	13 (1.2%)	19 (1.7%)	33 (3.0%)	203 (18.7%)	805 (74.2%)
Horse races	768 (19.5%)	12 (1.5%)	9 (1.1%)	10 (1.3%)	101 (13.1%)	630 (82.1%)
Fantasy sports	607 (15.4%)					

Daily fantasy sports		31 (5.1%)	30 (4.9%)	34 (5.7%)	77 (12.7%)	430 (70.9%)
Yearly fantasy sports		58 (9.6%)	85 (13.9%)	33 (5.5%)	120 (19.7%)	306 (50.4%)
Online casino style games	260 (6.6%)	19 (7.4%)	13 (4.8%)	18 (7.1%)	77 (29.6%)	125 (48.2%)
Dog races	124 (3.1%)	8 (6.6%)	2 (1.5%)	0 (0.0%)	1 (0.7%)	112 (90.9%)

Typical Monthly Spending by Gambling Type

Despite being the most frequently reported gambling activity (Table 6.1) and the most played in the past 12 months (69.9%), the average amount spent on the lottery in a typical month was only \$34.52 (standard deviation \$205.55). As would perhaps be expected, gamblers who play at casinos or casino style games online spent considerably more with an average of \$247.08 (standard deviation \$517.67) and \$212.03 (standard deviation \$665.54) respectively. While the average spent at gaming machines outside of casinos was considerably less at \$109.82 (standard deviation \$588.16) in a typical month. Those who had played yearly fantasy sports and online sports in the past 12 months spent an average of \$121.32 (standard deviation \$362.32) and \$123.53 (standard deviation \$578.67) in a typical month respectively. Interestingly, the highest rate of spending resulted from the 12.0% of respondents who had bet on dog races in the past year. The average spent in a typical month for this gambling activity was \$320.00 (standard deviation \$275.23)

It should be noted that the amounts spent in a typical month for each of the gambling activities were very variable with maximums of \$10,000 being reported for gaming machines outside of casinos and other games. This result is therefore a highly skewed distribution of spending and as such we have also provided the median and first and third quartiles which provide a sense of the typical amounts spent by the majority of the gamblers who had taken part in that gambling activity in the past 12 months.

Table 6.2 Weighted proportion of gamblers who have ever played and played in the last 12 months by gambling activity and a statistical summary (unweighted) of the dollar amount spent in a typical month by gambling activity

Gambling activity	Played in past	Amount spent in a typical month (\$)		
	12 months n (%)	Mean (std. deviation)	Median (Q1-Q3)	Minimum, maximum
Lottery games	2,277 (69.9%)	34.52 (205.55)	8 (2-20)	0, 7,440
Casino	882 (30.2%)	247.08 (517.67)	100 (20-200)	0, 5,000
Any other kind of game	734 (50.5%)	39.00 (413.81)	5 (2-20)	0, 10,000
Gaming machine outside a casino	547 (41.6%)	109.82 (588.16)	20 (6-50)	0, 10,000
Sports	593 (50.1%)	58.55 (359.85)	10 (3-40)	0, 7,000
Online sports	142 (12.0%)	123.53 (578.67)	20 (10-50)	0, 5,000
Private game	435 (39.8%)	79.30 (378.71)	20 (10-50)	0, 6,000
Bingo outside of a casino	268 (24.7%)	67.89 (252.78)	20 (10-50)	0, 3,000
Horse races	131 (17.0%)	81.93 (250.29)	20 (5-50)	0, 2,500
Daily fantasy sports	172 (28.3%)	74.59 (451.24)	10 (0-30)	0, 5,000
Yearly fantasy sports	296 (48.7%)	121.32 (362.32)	50 (10-137.50)	0, 5,000
Online casino style games	127 (48.9%)	212.03 (665.54)	25 (10-100)	0, 5,000
Dog races	11 (8.8%)	320.00 (275.23)	250 (100-500)	50, 700

Reasons for Gambling and Gambling Partners

Respondents who were identified as gamblers were asked to think about their reasons for gambling and rate them in terms of importance: very, somewhat, not at all. The responses are presented in Table 6.3. Gamblers were almost equally divided in the importance of the social aspect of gambling, with 58.0% saying that it wasn't important and the remainder saying it was important (very: 17.1%, somewhat: 24.9%). The convenience of gambling was similarly rated. Distraction was the least important reason for the majority of gamblers, with only 24.7% reporting that it was important (very: 8.5%, somewhat: 16.2%).

Gambling to win and for entertainment were viewed as very important by 46.6% and 54.7% of gamblers, respectively. The excitement and inexpensive entertainment value of gambling were viewed somewhat important by 41.4% and 41.9% of gamblers, respectively.

Table 6.3 Weighted proportion of the importance of gambling reasons among gamblers.

	Very important	Somewhat important	Not at all important
To be around or with other people	414 (17.1%)	603 (24.9%)	1,403 (58.0%)
Because it is convenient or easy to do	364 (15.2%)	835 (34.9%)	1,191 (49.8%)
To win money	1,148 (46.6%)	842 (34.2%)	474 (19.2%)
For entertainment or fun	1,351 (54.7%)	795 (32.2%)	319 (12.9%)
Because it's exciting and challenging	655 (27.2%)	996 (41.4%)	745 (31.0%)
Because it is inexpensive entertainment	438 (18.1%)	1,012 (41.9%)	961 (39.8%)
To distract yourself from everyday problems	202 (8.5%)	388 (16.2%)	1,799 (75.3%)

Gamblers were asked about who they usually gamble with when participating in their favorite gambling activity. Of those who responded to this question, 30.0% said they gambled alone, 29.3% gambled with either friends, co-workers, neighbors, or other club members, 25.2% gambled with a spouse, partner, or significant other, 12.0% gambled with family members (other than their spouse), and 3.5% gambled with other individuals.

CHAPTER 7 Sports Gambling in Maryland

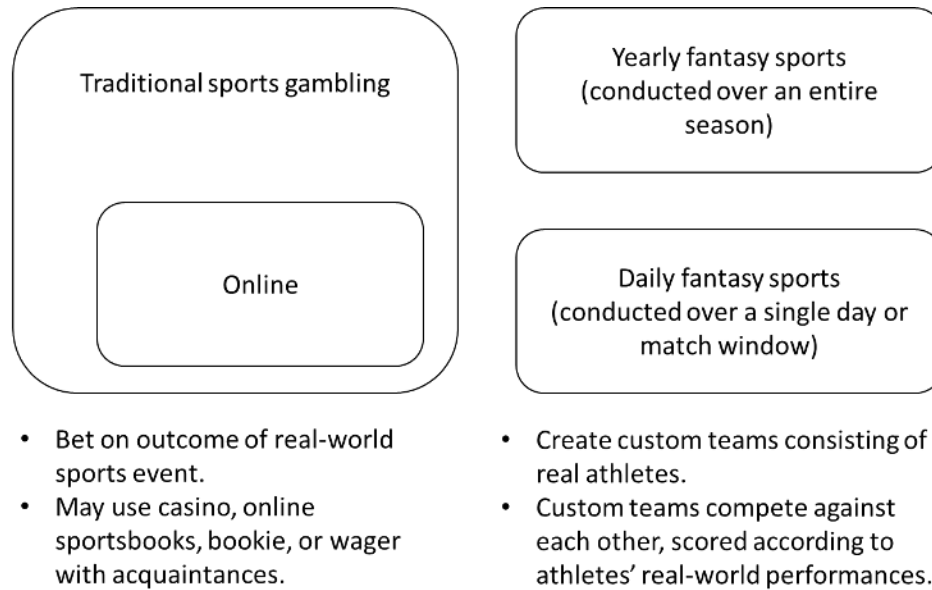
The most notable expansion of gambling in Maryland in the past few years has been the legal availability of sports gambling. Casinos in the state began to offer sports wagers in 2021, and legal mobile or online sportsbooks became operational the following year. This prevalence study was conducted during the period when sports gambling was available at casinos but not yet on mobile or online platforms. Online sports gambling was, however, legally available in the nearby states of Virginia, Pennsylvania, New Jersey, and New York, as well as the District of Columbia. Additionally, some Maryland gamblers may have used offshore online sportsbooks.

