

PHYSICAL HEALTH AND PROBLEM GAMBLING

Problematic gambling behavior is related to a number of physical health problems. Along with a host of physical health concerns, those who engage in problematic gambling have higher rates of suicide and premature death.¹ Some of the more common associated health problems include:



Being at a greater risk of being overweight or managing obesity.^{2,3}



Having chronic medical conditions like heart problems or diabetes.^{2,4,5}



Engaging in unhealthy lifestyle behaviors, such as greater time spent in sedentary activities, poor diet, and increased alcohol and tobacco use.^{2,6}



Having perceived poorer quality of physical health.^{2,7}



General health problems: heartburn, headaches, sleeping difficulties, stress, and head injuries.^{2,8,9}

Gambling severity and number of harmful health behaviors are positively correlated; thus, the more severe the gambling, the higher likelihood of more health-related problems.¹⁶

1. Karlsson, A. & Hakansson, A. (2018). Gambling disorder, increased mortality, suicidality, and associated comorbidity: a longitudinal nationwide register study. *Journal of Behavioral Addictions*, 7(4), 1091-1099

2. Black, D. W., Shaw, M., McCormick, B., Allen, J. (2013). Pathological gambling: relationship to obesity, self-reported chronic medical conditions, poor lifestyle choices, and impaired quality of life. *Comprehensive Psychiatry*, 54, 97-104

3. Lam, D. & Mok, M. (2017). Exploring the relationship between body mass index, obesity, and gambling level across different gambling types. *Journal of Gambling Issues*, 36, 97-112.

4. Hing, N., Russell, A., Tolchard, B., & Nower, L. (2016). Risk Factors for Gambling Problems: An Analysis by Gender. *Journal of Gambling Studies / Co-Sponsored by the National Council on Problem Gambling and Institute for the Study of Gambling and Commercial Gaming*, 32(2), 511-534. <https://doi.org/10.1007/s10899-015-9548-8>

5. Pilver, C. E. & Potenza, M. N. (2013). Increased incidence of cardiovascular conditions among older adults with pathological gambling features in a prospective study. *Journal of Addiction Medicine*, 7(6).

6. Patten, R. V., Weinstock, J. McGrath, A. B. (2018). Health outcomes in individuals with problem and pathological gambling: an analysis of the 2014 North Carolina behavioral risk factor survey system (BRFSS). *Journal of Gambling Studies*, 34, 297-306.

7. Lutfi, V., Calamand, D., Maccaferri, G. E. (2017). General health and health self-perception in gambling disorder from a consultation-liaison perspective: a systematic review. *Annals of Psychiatry and Mental Health*, 5(1): 1092.

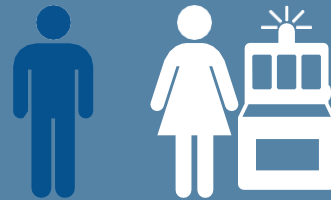
8. Parhami, I., Siani, A., Rosenthal, R. J., Fong, T. W. (2013). Pathological gambling, problem gambling and sleep complaints: an analysis of the national comorbidity survey: replication (NCS-R). *Journal of Gambling Studies*, 29, 241-253.

9. Bonnaire, C. Kovess-Masfety, V., Guignard, R., Richard, J. B., du Roscoat, E., Beck, F. (2017). Gambling type, substance abuse, health and psychosocial correlates of male and female problem gamblers in a nationally representative French sample. *Journal of Gambling Studies*, 33, 343-369.

16. Butler, N., Quigg, Z., Bates, R., Sayle, M., & Ewart, H. (2020). Gambling with your health: Associations between gambling problem severity and health risk behaviours, health and wellbeing. *Journal of Gambling Studies / Co-Sponsored by the National Council on Problem Gambling and Institute for the Study of Gambling and Commercial Gaming*, 36(2), 527-538. <https://doi.org/10.1007/s10899-019-09902-8>

OBESITY AND PROBLEM GAMBLING

- Compared to the general population, rates of obesity and being overweight are higher among individuals who engage in problem gambling behaviors.^{2,3} Those who engage in problem gambling behavior have been shown to have a higher BMI (an average difference of 3.6 BMI) than non-problem gamblers.²
- In fact, more severe problematic gambling behaviors are associated with higher rates of obesity across studies.¹⁰



Obesity measured by body mass index (BMI) is related to increased gambling participation among women. More specifically, gambling at casinos, placing bets on college basketball games, and playing video poker have been linked with higher female BMI.³

