

UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

# Predictors of Gambling & Problem Gambling in Massachusetts

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## Overview

- Baseline General Population Survey (BGPS) completed in 2013/2014
  - Descriptive report published in 2015, updated 2017
- Team completed 4 deeper analyses of BGPS data
- Purpose is to identify predictors of gambling & problem gambling in MA
- Utility
  - Inform development of PG prevention, intervention, treatment initiatives
  - Inform cohort (MAGIC) study

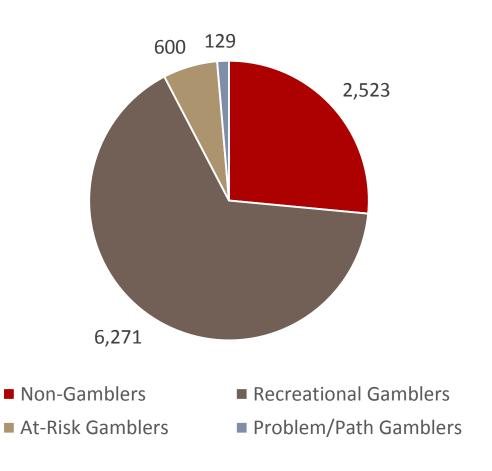


## Baseline General Population Survey

- Sample drawn from a list of addresses
- Respondents could complete online, on paper, or by telephone
- Data collected from Sept. 2013 May 2014
- N=9,578 respondents
  - Respondents classified by Gambling Participation and PPGM