The 2022 Maryland gambling prevalence survey asked about both traditional and fantasy sports gambling (Figure 7.1). Traditional sports gambling involves bets on the real-world outcomes of sports events, and may be placed at a casino, using online or mobile sportsbooks, with bookies, or as wagers between acquaintances. For participants who answered that they had participated in traditional sports gambling, the survey asked about online sports bets.

Fantasy sports are contests in which participants create custom teams consisting of real professional or college athletes. Participants' fantasy teams are scored according to the real-world performance of their individual athletes. Competitions usually occur between pairs of participants or among closed leagues, although some fantasy sports bets may be placed against a casino or sportsbook. Fantasy sports contests can take place over the course of a single day or round of games (daily fantasy sports), or across an entire season or longer (yearly fantasy sports).

Due to the need to do complex scoring in a short amount of time, daily fantasy sports tend to be an online-only activity. Yearly fantasy sports leagues are usually organized on mobile or online platforms as well in the modern era, although scoring by hand is still present in some leagues.

Figure 7.1 Types of sports gambling included in 2022 Maryland prevalence survey



More than a third (30.1%) of Maryland gamblers have ever participated in sports gambling. More males than females have gambled on sports (Table 7.1). Middle-age group gamblers reported higher rates of sports gambling participation. Members of all sociodemographic groups have gambled on sports, but those with higher levels of education or income tended to be more likely to have participated. Gamblers from all regions of Maryland had similar proportions of sports gambling.

Table 7.1 Weighted sociodemographic characteristics of gamblers who wager on sports

Sociodemographic	Gamblers who have wagered on sports (N = 1,185)	
	n	%
Gender*		
Male	652	34.6%
Female	533	21.6%
Age (in years)*		
18-24	60	20.9%
25-34	203	28.1%
35-44	221	30.4%
45-54	231	31.4%

55-64	223	27.3%
65-74	152	24.2%
75+	94	21.5%
Race*		
Asian	56	20.2%
Black and African American	266	22.5%
White	753	29.6%
Other	110	31.4%
Ethnicity*		
Hispanic	72	23.6%
Non-Hispanic	1,113	27.5%
Highest level of education*		
High school diploma or less	50	22.1%
Some college, associate's degree, vocational, technical, or trade school	444	27.6%
Bachelor's degree	82	27.8%
Master's degree or higher	515	33.0%
Work status for previous week		
Working full-time	689	30.9%
Working part-time or not working	382	25.8%
Total household income*		
Up to \$50,000	214	21.7%
\$50,001 - \$100,000	303	25.9%
\$100,001 - \$150,000	250	28.3%
Over \$150,000	418	31.7%
Maryland region*		
Central	384	27.9%
Western	361	28.0%
Southern	332	25.2%
Eastern	108	28.9%
Marital Status*		
Married	696	30.6%

Not married	488	23.5%
*Imputed and used in the weighting procedure		

Traditional vs Fantasy Sports Gambling

Of the Maryland residents who had gambled on sports, 50.1% had done so in the past 12 months (Table 7.2) and of those 12.0% had done so online or on a mobile platform. Of the gamblers who had wagered on fantasy sports, 48.7% had wagered on yearly fantasy sports and 28.3% had wagered on daily fantasy sports.

Sociodemographic patterns in past-year traditional and fantasy sports gambling generally followed similar patterns as lifetime sports gambling (Tables 7.1 and 7.2). Online sports gambling and fantasy sports were more commonly reported among younger age groups. Those who worked full-time reported higher rates of each of these gambling activities.

Table 7.2 Weighted sociodemographic characteristics of gamblers who have participated in traditional sports or fantasy sports gambling in the past 12 months, by modality.

Sociodemographic	Gambled on traditional sports in the past year ^Δ		Gambled on fantasy sports in the past year ^Δ	
	Any mode	Online [†]	Yearly fantasy	Daily fantasy
Total	593 (50.1%)	142 (12.0%)	296 (48.7%)	172 (28.3%)
Gender*				
Male	358 (54.9%)	96 (14.6%)	237 (55.3%)	126 (29.4%)
Female	235 (44.1%)	47 (8.8%)	59 (32.9%)	46 (25.6%)
Age (in years)*				
18-24	34 (56.8%)	16 (26.0%)	24 (82.0%)	21 (71.4%)
25-34	127 (62.7%)	49 (24.1%)	93 (51.2%)	53 (29.0%)
35-44	140 (63.2%)	44 (19.8%)	85 (54.4%)	37 (23.6%)
45-54	112 (48.4%)	19 (8.4%)	57 (42.7%)	40 (30.3%)
55-64	97 (43.4%)	10 (4.3%)	25 (33.1%)	13 (17.4%)

65-74	54 (35.7%)	3 (2.1%)	8 (35.4%)	6 (26.7%)
75+	29 (31.0%)	1 (1.5%)	4 (43.3%)	2 (18.3%)
Race*				
Asian	23 (40.9%)	3 (6.0%)	13 (43.5%)	6 (21.8%)
Black and African American	160 (60.2%)	48 (18.1%)	59 (50.6%)	44 (38.3%)
White	375 (49.8%)	82 (10.9%)	212 (49.3%)	113 (26.5%)
Other	36 (32.4%)	9 (7.9%)	13 (38.7%)	7 (22.5%)
Ethnicity*				
Hispanic	30 (41.1%)	6 (8.8%)	23 (43.5%)	19 (36.6%)
Non-Hispanic	564 (50.7%)	136 (12.2%)	273 (49.2%)	152 (27.5%)
Highest level of education*				
High school diploma or less	33 (65.3%)	11 (21.3%)	0 (0.0%)	0 (0.0%)
Some college, associate's degree, vocational, technical, or trade school	222 (49.9%)	48 (10.9%)	73 (45.8%)	37 (23.1%)
Bachelor's degree	42 (50.7%)	6 (7.7%)	23 (59.0%)	17 (43.5%)
Master's degree or higher	256 (49.7%)	66 (12.8%)	173 (48.0%)	107 (29.8%)
Work status for previous week				
Working full-time	386 (56.0%)	91 (13.3%)	239 (50.4%)	125 (26.3%)
Working part-time or not working	137 (35.9%)	30 (7.8%)	44 (41.0%)	36 (33.3%)
Total household income*				
Up to \$50,000	116 (54.3%)	32 (15.1%)	38 (59.6%)	24 (36.8%)
\$50,001 - \$100,000	148 (49.0%)	41 (13.7%)	64 (47.8%)	54 (40.3%)
\$100,001 - \$150,000	122 (48.7%)	28 (11.3%)	70 (48.3%)	34 (23.5%)
Over \$150,000	207 (49.6%)	40 (9.7%)	123 (46.8%)	60 (22.7%)
Maryland region*				
Central	201 (52.4%)	55 (14.2%)	87 (49.9%)	51 (29.3%)
Western	163 (45.1%)	38 (10.6%)	103 (47.2%)	60 (27.3%)
Southern	173 (52.0%)	33 (10.0%)	82 (46.5%)	42 (23.5%)
Eastern	57 (52.7%)	16 (14.7%)	24 (62.4%)	19 (50.8%)
Marital Status*				
Married	344 (49.3%)	83 (11.9%)	170 (43.8%)	92 (23.8%)
Not married	250 (51.1%)	59 (12.1%)	126 (57.5%)	79 (36.2%)