SELF-PERCEIVED HEALTH AND PROBLEM GAMBLING

- Problem gambling is related to poorer self-reported general health perceptions. In one study assessing various health outcomes of problem gamblers, researchers found compared to non-problem gamblers, participants had lower health perceptions, particularly in domains of social functioning and vitality.²
- A large review found that self-ratings of bodily pain tended to be elevated and overall health self-perception tend to be lower compared to non-problematic gamblers across studies.⁷

2. Black, D. W., Shaw, M., McCormick, B., Allen, J. (2013). Pathological gambling: relationship to obesity, self-reported chronic medical conditions, poor lifestyle choices, and impaired quality of life. *Comprehensive Psychiatry*, 54, 97-104

3. Lam, D. & Mok, M. (2017). Exploring the relationship between body mass index, obesity, and gambling level across different gambling types. *Journal of Gambling Issues*, 36, 97-112.

7. Lutri, V., Calamand, D., Maccaferri, G. E. (2017). General health and health self-perception in gambling disorder from a consultation-liaison perspective: a systematic review. *Annals of Psychiatry and Mental Health*, 5(1): 1092.

10. Loo, J. Y., Kraus, S. W., & Potenza, M. N. (2019). A systematic review of gambling-related findings from the national epidemiological survey on alcohol and related conditions. *Journal of Behavioral Addictions*, 8(4), 625-648.

CHRONIC MEDICAL CONDITIONS AND PROBLEM GAMBLING

Problem gambling behavior is related to having chronic medical conditions, including:

Heart conditions



Diabetes



Pain



- Problem gambling in older adults may place individuals at risk for developing arteriosclerosis and heart conditions.⁵ Researchers conducting a study including over 10,000 individuals aged 55 and older found individuals at risk of problem gambling were 36% more likely to develop arteriosclerosis than those not at risk.⁵
- Some limited data suggests that there may be an association between problem gambling and coronary heart disease.¹¹
- Individuals at risk of problem gambling behavior may be more likely to have diabetes than non-problem gamblers.⁴
- Problematic gambling is also related to endorsements of greater pain interference than low or no pain.¹⁰
- Gambling is associated with individuals reporting higher physical health concerns, specifically bodily symptom complaints such as pain, weakness, or shortness of breath.⁷

PROBLEM GAMBLING AND PHYSICAL HEALTH: RESEARCH CONTRADICTING THE LARGER BODY OF WORK

However, some studies suggest that problematic gambling is not always associated with increased chronic health risks.

- One study including over 25,000 adults, found that there were no differences between problem and non-problem gamblers in their rates of chronic diseases.⁹
- Individuals experiencing problems with gambling are not always found to have higher rates of diabetes², or liver conditions⁵ compared to individuals who do not experience problems with gambling.

2. Black, D. W., Shaw, M., McCormick, B., Allen, J. (2013). Pathological gambling: relationship to obesity, self-reported chronic medical conditions, poor lifestyle choices, and impaired quality of life. *Comprehensive Psychiatry*, 54, 97-104

4. Hing, N., Russell, A., Tolchard, B., & Nower, L. (2016). Risk Factors for Gambling Problems: An Analysis by Gender. *Journal of Gambling Studies* / Co-Sponsored by the National Council on Problem Gambling and Institute for the Study of Gambling and Commercial Gaming, 32(2), 511-534. <https://doi.org/10.1007/s10899-015-9549-9>

5. Pilver, C. E. & Potenza, M. N. (2013). Increased incidence of cardiovascular conditions among older adults with pathological gambling features in a prospective study. *Journal of Addiction Medicine*, 7(6).

7. Lutri, V., Calamand, D., Maccaferri, G. E. (2017). General health and health self-perception in gambling disorder from a consultation-liaison perspective: a systematic review. *Annals of Psychiatry and Mental Health*, 5(1):1092.

9. Bonnaire, C. Kovess-Masfety, V., Guignard, R., Richard, J. B., du Roscoat, E., Beck, F. (2017). Gambling type, substance abuse, health and psychosocial correlates of male and female problem gamblers in a nationally representative French sample. *Journal of Gambling Studies*, 33, 343-369.

10. Loo, J. Y., Kraus, S. W., & Potenza, M. N. (2019). A systematic review of gambling-related findings from the national epidemiological survey on alcohol and related conditions. *Journal of Behavioral Addictions*, 8(4), 625-648.

11. Germain, C., Vahanian, A., Basquin, A., Richoux-Benham, C., Embouazza, H., Lejoyeux, M. (2011). Brief report: coronary heart disease: and unknown association to pathological gambling. *Frontiers in Psychiatry*, 2(11).

