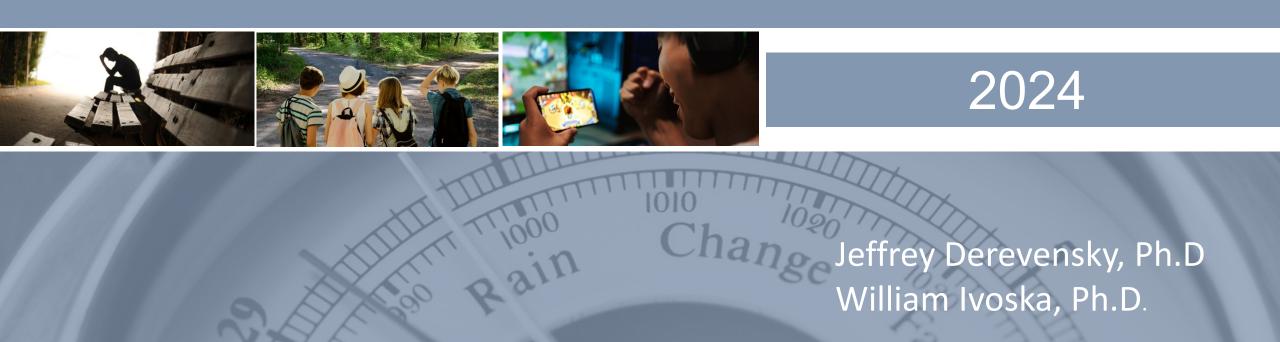
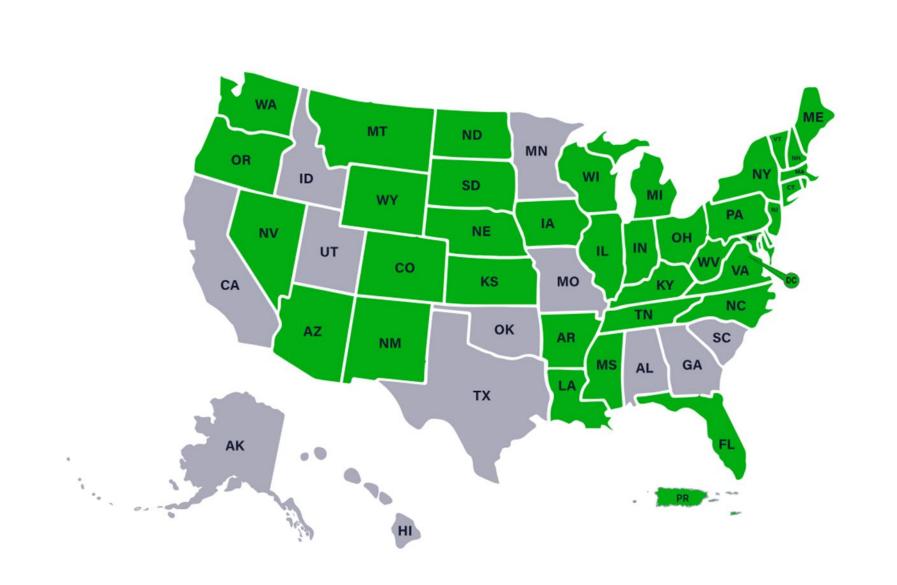
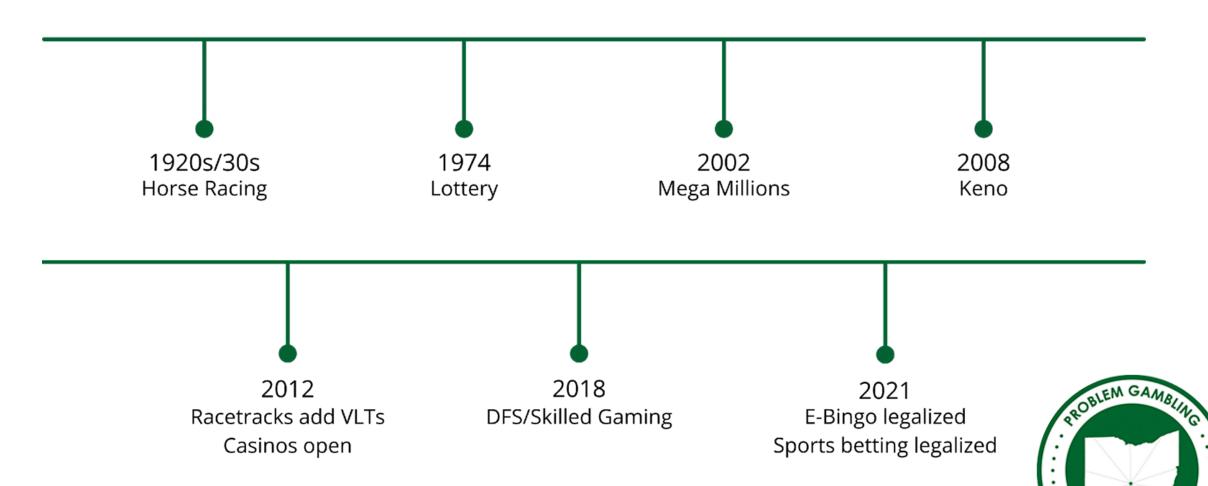
Changing Youth Gambling Behaviors in Light of Expanded Sports Wagering