* Imputed and used in the weighting procedure

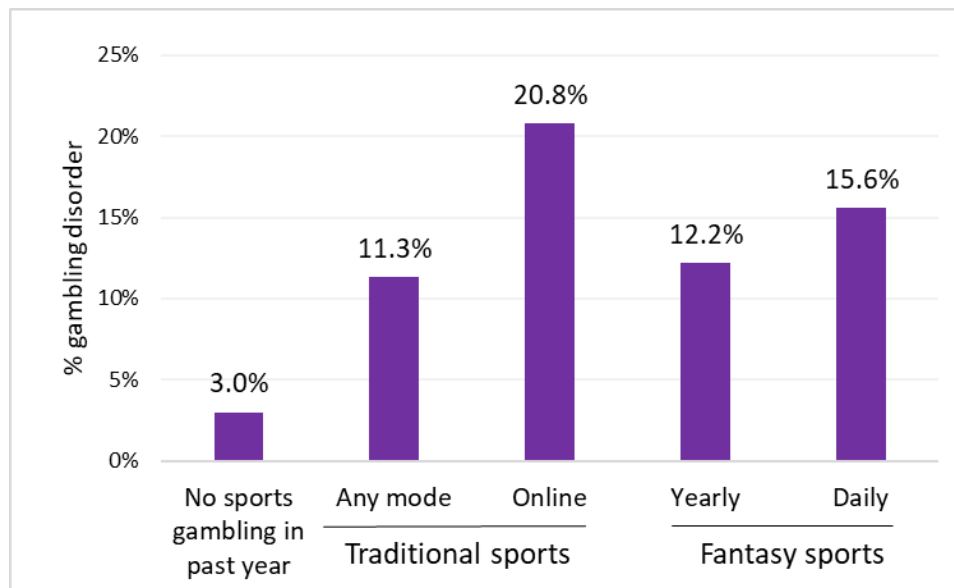
^Participants may fit into more than one category.

†All “online” traditional sports bettors are also in the “any mode” group.

Gambling Behavior of Sports Gamblers

Sports gamblers appeared to suffer from gambling disorder (see Chapter 3 for the definition of a disordered gambler) at higher rates than other Marylanders (Figure 7.2). Among those who had not gambled on sports in any form in the past year, 3.0% were assessed to have gambling disorder on the NODS. At least ten percent of sports gamblers were experiencing gambling disorder, including 11.3% of traditional sports gamblers. The group with the highest proportion of disordered gamblers were those who had placed traditional sports bets online, of whom 20.8% had gambling disorder.

Figure 7.2 Weighted prevalence of gambling disorder among Marylanders who had gambled on sports in the past year.



Participants may fit into more than one category; all “online” traditional sports bettors are also in the “any mode” group.

CHAPTER 8 Problem and Pathological Gambling in Maryland

This chapter describes lifetime gambling behavior using NODS. The self-assessment version of the NODS was used. This is used to identify individuals who may benefit from seeking help for their problematic gambling behavior, based on the DSM-IV criteria for pathological gambling. All respondents who reported gambling were classified into low-risk (NODS score 0), at-risk (NODS score 1 to 2), problem gambler (NODS score 3 to 4), and probable pathological gambler (NODS score 5 or higher). When examining the sociodemographics, the highest two categories (NODS score 3 or higher) were combined into a single category of disordered gamblers.

In epidemiological studies and surveys, prevalence or prevalence rate is a measure commonly used to report the percentage (%) of individuals with a specific condition (e.g., gambling disorder) within a given population during a given time period. This is reported using a representative sample from that given population during that given time and obtained by dividing the number of people with a given condition with the total number of people in the sample. In population-based surveys, the sample is weighted to reflect population-based measures. The uncertainty around the estimates is commonly presented with 95% confidence intervals (CI); the narrower the 95% CIs are, the more precise the estimates are.

Prevalence of Gambling Behavior

Table 8.1 shows the estimated prevalence and population estimates of lifetime gambling behavior, including non-gambling behavior, in the State of Maryland. Following application of weighting to account for the sociodemographic distribution in the State of Maryland, probable pathological gamblers made up 1.6% (95% CI: 1.1% to 2.4%) of the population. The weighted proportions of “problem gambling” and “at-risk gambling” were 2.4% (95% CI: 1.7% to 3.4%) and 6.9% (95% CI: 5.8% to 8.2%), respectively. Disordered gamblers made up 4.0% (95% CI: 3.1% to 5.2%)

Table 8.1 Weighted prevalence and population estimates (95% Confidence Interval) for all gambling risk categories, including non-gamblers.

	Prevalence	95% Confidence Interval
Non-Gambler	8.8%	[7.6%, 10.3%]
Low-Risk Gambler	80.2%	[78.2%, 82.0%]
At-Risk	6.9%	[5.8%, 8.2%]
Disordered Gambler	4.0%	[3.1%, 5.2%]
Problem Gambler	2.4%	[1.7%, 3.4%]
Probable Pathological Gambler	1.6%	[1.1%, 2.4%]
Low-risk: NODS score 0		
At-risk: NODS score 1 to 2		
Disordered gambler: Problem gambler (NODS score 3 to 4) and Probable pathological gambler (NODS score 5 or higher) combined		

Gambling Behavior by Sociodemographic Characteristics and Region

The NODS categories according to major sociodemographic characteristics and regions are shown in Tables 8.2 and 8.3. To report the gambling behavior, we combined people with “probable pathological gambling” and “problem gambling” into one category (i.e., disordered gamblers).

Table 8.2 shows the distribution of gambling behavior by sociodemographic characteristics and Maryland region. Within each sociodemographic characteristic we compared the distribution of gambling behavior and found that males, those aged 35-44 years, Black and African Americans, non-Hispanics, those with a lower level of education, those with a total household income below \$25,000, and those who are separated had higher rates of disordered gambling and subsequently lower rates of low-risk gambling. Conversely, those aged 18 to 24 years and older than 75 years were primarily low-risk gamblers with considerably lower rates of at-risk and disordered gambling.

