



Report Summary

MAGIC Wave 3 Report: Changes in gambling participation, behaviour, and incidence in Massachusetts

What this report is about

In 2011, an act was passed to expand gambling in Massachusetts. The Massachusetts Gaming Commission was required to set an annual research agenda. In 2013, it was recommended that a longitudinal cohort study be added to the annual research agenda.

Longitudinal cohort studies follow a group of people with shared experience (a cohort) over time. This allows researchers to understand the risk and protective factors of gambling. Several large-scale longitudinal cohort studies have been conducted across the world. However, none have been conducted in the US.

The Massachusetts Gambling Impact Cohort (MAGIC) study is a longitudinal cohort study. It involved 3,139 Massachusetts adults aged 18+, the majority of whom were at higher risk of developing a gambling problem. Participants were people who had responded to the Baseline General Population Survey carried out in 2013/2014. This cohort was followed in 2015 and 2016. In this report, the researchers provided results across the three waves with a focus on the third wave. In particular, the researchers reported changes in gambling participation, incidence of problem gambling, and stability and transition of gambling status.

What was done?

The Baseline General Population Survey was used to identify participants at higher risk of developing gambling problems. The researchers did so by identifying people with at-risk or problem gambling according to the Problem and Pathological Gambling Measure (PPGM). They also identified people who

Why is this report important?

This report presents results from a longitudinal cohort study of 3,139 Massachusetts adults aged 18+ at higher risk of developing a gambling problem (MAGIC). Longitudinal cohort studies can help understand the risk and protective factors of gambling. MAGIC is the first major gambling cohort study in the US. The report presents results examining changes in gambling participation and provides information on both incidence and remission of problem gambling. Lastly, it highlights the stability and transition of gambling status over time.

gambled weekly or spent \$1,200 or more a year on gambling. Plus, they identified people who served in the military since September 2001.

The researchers identified 4,860 participants. Of these, 3,139 agreed to take part. The response rate from Wave 1 to Wave 2 was 65.1%. A total of 2,450 completed Wave 3 for a cohort retention rate of 78.1%. Complete questionnaires from all three waves were available from 2,428 participants.

Aside from the PPGM, participants also answered questions about their gambling participation. This included the type and frequency of gambling activities they engaged in, including online gambling. They also answered questions about the amount of money spent. Participants were asked if they gambled out of state and at the new casino (Plainridge Park Casino), which opened in 2015. Other questions included physical and mental health, alcohol and drug use, gambling attitudes, and awareness of problem gambling services. Wave 3 added questions about

lifetime gambling, mental health problems, and childhood abuse.

What you need to know

There was a small increase in participation in daily lottery games, sports betting, and private betting from Wave 1 to Wave 2. Increases from Wave 2 to Wave 3 in overall gambling participation, as well as specific forms of gambling were observed. These effects ranged from small to medium. The largest increases observed might be due to wording changes from Wave 2 to Wave 3, such as providing more examples of daily games and online gambling. There was a decrease in out-of-state casino gambling from Wave 2 to Wave 3. This suggests people who might have gambled out-of-state gambled at the new casino instead. There were small decreases in the average maximum frequency of gambling from Wave 1 to Wave 2, and from Wave 2 to Wave 3. There was a significant increase in total gambling spending from Wave 2 to Wave 3, with large effects. But this might be due to outliers. From Wave 2 to Wave 3, there were significant increases in the average number of gambling activities participated in.

Incidence was defined as non-problem gamblers in one wave who were classified as problem gamblers in the next wave. The incidence rate from Wave 1 to Wave 2 was 2.4%, and 1.2% from Wave 2 to Wave 3. Remission was defined as problem gamblers in one wave who were classified as non-problem gamblers in the next. Remission from Wave 1 to Wave 2 was 49.4%, and 44.0% from Wave 2 to Wave 3.

Recreational gamblers were the most stable group. 70.2% of recreational gamblers remained in this category throughout the three waves. The next most stable group was non-gamblers. 48.1% of non-gamblers remained non-gamblers across all three waves. 32.8% of problem/pathological gamblers at Wave 1 remained problem/pathological gamblers across the three waves. The least stable group was at-risk gamblers. Only 20.4% at Wave 1 remained at-risk across all three waves. Few gamblers transitioned to non-gambling status by Wave 3.

Who is it intended for?

The report is intended for governments to assess the potential impacts of expanding legalized gambling. Future research could identify risk and protective factors for transitioning to problem and non-problem gambling status. Governments could use this report to develop prevention and treatment programs. Treatment providers could consider offering controlled gambling as a treatment goal instead of abstinence.

About the researchers

Alissa Mazar, Rachel A. Volberg, Edward J. Stanek, and **Martha Zorn** are associated with the University of Massachusetts Amherst School of Public Health and Health Sciences in Amherst, MA, USA. **Robert J. Williams** is associated with the Faculty of Health Sciences at the University of Lethbridge in Lethbridge, AB, Canada. Questions about this study can be sent to Dr. Volberg at volberg@schoolph.umass.edu.

Citation

Mazar, A., Volberg, R. A., Williams, R. J., Stanek, E. J., & Zorn, M. (2019). *The MA Gambling Impact Cohort: Analyses Across Three Waves*. Retrieved from the University of Massachusetts Amherst School of Public Health and Health Sciences:

https://www.umass.edu/seigma/sites/default/files/MAGIC%20Wave%203%20Report_Final_2019-09-12.pdf

Study disclosures

This study was funded by the Massachusetts Gaming Commission under ISA MGC10500001UMS15A.

Gambling Research Exchange (GREO)

Gambling Research Exchange (GREO) has partnered with the Knowledge Mobilization Unit at York University to produce Research Snapshots. GREO is an independent knowledge translation and exchange organization that aims to eliminate harm from gambling. Our goal is to support evidence-informed decision making in responsible gambling and policies to reduce harm from gambling. Learn more about GREO by visiting greo.ca or emailing info@greo.ca.