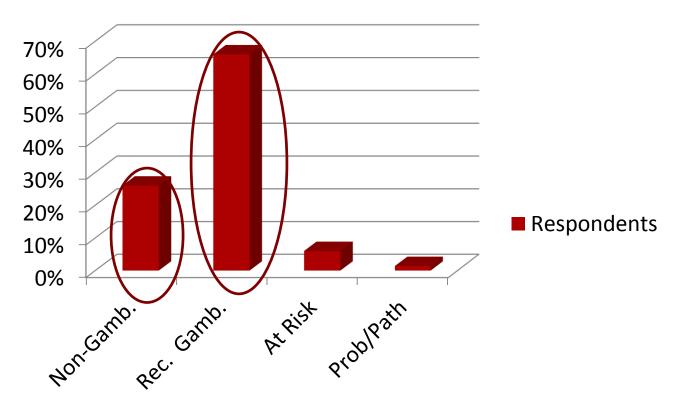


# Gambling Groups in MA





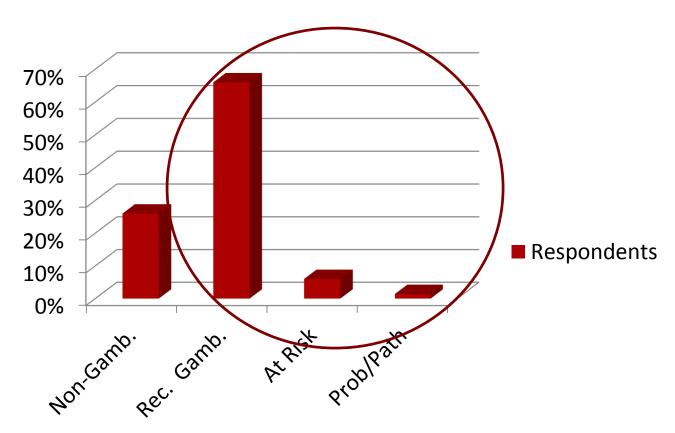
# 1<sup>st</sup> Analysis



**Gambling Participation** 



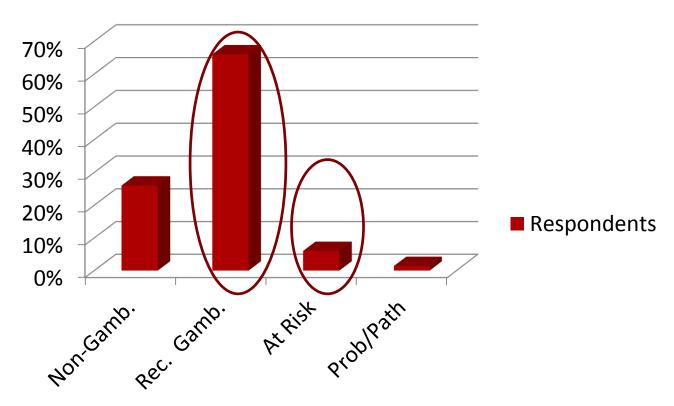
# 2<sup>nd</sup> Analysis



**Gambling Participation** 



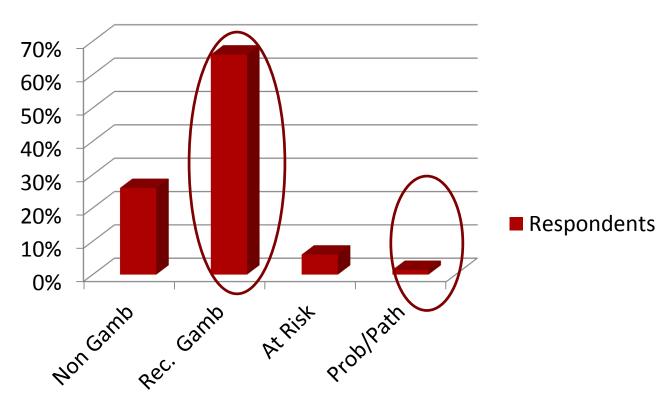
# 3<sup>rd</sup> Analysis



**Gambling Participation** 



## 4<sup>th</sup> Analysis



**Gambling Participation** 



# Characteristics Included in Multivariate Models

## Demographic Factors

Gender, Age , Race/ethnicity, Country of birth, Marital status, Education,
 Employment, HH income, Military service, MA region of residence

## Health-related Factors

General health, Stress, Mental health, Tobacco, Alcohol, Binge Drinking,
 Illicit drug use, Problems with drugs/alcohol, Behavioral addictions,
 Childhood happiness, Extreme sports

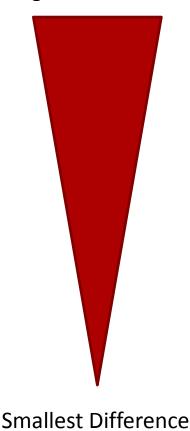
## Gambling-related Factors

- Involvement of friends/family in gambling
- Past-year participation in 10 gambling formats



# Characteristics Distinguishing Non-Gamblers from Recreational Gamblers

### Largest Difference



#### Characteristic

Have a lower portion of friends and family that are regular gamblers

Not use alcohol

Higher educational attainment

Be a student, homemaker, disabled, or retired

Be either 18-34 or 65+

Be born outside the United States

Not binge drink

Have lower household income

Not use tobacco

Have less happy childhood

Not have served in the military

Be non-White

Not have problems with drugs or alcohol

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# Characteristics Contributing to Higher Gambling Involvement

**Largest Difference** 



#### Characteristic

Have a greater portion of friends and family that are regular gamblers

Have lower educational attainment

Be male

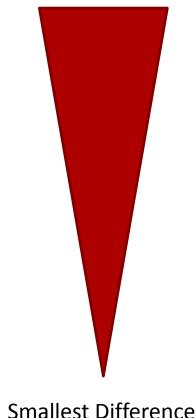
Binge drink

Have poorer health status

Use tobacco

## Characteristics Distinguishing At-Risk Gamblers from Recreational Gamblers

## Largest Difference



#### Characteristic

Be a casino gambler

Have a greater portion of friends and family that are regular gamblers

Play instant lottery games

Play daily lottery games

Be male

Be an online gambler

Be born outside the United States

Participate in private betting

Have lower educational attainment

Play bingo

Not purchase raffle tickets

Have lower HH income

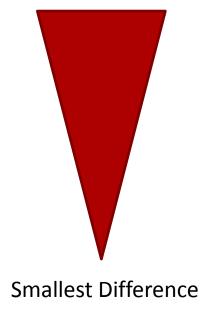
Have mental health problems

Have no alcohol use in past 30 days

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## Distinguishing At-Risk from Recreational Gamblers Controlled for Number of Gambling Formats