We compared low-risk, at-risk, and disordered gamblers in Table 8.3. At-risk gamblers were almost equally divided between males and females (55.1% vs 44.9%), however, 67.4% of disordered gamblers were male, while only 41.4% of low-risk gamblers were male. The majority (65.7%) of disordered gamblers were aged

between 35 and 64 years, while only 5.3% were aged between 18 and 24 years (3.0%) and older than 75 years (2.3%). Almost half of all disordered gamblers were Black and African American, while more than half of at-risk and low-risk gamblers were White. Compared to low-risk and at-risk gamblers, we see considerably more disordered gamblers who have a high school education or no diploma. A higher proportion of disordered gamblers resided in Eastern Maryland, while low-risk and at-risk gamblers tended to be equally spread out through the Central, Western, and Southern regions.

Table 8.2 Comparison of the weighted sociodemographic characteristics of low-risk, at-risk, and disordered gamblers only. Percentages are provided by row.

Sociodemographic	Low-risk Gambler		At-risk		Disordered Gambler	
	n	%	n	%	n	%
Gender*						
Male	1,439	83.6%	164	9.6%	118	6.8%
Female	2,026	91.4%	134	6.0%	57	2.6%
Age (in years) *						
18-24	215	94.0%	9	3.7%	5	2.3%
25-34	570	86.9%	59	8.9%	28	4.2%
35-44	578	85.1%	56	8.2%	45	6.7%
45-54	574	85.0%	67	9.9%	34	5.1%
55-64	652	87.7%	57	7.6%	35	4.7%
65-74	514	90.4%	32	5.6%	23	4.1%
75+	361	93.7%	20	5.2%	4	1.0%
Race*						
Asian	196	90.0%	15	7.1%	6	2.9%
Black and African American	883	83.7%	86	8.1%	86	8.2%
White	2,122	90.2%	159	6.7%	72	3.1%
Other	264	84.6%	38	12.2%	10	3.1%
Ethnicity*						
Hispanic	253	88.3%	33	11.6%	1	0.2%
Non-Hispanic	3,211	88.0%	265	7.3%	174	4.8%
Highest level of education*						

No diploma	201	88.1%	7	3.2%	20	8.7%
High school diploma	738	85.5%	67	7.7%	59	6.8%
Some college	668	89.5%	51	6.9%	27	3.6%
Associated degree or vocational, technical, or trade school	263	89.5%	20	6.9%	11	3.7%
Bachelor's degree	841	87.0%	88	9.1%	37	3.8%
Master's degree	532	89.6%	45	7.5%	17	2.9%
Postgraduate degree	221	90.1%	20	8.2%	4	1.7%
Work status for previous week						
Working full-time	1,790	86.7%	177	8.6%	96	4.7%
Working part-time	344	87.6%	36	9.0%	13	3.4%
Not working last week	855	91.5%	38	4.1%	41	4.4%
Total household income *						
Up to \$15,000	173	84.1%	13	6.5%	19	9.4%
\$15,001 - \$25,000	120	82.5%	7	5.1%	18	12.4%
\$25,001 - \$35,000	162	92.0%	6	3.6%	8	4.4%
\$35,001 - \$50,000	296	87.9%	30	9.0%	10	3.1%
\$50,001 - \$75,000	461	85.2%	43	8.0%	37	6.8%
\$75,001 - \$100,000	457	87.7%	42	8.1%	22	4.3%
\$100,001 - \$125,000	386	89.4%	34	7.8%	12	2.7%
\$125,001 - \$150,000	334	91.3%	17	4.8%	14	3.9%
Over \$150,000	1,074	88.6%	104	8.6%	34	2.8%
Maryland region *						
Central	1,096	87.6%	93	7.5%	62	5.0%
Western	1,027	90.0%	78	6.8%	37	3.2%
Southern	1,054	87.6%	103	8.6%	45	3.8%
Eastern	287	84.2%	24	7.0%	30	8.8%
Ever been in the armed services *						
Yes	336	83.3%	44	10.8%	24	5.8%
No	3,128	88.5%	255	7.2%	151	4.3%
Main language spoken in the home						
English	3,131	88.1%	254	7.1%	168	4.7%

Spanish	104	86.1%	17	13.9%	0	0.0%
Other	58	82.1%	11	15.7%	1	2.1%
Marital status*						
Married	1,879	89.5%	151	7.2%	69	3.3%
Widowed	222	87.5%	20	7.9%	12	4.7%
Divorced	346	82.7%	48	11.5%	24	5.8%
Separated	74	82.2%	6	6.6%	10	11.2%
Never Married	944	87.6%	74	6.9%	60	5.5%

*Imputed and used in the weighting procedure

Low-risk: NODS score 0.

At-risk: NODS score 1 to 2

Disordered gambler: Problem gambler (NODS score 3 to 4) and Probable pathological gambler (NODS score 5 or higher) combined

Table 8.3 Comparison of low-risk, at-risk, and disordered gamblers by weighted sociodemographic characteristics. Percentages are provided by column.

Sociodemographic	Low-risk Gambler		At-risk		Disordered Gambler	
	n	%	n	%	n	%
Gender*						
Male	1,439	41.5%	164	55.1%	118	67.4%
Female	2,026	58.5%	134	44.9%	57	32.6%
Age (in years) *						
18-24	215	6.2%	9	2.9%	5	3.0%
25-34	570	16.5%	59	19.7%	28	15.8%
35-44	578	16.7%	56	18.7%	45	26.0%
45-54	574	16.6%	67	22.5%	34	19.6%
55-64	652	18.8%	57	18.9%	35	20.1%
65-74	514	14.8%	32	10.6%	23	13.2%
75+	361	10.4%	20	6.7%	4	2.3%
Race*						

Asian	196	5.6%	15	5.2%	6	3.6%
Black and African American	883	25.5%	86	28.8%	86	49.5%
White	2,122	61.2%	159	53.2%	72	41.3%
Other	264	7.6%	38	12.8%	10	5.6%
Ethnicity*						
Hispanic	253	7.3%	33	11.1%	1	0.3%
Non-Hispanic	3,211	92.7%	265	88.9%	174	99.7%
Highest level of education*						
No diploma	201	5.8%	7	2.4%	20	11.3%
High school diploma	738	21.3%	67	22.3%	59	33.8%
Some college	668	19.3%	51	17.2%	27	15.4%
Associated degree or vocational, technical, or trade school	263	7.6%	20	6.8%	11	6.2%
Bachelor's degree	841	24.3%	88	29.6%	37	21.1%
Master's degree	532	15.4%	45	14.9%	17	9.8%
Postgraduate degree	221	6.4%	20	6.7%	4	2.4%
Work status for previous week						
Working full-time	1,790	51.7%	177	59.4%	96	55.1%
Working part-time	344	9.9%	36	11.9%	13	7.7%
Not working last week	855	24.7%	38	12.8%	41	23.4%
Prefer not to answer or missing	475	13.7%	47	15.9%	24	13.8%
Total household income*						
Up to \$15,000	173	5.0%	13	4.5%	19	11.1%
\$15,001 - \$25,000	120	3.5%	7	2.5%	18	10.3%
\$25,001 - \$35,000	162	4.7%	6	2.1%	8	4.5%
\$35,001 - \$50,000	296	8.5%	30	10.2%	10	5.9%
\$50,001 - \$75,000	461	13.3%	43	14.5%	37	21.0%
\$75,001 - \$100,000	457	13.2%	42	14.1%	22	12.7%
\$100,001 - \$125,000	386	11.1%	34	11.3%	12	6.7%
\$125,001 - \$150,000	334	9.7%	17	5.8%	14	8.3%
Over \$150,000	1,074	31.0%	104	34.9%	34	19.6%