States with Sports Wagering



Timeline of Legalized Gambling in Ohio

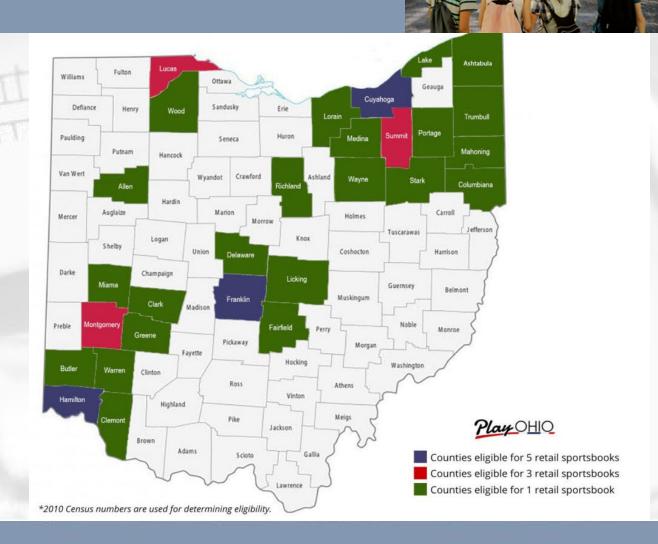


VETWORK OF OHI



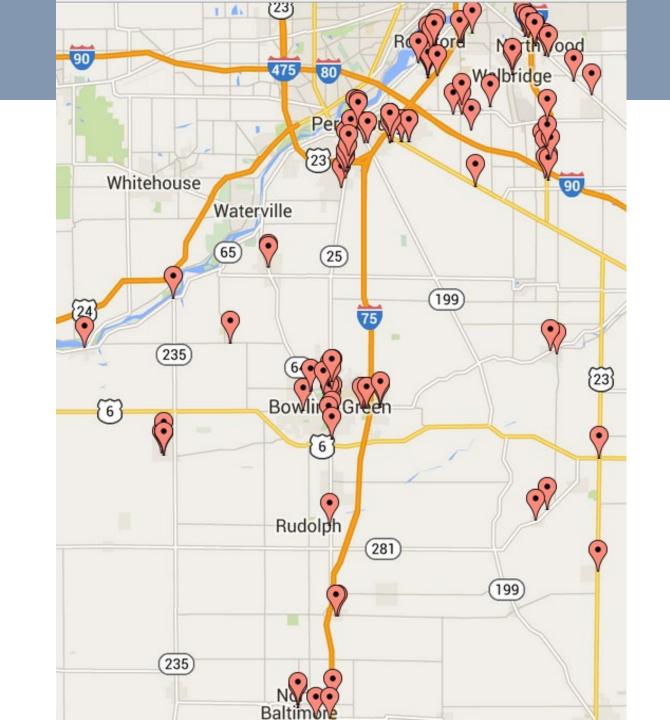
Legalization of Sports Betting in Ohio

- Sports Betting became legal in January 2023; age 21+
- \$7.65 billion wagered on sports betting initial year
- 20 online/mobile sports betting operators
- 16 in-person retail operators
- DraftKings, BetMGM, Caesars, FanDuel, BetRivers, and others
 - (97% revenues from on-line apps)
- Sports gambling problems #2 to Ohio Problem Gambling Helpline



In Wood County Ohio:

- Hollywood Casino (~\$22m in revenues per month)
- 120 Lottery Agents
- Increasing Numbers of Gambling Licenses
 - Type A for Hollywood
 Casino + sportsbooks
 operating online & mobile
 apps
 - Type B for brick-andmortar sportsbooks
 - Type C for betting terminals in restaurants, bars, etc.