### **Largest Difference**



#### Characteristic

Number of gambling formats engaged in

Have a greater portion of friends and family that are regular gamblers

Not purchase raffle tickets

Be born outside the United States

Be a casino gambler

Have lower educational attainment

Be male

Have lower HH income

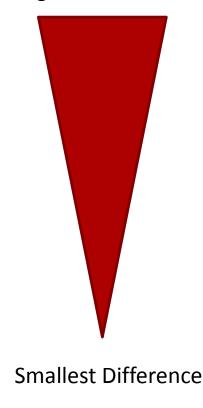
Have mental health problems

Have no alcohol use in past 30 days



# Characteristics Distinguishing Problem/Pathological Gamblers from Recreational Gamblers

### **Largest Difference**



#### Characteristic

Play daily lottery games

Have a greater portion of friends and family that are regular gamblers

Be Black

Be a casino gambler

Be male

Be an online gambler

Play instant lottery games

Have behavioral addictions (overeating, sex, pornography, shopping, exercise)

Have lower educational attainment

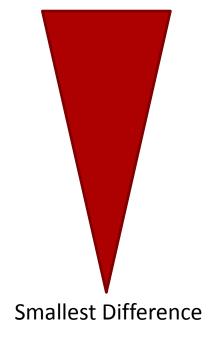
Be born outside the United States

Have less happy childhood



## Distinguishing Problem/Path from Recreational Gamblers Controlled for Number of Gambling Formats

## Largest Difference



#### Characteristic

Number of gambling formats engaged in

Be Black

Have a greater portion of friends and family that are regular gamblers

Not purchase raffle tickets

Be born outside the United States

Have lower educational attainment

Have behavioral addictions (overeating, sex, pornography, shopping, exercise)

Have less happy childhood

Have poorer health status

Participate in private betting



# Summary of Multivariate Predictors

	Non-Gambler	Higher Gambling Involvement	At-Risk Gambler	Problem and Pathological Gambler
Gender		Male	Male	Male
Age	18-34 or 65+			
Race/Ethnicity	Non-White			Black
Born in United States	No		No	No
Marital Status				
Educational Attainment	Higher	Lower	Lower	Lower
Employment	Student, Homemaker, Disabled, or Retired			
Household Income	Lower		Lower	
Military Service	No			
Region of Massachusetts				



# Summary of Multivariate Predictors

	Non-Gambler	Higher Gambling Involvement	At-Risk Gambler	Problem and Pathological Gambler
Health Status		Poorer		
Extreme Sports				
Stress Level				
Tobacco Use	No	Yes		
Alcohol Use	No		No	
Binge Drinking	No	Yes		
Illicit Drug Use				
Drug or Alcohol Problems	No			
Behavioral Addictions				Yes
Mental Health Problems			Yes	
Childhood Unhappiness	Higher			Higher

# Summary of Multivariate Predictors

	Non-Gambler	Higher Gambling Involvement	At-Risk Gambler	Problem and Pathological Gambler
Friend & Family Gambling	Fewer	More	More	More
Traditional Lottery				
Daily Lottery Games			Yes	Yes
Instant Lottery Games			Yes	Yes
Raffles			No	
Casino Gambling			Yes	Yes
Bingo			Yes	
Horse Racing				
Sports Betting				
Private Gambling			Yes	
Online Gambling			Yes	Yes

Shaded cells indicate the strongest individual predictor in each analysis.



# Implications for Prevention

- Importance of targeting excessive gambling levels rather than gambling in general
- The social network of gamblers is a particularly important target for prevention
- Certain demographic groups merit special attention
- Certain forms of gambling also merit attention as they pose an elevated risk to MA residents



## For more information

Williams, RJ, Zorn, M, Volberg, RA, Stanek, EJ, Freeman, J, Maziya, N, Naveed, M, Zhang, Y, & Pekow, PS. (2017). *Gambling and Problem Gambling in Massachusetts: In-Depth Analysis of Predictors*. Amherst, MA: School of Public Health & Health Sciences, University of Massachusetts Amherst

A PDF of this report can be downloaded at www.umass.edu/seigma