Maryland region*						
Central	1,096	31.6%	93	31.3%	62	35.7%
Western	1,027	29.6%	78	26.1%	37	21.1%
Southern	1,054	30.4%	103	34.6%	45	26.0%
Eastern	287	8.3%	24	8.0%	30	17.2%
Ever been in the armed services*						
Yes	336	9.7%	44	14.7%	24	13.5%
No	3,128	90.3%	255	85.3%	151	86.5%
Main language spoken in the home						
English	3,131	90.4%	254	85%	168	96.2%
Spanish	104	3.0%	17	5.6%	0	0.0%
Other	58	1.7%	11	3.7%	1	0.9%
Marital status*						
Married	1,879	54.2%	151	50.5%	69	39.3%
Widowed	222	6.4%	20	6.7%	12	6.8%
Divorced	346	10.0%	48	16.1%	24	13.9%
Separated	74	2.1%	6	2.0%	10	5.8%
Never Married	944	27.3%	74	24.8%	60	34.2%

*Imputed and used in the weighting procedure

Low-risk: NODS score 0.

At-risk: NODS score 1 to 2

Disordered gambler: Problem gambler (NODS score 3 to 4) and Probable pathological gambler (NODS score 5 or higher) combined

CHAPTER 9 Seeking Help for Gambling Problems

This chapter reports unweighted results for the prevalence of seeking help for gambling problems, knowledge of available resources for gambling problems, and attitudes toward gambling.

Respondents were asked if they had ever sought help for gambling problems; 0.5% responded that they sought help for gambling issues. The history of seeking help according to gambling disorder categories is shown in Table 9.1. A substantially higher proportion of disordered gamblers sought help for gambling problems (7.5%), compared to Low-risk gamblers (<1%).

Table 9.1 Help-Seeking by Gambling Risk Category

	Have you ever sought help for a gambling problem?					
	Yes		No		Total	
	n	(%)	n	(%)	n	(%)
Has Never Gambled	0	0.0%	19	100.0%	19	100.0%
Low-risk	2	0.1%	2,302	99.9%	2,304	100.0%
At-risk	3	1.2%	256	98.8%	259	100.0%
Disordered Gambler	8	7.5%	98	92.5%	106	100.0%
Total	13	0.5%	2,675	99.5%	2,688	100.0%

The types of help sought by the sample are shown in Table 9.2. Respondents were allowed to select more than one type of help sought. A majority of those who sought help did so from Gamblers Anonymous (46.2%), followed by family members (38.5%), and friends (30.8%).

Table 9.2 Type of Help Sought by Gamblers

	n	(%)
Family member	5	38.5%
Friend	4	30.8%
Family doctor	1	7.7%
Gamblers Anonymous	6	46.2%
Treatment program in Maryland	1	7.7%

Treatment programs outside of Maryland	1	7.7%
Veterans Administration	1	7.7%
Psychologist or psychiatrist	1	7.7%
Other counselor	2	15.4%
Hospital outside Maryland	1	7.7%
Other	2	15.4%

Awareness of Problem Gambling Resources

Respondents' knowledge of available community services is shown in Table 9.3. Overall, the proportions of all respondents with knowledge of the three community services were 61.1% knew of the toll-free helpline, 49.8% knew of gamblers anonymous, and 48.4% knew about outpatient services. More than half of the respondents identified as meeting criteria for disordered gambling reported being aware of a toll-free helpline in the community (77.6%), a majority (65.4%) were aware of Gamblers Anonymous meetings, and 59.8% knew about outpatient services.

Table 9.3 Knowledge of available resources in the community

Available in your community...	Yes	Missing	Total
	%	%	%
A toll-free helpline that provides crisis help or referral problem gamblers and others?			
Has Never Gambled	38.4%	26.0%	100.0%
Low-risk	62.6%	15.0%	100.0%
At-risk	65.1%	11.1%	100.0%
Disordered Gambler	77.6%	2.8%	100.0%
Total	61.1%	15.3%	100.0%
Gamblers Anonymous?			
Has Never Gambled	29.9%	28.8%	100.0%
Low-risk	50.7%	19.3%	100.0%
At-risk	58.6%	11.1%	100.0%
Disordered Gambler	65.4%	5.6%	100.0%

Total	49.8%	19.2%	100.0%
Outpatient services for problem gambling, such as private counseling?			
Has Never Gambled	30.2%	29.7%	100.0%
Low-risk	49.3%	20.1%	100.0%
At-risk	54.8%	13.0%	100.0%
Disordered Gambler	59.8%	7.5%	100.0%
Total	48.4%	20.2%	100.0%

Awareness of Information about Responsible Gambling

Respondents were asked if they had ever encountered information about problem gambling or responsible gambling on billboards, television, radio, posters or flyers, online, or newspapers. The results are shown in Table 9.6. Television was the most commonly reported source of information about responsible gambling, mentioned by 59.0% of the respondents. The proportions of respondents who encountered the information by billboards, radio, posters or flyers, online, and newspapers are 43.4%, 42.3%, 30.7%, 22.4%, and 21.5%, respectively.

Table 9.6 Location of Publicity about Responsible Gambling

	Billboards	Television	Radio	Posters or Flyers	Online	Newspapers
Yes	43.4%	59.0%	42.3%	30.7%	22.4%	21.5%
No	47.6%	34.3%	48.4%	58.4%	66.8%	67.9%
Missing	9.0%	6.8%	9.3%	10.9%	10.8%	10.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Attitudes Towards Gambling

Participants were asked a series of eight questions about their attitudes towards gambling. The responses were then categorized according to the NORC gambling categories (Table 9.7). Attitudes were queried with several statements regarding gambling and response options were presented in Likert-type scales. Responses to these questions differed depending on the gamblers behavior.

These items did not reveal any dominant, consistent ideology among Marylanders regarding the availability of gambling options. Respondents generally agreed with the statement, “There are too many opportunities for gambling nowadays” (57.0%) (Table 9.7). Marylanders were evenly split as 50.0% agreed that, “People should have the right to gamble whenever they want”. A plurality of the sample (43.7%) had no firm opinion as to whether gambling should be discouraged. No dominant answer emerged among the overall sample as to whether most gamblers do so sensibly, the dangers gambling poses to family life, or the benefits of gambling to society, or enrichment of one’s personal life. Less than half of respondents (48.8%) did not wish to see gambling outlawed (Table 9.7).