UNHEALTHY BEHAVIORS AND PROBLEM GAMBLING

Problem gambling often co-occurs with unhealthy lifestyles and poor health behaviors. Individuals with problem gambling behaviors also tend to^{2,16}:

- Spend more time engaging in **sedentary activities**, like watching television (20+ hours/week).
- Engage in physical exercise less often.
 - Individuals with problem gambling behaviors are two point nine times more likely to engage in low levels of physical activity.
- Use/consume more
 - **Tobacco** (1+ pack(s) of cigarettes or 1 can of chewing tobacco per day).
 - **Alcohol**, particularly binge drinking (>6 drinks).
 - **Caffeine** (5+ servings daily).
- Have poor:
 - Hydration, skip meals, and /or eat less nutrient-rich **diets**.¹² Individuals with problem gambling behaviors are more likely to have a poorer diet compared to those without.
 - Hygiene and overall **self-care**.
 - **Sleep** due to sleep deprivation or cumulative sleep debt.^{8,12}

Research suggests that women who gamble are more likely to drink while pregnant than those who do not.²

Key Findings

- Problem gambling is strongly associated with obesity and an increased risk of alcohol and nicotine use.
- Problem gambling among older adults may increase their risk for heart conditions.
- Problem gambling tends to be associated with sedentary lifestyle choices.
- Problem gambling is associated with harmful health behaviors, which may lead to chronic health conditions or other long-term health consequences.

2. Black, D. W., Shaw, M., McCormick, B., Allen, J. (2013). Pathological gambling: relationship to obesity, self-reported chronic medical conditions, poor lifestyle choices, and impaired quality of life. *Comprehensive Psychiatry*, 54, 97-104

8. Parhami, I., Siani, A., Rosenthal, R. J., Fong, T. W. (2013). Pathological gambling, problem gambling and sleep complaints: an analysis of the national comorbidity survey: replication (NCS-R). *Journal of Gambling Studies*, 29, 241-253.

12. Lateef, F. (2013). Exhaustion from prolonged gambling. *Journal of Acute Disease*, 2(2), 164-166. [https://doi.org/10.1016/S2221-6189\(13\)60121-3](https://doi.org/10.1016/S2221-6189(13)60121-3)

16. Butler, N., Quigg, Z., Bates, R., Sayle, M., & Ewart, H. (2020). Gambling with your health: Associations between gambling problem severity and health risk behaviours, health and wellbeing. *Journal of Gambling Studies / Co-Sponsored by the National Council on Problem Gambling and Institute for the Study of Gambling and Commercial Gaming*, 36(2), 527-538. <https://doi.org/10.1007/s10899-019-09902-8>

PROBLEM GAMBLING PREVENTION AND INTERVENTION STRATEGIES

Given the harmful relationship problem gambling has with physical health, prevention strategies and methods to intervene are important for community stakeholders to know about.

- ♦ Learn more about the harmful relationship between physical health concerns and problematic gambling including prevention, treatment, and ways to support individuals who are seeking help.
- ♦ Integrate the harmful impact of problem gambling into education opportunities when discussing physical health concerns and/or developing partnerships.
- ♦ Use a brief assessment measure to identify gambling problems such as the Brief Biosocial Gambling Screen (BBGS) and assess functionality in areas of life (e.g., occupational, financial, social, interpersonal, and intrapersonal).^{13,14}
- ♦ Develop a harm minimization strategy. Take a responsible gambling approach and collaboratively plan what best aligns with their goals, while also promoting health and reducing harm.¹³



Interventions and Treatment^{14,15}

- Brief, early intervention (e.g., motivational interviewing or motivational enhancement).
- Social support groups such as Gambling Anonymous (GA) or SMART Recovery.
- Cognitive-behavioral therapy from specialists in addictive behaviors.
- There are mixed findings for medication use in the treatment of problem gambling. Consider reviewing research and attending training events on using pharmacological therapies for gambling urges and cravings.

13. Price, A., Hilbrecht, M., & Billi, R. (2021). Charting a path towards a public health approach for gambling harm prevention. *Journal of Public Health*, 1–17. <https://doi.org/10.1007/s10389-020-01437-2>

14. Yao, Y. H. C., & Potenza, M. N. (2015). Gambling disorder and other behavioral addictions: Recognition and treatment. *Harvard Review of Psychiatry*, 23(2), 134. <https://doi.org/10.1097/HRP.0000000000000051>

15. Quilty, L. C., Wardell, J. D., Thiruchselvam, T., Keough, M. T., & Hendershot, C. S. (2019). Brief interventions for problem gambling: A meta-analysis. *PLoS One*, 14(4), e0214502. <https://doi.org/10.1371/journal.pone.0214502>