Table 9.7 Attitudes towards gambling

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Missing	Total
There are too many opportunities for gambling nowadays							
Non Gambler	38.1%	24.3%	26.8%	2.3%	1.4%	7.1%	100.0%
Low-risk Gambler	27.3%	28.7%	36.2%	4.7%	1.8%	1.2%	100.0%
At-risk	25.3%	31.4%	27.6%	11.1%	3.4%	1.1%	100.0%
Problem Gambler	33.9%	35.5%	21.0%	4.8%	3.2%	1.6%	100.0%
Probable Pathological Gambler	48.9%	24.4%	15.6%	0.0%	4.4%	6.7%	100.0%
Total	28.4%	28.6%	34.5%	4.9%	1.9%	1.8%	100.0%
People should have the right to gamble whenever they want							
Non Gambler	8.8%	22.9%	36.2%	11.0%	11.9%	9.3%	100.0%
Low-risk Gambler	10.5%	39.6%	33.5%	12.1%	2.7%	1.6%	100.0%
At-risk	21.1%	46.7%	23.4%	6.9%	0.8%	1.1%	100.0%
Problem Gambler	17.7%	53.2%	22.6%	4.8%	0.0%	1.6%	100.0%
Probable Pathological Gambler	20.0%	35.6%	31.1%	4.4%	2.2%	6.7%	100.0%
Total	11.2%	38.8%	32.9%	11.6%	3.3%	2.3%	100.0%
Gambling should be discouraged							
Non Gambler	29.4%	25.4%	28.8%	3.7%	3.7%	9.0%	100.0%
Low-risk Gambler	11.2%	24.9%	45.4%	13.5%	3.4%	1.6%	100.0%
At-risk	7.3%	19.5%	42.5%	21.8%	8.0%	0.8%	100.0%
Problem Gambler	11.3%	11.3%	43.5%	25.8%	6.5%	1.6%	100.0%

Probable Pathological Gambler	11.1%	15.6%	35.6%	24.4%	6.7%	6.7%	100.0%
Total	12.5%	24.4%	43.7%	13.5%	3.7%	2.2%	100.0%
Most people who gamble do so sensibly							
Non Gambler	2.5%	5.9%	36.4%	31.9%	13.6%	9.6%	100.0%
Low-risk Gambler	2.1%	18.6%	44.3%	26.6%	6.4%	1.9%	100.0%
At-risk	3.1%	24.1%	39.8%	26.1%	5.4%	1.5%	100.0%
Problem Gambler	0.0%	27.4%	45.2%	21.0%	4.8%	1.6%	100.0%
Probable Pathological Gambler	4.4%	11.1%	26.7%	35.6%	15.6%	6.7%	100.0%
Total	2.2%	18.0%	43.2%	27.0%	7.0%	2.5%	100.0%
Gambling is dangerous for family life							
Non Gambler	36.7%	28.5%	19.5%	3.1%	2.8%	9.3%	100.0%
Low-risk Gambler	15.1%	33.3%	39.0%	8.3%	2.3%	1.9%	100.0%
At-risk	4.6%	29.5%	44.1%	16.1%	4.6%	1.1%	100.0%
Problem Gambler	8.1%	29.0%	43.5%	17.7%	0.0%	1.6%	100.0%
Probable Pathological Gambler	26.7%	28.9%	24.4%	4.4%	6.7%	8.9%	100.0%
Total	16.3%	32.6%	37.6%	8.5%	2.5%	2.5%	100.0%
On balance gambling is good for society							
Non Gambler	1.4%	2.8%	28.2%	28.8%	29.4%	9.3%	100.0%
Low-risk Gambler	1.4%	8.8%	47.4%	28.0%	12.3%	2.1%	100.0%
At-risk	2.3%	18.4%	51.0%	22.6%	5.0%	0.8%	100.0%
Problem Gambler	0.0%	21.0%	50.0%	22.6%	4.8%	1.6%	100.0%
Probable Pathological Gambler	6.7%	13.3%	48.9%	13.3%	11.1%	6.7%	100.0%
Total	1.5%	9.1%	46.1%	27.5%	13.1%	2.7%	100.0%

Gambling livens up life							
Non Gambler	1.1%	4.5%	31.9%	24.6%	28.8%	9.0%	100.0%
Low-risk Gambler	0.9%	14.8%	47.4%	23.6%	11.3%	1.9%	100.0%
At-risk	3.4%	34.5%	38.7%	15.3%	6.5%	1.5%	100.0%
Problem Gambler	3.2%	37.1%	37.1%	14.5%	6.5%	1.6%	100.0%
Probable Pathological Gambler	6.7%	33.3%	33.3%	17.8%	2.2%	6.7%	100.0%
Total	1.2%	15.7%	45.3%	23.0%	12.3%	2.5%	100.0%
It would be better if gambling was banned altogether							
Non Gambler	19.5%	12.7%	39.3%	15.5%	4.5%	8.5%	100.0%
Low-risk Gambler	3.7%	6.9%	37.5%	34.9%	15.3%	1.7%	100.0%
At-risk	2.3%	5.0%	24.1%	39.1%	28.7%	0.8%	100.0%
Problem Gambler	4.8%	4.8%	27.4%	35.5%	25.8%	1.6%	100.0%
Probable Pathological Gambler	20.0%	6.7%	28.9%	22.2%	15.6%	6.7%	100.0%
Total	5.1%	7.2%	36.6%	33.5%	15.3%	2.2%	100.0%

CHAPTER 10 Gambling in Maryland from 2010 to 2022

In this chapter we bring together highlights of the findings from the 2010, 2017, 2020, and current 2022 survey. It should be noted that there are differences in the survey methodology used in each of these reports, including how the sample was obtained and the weighting procedures used. Therefore, comparisons should be made with caution. For details of the methods used, please reference each of the relevant reports.

Gamblers in Maryland

In 2022, 90.4% of Marylanders were found to have ever gambled in their lifetime. This is a very slight decrease from 2020 where 92.3% of Marylanders were found to have ever gambled in their lifetime and a slight increase from those of 2010 and 2017 (89.7% and 87.0% respectively, Table 10.1).

Table 10.1 Weighted prevalence of lifetime gambling across survey years

Survey year	Have ever gambled in lifetime
2010	89.7%
2017	87.0%
2020	92.3%
2022	90.4%

Type of Gambling Activity

From 2010 to 2022 the most frequently reported gambling types were lottery games and casino betting (Table 10.2). Since 2010, lottery play has increased 15.2% while casino gambling has only increased 6.6%. There has also been a substantial increase in the use of gaming machines outside of casinos, with 33.4% of those who have ever gambled in their lifetime reporting use in 2022 compared to 21.3% in 2010 (12.1% increase from 2010 to 2022). However, this actually represents a decrease from that of 2020 where 42.1% had ever used a gaming machine outside of casino. Placing a bet on horse races is no longer a popular gambling activity among Marylanders and since 2010 has decreased from 29.5% to 19.5% in 2022. Each year the survey asks about other gambling types not covered by the specific categories listed in the survey.

These can include raffles, sweepstakes, baby pools, pull-tabs, dogfights, and cockfights. Although we cannot identify exactly which of these other gambling types are rising in popularity there has been an overall increase in popularity with a 9.4% increase from 2010 to 2022.

Table 10.2 Weighted lifetime prevalence of having ever gambled by gambling type, across survey years

Gambling type*	Survey years				Change from 2010 to 2022
	2010	2017	2020	2022	
Lottery	67.5%	77.6%	76.8%	82.7%	15.2%
Casino	67.5%	73.9%	70.3%	74.1%	6.6%
Sports	32.9%	29.2%	35.5%	30.1%	-2.8%
Private games	30.2%	28.8%	29.9%	27.7%	-2.5%
Horse races	29.5%	31.3%	27.6%	19.5%	-10.0%
Other	27.5%	25.4%	31.6%	36.9%	9.4%
Bingo	24.8%	26.7%	36.2%	27.5%	2.7%
Gaming machines outside casinos	21.3%	23.6%	42.1%	33.4%	12.1%
Dog races	5.8%	6.8%	8.1%	3.1%	-2.7%
Online casino style games[‡]	3.6%	3.4%	10.3%	6.6%	3.0%
Fantasy sports	N/A	5.6%	13.3%	5.1%	-0.5% [†]

*Ordered from most to least prevalent according to 2010 survey.

[‡]In 2010, 2017, and 2020 this question was phrased as asking about wagering on the computer over the internet.

[†]Change from 2017 to 2022.

Casino Gambling

Each report examined the frequency of the different gambling types. For the purposes of comparison across the survey years, Table 10.3 reports the frequency of play in the past 12 months for casino gambling. We see the biggest changes in the proportion who have not played at all in the past year (increase of 9.0% from 2010 to 2022) and a corresponding decrease in those who only gambled at a casino a few days all year (decrease of 8.9% from 2010 to 2022). There were only minor changes from 2010 to 2022 for those who gambled at casinos more frequently.

Table 10.3 Weighted prevalence of frequency of casino gambling in the past 12 months, across survey years.

Gambling Frequency [^]	Survey years				Change from 2010 to 2022
	2010	2017	2020	2022	
Not at all in the past year	59.5%	58.9%	48.5%	68.5%	9.0%
Only a few days all year	32.1%	31.0%	30.1%	23.2%	-8.9%
Once a month or less	3.6%	4.6%	9.7%	3.7%	0.1%
Several times a month	2.2%	3.4%	7.1%	2.3%	0.1%
Daily or several times a week	2.7%	2.0%	4.6%	1.1%	-1.6%

[^]Frequency of play in the last 12 months amongst those who have ever participated in casino gambling in their lifetime.

Gambling Behavior

Excluding the year 2020, the prevalence of low-risk, at-risk, and disordered gambling in 2022 is similar to the rates reported in 2010 (Table 10.4). In 2017, there was a higher prevalence of low-risk gamblers, with a subsequent lower prevalence of at-risk and disordered gamblers. In 2020, differences in the sampling frame and the COVID-19 pandemic likely resulted in considerably higher rates of at-risk and disordered gamblers than would have been expected, making comparisons to previous years and the current year challenging.

There have been some fluctuations over the survey years in the demographics of low-risk, at-risk, and disordered gamblers. There has been a shift in age, and we now see slightly higher prevalence rates of disordered gambling among the older age groups where previously this was more typical of the younger age groups. For example, in 2010, 6.8% of those aged 18-29 were disordered gamblers compared to 1.0% of those aged 65 years and above (Table 10.5). In 2022, 2.3% of those aged 18-29 were disordered gamblers compared to 4.7% of those aged 65-74 years and 5.1% of those aged 75 years or older.

Trends in gender have remained consistent across survey years, with men having higher prevalence rates of at-risk and disordered gambling compared to women. Similarly for race and ethnicity, non-Hispanic

Black or African American Marylanders have typically had higher prevalence rates of at-risk and disordered gambling than non-Hispanic White Marylanders.

Table 10.4 Weighted prevalence of lifetime gambling risk, amongst all Marylanders, across survey years

Survey year	Have ever gambled in lifetime	Gambling behavior*				
		Low-risk gambler	At-risk gambler	Problem gambler	Probable pathological gambler	Disordered gambler
2010	89.7%	77.3%	9.0%	1.9%	1.5%	3.4%
2017	87.0%	80.3%	2.5%	0.7%	1.0%	1.7%
2020	92.3%	71.2%	11.5%	3.1%	5.5%	8.4%
2022	90.4%	80.2%	6.9%	2.4%	1.6%	4.0%

*The proportion of non-gamblers is not shown but can be derived by subtracting the proportion of low-risk, at-risk, and disordered gamblers from 100.

Low-risk: NODS score 0

At-risk: NODS score 1 to 2

Disordered gambler: Problem gambler (NODS score 3 to 4) and Probable pathological gambler (NODS score 5 or higher) combined

Table 10.5 Weighted prevalence of lifetime gambling risk by demographics, amongst only those who had ever gambled in their lifetime, across survey years

Demographics	Low-risk gamblers				At-risk gamblers				Disordered gamblers			
	2010	2017	2020	2022	2010	2017	2020	2022	2010	2017	2020	2022
Gender												
Male	82.9%	93.3%	76.7%	82.9%	11.8%	3.8%	12.8%	9.9%	5.3%	2.9%	10.6%	7.2%
Female	92.2%	96.5%	82.7%	90.9%	6.3%	2.3%	10.4%	6.6%	1.5%	1.2%	6.9%	2.6%
Age (in years)												
18-29	80.0%	95.8%	74.5%	92.3%	13.2%	3.6%	10.9%	6.0%	6.8%	0.6%	14.6%	1.7%
30-44	88.2%	92.7%	73.1%	84.1%	9.0%	4.1%	12.6%	8.8%	2.7%	3.2%	14.2%	7.1%
45-54	89.0%	93.4%	79.6%	83.0%	7.3%	3.9%	14.2%	11.4%	2.8%	2.8%	6.2%	5.6%
55-64	89.3%	94.2%	85.0%	88.7%	7.9%	3.0%	10.5%	6.4%	2.8%	2.8%	4.5%	4.9%
65-74	92.7%	97.5%	87.8%	89.9%	6.3%	1.4%	10.5%	5.7%	1.0%	1.0%	1.7%	4.5%
75+		95.9%	89.8%	94.5%		2.3%	8.2%	5.1%		1.0%	2.0%	0.3%
Race and ethnicity												
Non-Hispanic White	89.9%	96.8%	83.3%	90.0%	8.2%	2.3%	11.1%	6.9%	2.0%	0.8%	5.6%	3.1%
Non-Hispanic Black or African American	82.6%	90.5%	77.1%	81.9%	12.5%	5.8%	12.2%	9.4%	4.9%	3.7%	10.7%	8.7%
Hispanic		88.7%	68.5%	88.3%		4.5%	13.1%	11.6%		6.8%	18.4%	0.2%
Asian or Pacific Islander	Not reported	93.9%	80.3%	89.6%	Not reported	0.0%	9.3%	7.1%	Not reported	6.1%	10.4%	3.3%
American Indian		80.2%	77.1%	N/R		3.2%	15.0%	N/R		16.5%	7.9%	N/R
Other		94.6%	82.5%	84.6%		1.2%	12.7%	12.2%		4.2%	4.8%	3.1%

N/R = Not reported. Not included due to small number of individual respondents.

CHAPTER 11 Summary, Limitations, and Direction for the Future

Major Findings and Trends

The primary objective of the 2022 Statewide Gambling Prevalence in Maryland survey was to describe the gambling behavior of those aged 18 years and older residing in Maryland and identify any important changes in this behavior. This report estimated the prevalence of those who have ever gambled in their lifetime; the types and frequency of gambling occurring in the state; the prevalence of disordered gambling; and the help seeking behavior of gamblers. It also took a closer look at sports gambling, which only became legally available within casinos in 2021 and online in 2022.

In 2022, the overall prevalence of adults who had ever participated in any form of gambling was approximately 9 out of every 10 Marylanders. This finding was similar to that of earlier statewide surveys from 2020, 2017, and 2010. Amongst those who have gambled in their lifetime, the popular types of gambling remained similar to those reported in previous years, with lottery games and casinos being the most popular. Gambling online, fantasy sports, and dog races were among the least prevalent forms of gambling. The recent legalization of sports gambling in the state and the availability of online sports betting may result in substantial changes in the prevalence of fantasy sports betting. Gambling on dog races has not ever been particularly popular in the state during the course of the prevalence studies. This may be due to the lack of an active racetrack within the state, the closest being in West Virginia, or it may be that Marylanders who are looking for this type of gambling activity prefer to gamble on the horse races which play a significant role in the state. Except for the lottery and yearly fantasy sports, the majority of gamblers in the state reported infrequent play in the 12 months prior to being surveyed. The average dollar amount spent on gambling was typically around one hundred dollars or less, although some individuals reported spending thousands in a typical month.

Despite the majority of Americans reporting that they find gambling morally acceptable (Gallup, 2018), in Maryland the majority of non-gamblers reported that their moral or ethical objections were important in their decision not to gamble. Their fear of losing money was also an important driver for their not gambling. Conversely, the majority of gamblers felt winning money was an important reason for gambling, as was the entertainment value of gambling.

Substance use, a frequent comorbidity of gambling, was more prevalent among Maryland gamblers, however the distribution of the frequency of substance use followed similar trends of non-gamblers. Gamblers were slightly less likely than non-gamblers to report their health as excellent, but combining those who reported their health as excellent or very good resulted in almost no difference between gamblers and non-gamblers. There was however a slightly higher proportion of gamblers who reported their health as poor compared to non-gamblers.

The gambling behavior of those who had ever gambled in their lifetime was further characterized using NODS, which classifies behavior as either low-risk, at-risk, or disordered. In 2022, the rates of disordered gambling were similar to those of 2010 and slightly elevated from those of 2017. Disordered gambling was more prevalent amongst males, those aged 35-44 years, those who identified as non-Hispanic Black or African American, those with lower levels of education, those with lower levels of income, and those living in Eastern Maryland. These trends were also found in the previous statewide reports (Tracy et al., 2019; Tracy & Schluterman, 2021) and also in the general gambling literature (Potenza et al., 2019).

Only a handful of gamblers in Maryland had sought help for their gambling, with the majority of those seeking help being disordered gamblers. The rates of help-seeking were considerably lower in 2022 than those in 2020 (Tracy & Schluterman, 2021). Gamblers Anonymous was a popular source of help, as was reaching out to family or friends. Knowledge of the availability of community services for seeking help for gambling was most prevalent amongst disordered gamblers. The majority of gamblers reported encountering information about responsible gambling from the television. Billboards and radio station announcements were also reaching a high number of individuals, while posters or flyers, online, and newspaper announcements were reaching fewer gamblers.

Sports gambling, the most recent expansion of gambling in the State, became available in casinos in 2021 and online in 2022, although following completion of the Statewide Prevalence survey. More than a third of Maryland gamblers had ever participated in sports gambling (30.1%), which included both traditional sports gambling and fantasy sports. The prevalence of disordered gambling was notably high amongst this group of individuals, with 11.3% of traditional sports gamblers, 20.8% of online sports gamblers, 12.2% of yearly fantasy sports gamblers, and 15.6% of daily sports gamblers experiencing disordered gambling. At the time of conducting the study, online sports gambling had yet to be made available and was therefore still illegal. It is perhaps therefore not surprising that disordered gambling appears high amongst sports

gamblers who may be seeking out more ways to gamble than at-risk, or low-risk gamblers, and that this may dissipate over time. As has been noted by other studies (LaPlante & Shaffer, 2007; Shaffer, 2005), when a new means of gambling is introduced there may be an initial surge in uptake, but that this does not necessarily translate to an increase in gambling behavior.

Survey Limitations

Response rates to surveys have been on the decline (Stedman et al., 2019) and to combat this, additional reminder postcards were employed to help boost response rates. Despite these efforts, the target sample size of 6,000 respondents was not reached. It is therefore possible that the respondents to the survey were not fully representative of the state's population. For example, people who gamble, people with gambling problems, and people with strong feelings about gambling may have been more likely to respond to the survey, given the topic. In addition, the smaller sample size meant that it was not feasible to closely examine all gambling behaviors. For example, in 2020 the over-representation of at-risk and disordered gamblers allowed for a rigorous assessment of the predictors of gambling behavior. Trends in help seeking behavior were also challenging to examine due to the limited sample size.

Data collection occurred from April-July 2022 during the COVID-19 pandemic and a period of transition from any remaining pandemic restrictions to minimal or no restrictions. The reporting of gambling behavior, and in particular frequency of play and dollar amounts spent may have been influenced by this. Restrictions on gathering indoors or the need to continue wearing a face covering may have impacted gambling behaviors. In addition, unemployment rose during the pandemic, and job loss may have had an influence on gambling behavior, including frequency of play and spending.

Problem gambling is a sensitive issue and social desirability response bias may be present despite the anonymity of the survey. Furthermore, the NODS screening instrument is not a definitive diagnostic tool and does not have perfect sensitivity and specificity. This could result in some individuals who were found to be probable pathological gamblers not actually having a diagnosable gambling problem, while others may have fallen into lesser gambling risk categories but do have a gambling problem. Only a clinical evaluation could truly distinguish and diagnose a gambling problem.

Each survey year, improvements are made to the survey instrument and the analytical approach. While this ensures that the instrument is capturing the most relevant and accurate data and that these data are being fully utilized, it also poses a limitation in the ability to draw conclusions by comparing across survey years.

Directions for the Future

Based on the present findings and those of the 2010, 2017, and 2020 statewide surveys in Maryland, we propose the following recommendations:

- Continue to conduct statewide gambling prevalence studies to monitor and evaluate the prevalence of disordered gambling in the state of Maryland which has increased over the past decade.
- Continue to track the prevalence of sports gambling, which only became fully available online after the 2022 survey had concluded, to determine if uptake amongst gamblers and disordered gamblers subsides as it becomes less novel.
- Given the low number of individuals who are seeking help for gambling, identify barriers to help-seeking and design interventions to address those barriers while also ensuring that these resources are being targeted to the sociodemographic groups with the highest proportion of gamblers.
- Identify the impact of messaging on problem gambling and responsible gambling by adding targeted questions to future studies.
- Conduct longitudinal studies to allow for an examination of the risk factors for transitioning from a non-gambler to a low-risk gambler, a low-risk gambler to an at-risk gambler, and an at-risk gambler to a disordered gambler.
- Given that substance use was higher amongst gamblers than non-gamblers, integrating education programs and resources designed for each group could have a beneficial crossover.
- Disordered gambling is a rare outcome making it difficult to draw conclusions about sub-groups or targeted strategies. Consider the use of a cohort study to allow for a thorough examination of the risk factors of disordered gambling.

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