Survey: A Brief Overview



Five people got us started:

- 1. Juvenile Court Judge
- 2. County Superintendent
- 3. Congresswoman
- 4. County ADAMHS Board leadership
- 5. A willing ABD doctoral student

Survey Construction – 2004 -2024



- 1. ATOD questions from MTF
- 2. Perceptions about ATOD/gambling (peers, parents, harm) DFC
- 3. Bullying Victimization CDC
- 4. Mental Health Youth Problem Severity Scales PSS
- 5. Suicide ideation and attempts CDC
- 6. Adverse Childhood Experiences 10 questions
- 7. Gambling Activities & Disordered Gambling Nods-Clip or Bags
- 8. Gaming Activity & Disordered Gaming IGDS-SF
- 9. Risky Loot Box behaviors RLI Inventory
- 10. Questions of local interest

Survey Metrics



- Approximately 10,000 students surveyed every 2 years (grades 5 to 12) N=8,981 (2024)
 - White (77.8%); Black or African American (3.6%); Latino (5.4%); Multicultural (5.1%); Asian (2.6%); other (5.5% combines choice of Pacific Islander, Middle Eastern, Native American, and Other).

2. Students Excluded

- Use of a fake drug;
- <70 % survey completed
- Exaggeration (all drugs, all the time) or inconsistent.
- 3.5 4.0% typically excluded

3. Item Reliability

- Problem severity scale (Cronbach $\alpha = 0.928$)
- ACES (Cronbach $\alpha = 0.78$)
- Risky Loot Box Inventory (Cronbach $\alpha = 0.86$).
- Substance use and attitudinal questions (Spearman Brown and Guttman split half coefficients averaged around .80).

Wood County Ohio Prevention & Intervention



Use of Survey Data led to:

- 1. Over \$13 million in grants
- 2. Funding:
 - Prevention Coalition and FT staff
 - 10 in-school Prevention Specialists and
 - 10 Clinical Counselors

3. Community Awareness:

- Creation of Addiction Task Force
- BOT presentations,
- Faculty/staff in-service workshops, etc

4. Publications



Celebrating 20 Years of Prevention Education



	Substance/12 th Grade	2004 Rate	2024 Rate	% Decrease
	Alcohol	70.5	30.2	- 43
	Marijuana	35.5	14.8	- 42
	Cigarettes (30 day)	27.2	1.6	- 93
	Cigs / Nicotine Vape	27.2	8.1	- 70
ş	Painkillers	22.6	1.0	- 96
	Cocaine	6.6	0.6	- 91
	Barbiturates	12.1	1.5	- 88
	Methylphenidate	10.4	0.7	- 93
	Ecstasy/MDMA	3.5	0.2	- 94
	Inhalants	3.8	0.3	- 92
	LSD	5.6	0.9	- 84

But NIDA & NIH notes reported a dramatic rise in overdose deaths from 2019 to 2022. Taken together, these data suggest that while drug use is becoming less common among teens, it is becoming more dangerous.

Adverse Childhood Experiences (ACEs)



ABUSE

NEGLECT

HOUSEHOLD DYSFUNCTION



Physical



Physical



Mental Illness



Incarcerated Relative



Emotional

Sexual



Emotional



Mother treated violently



Substance Abuse

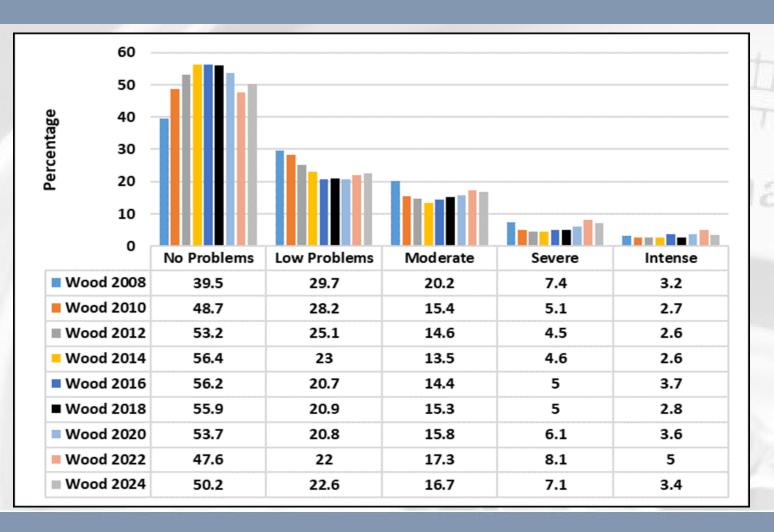


Divorce

ACEs Questions	Wood County Grades 7-12 Combined			
Parent/Household member experienced:	2018	2020	2022	2024
Mental Illness	19.6	22.1	26.6	26.4
Substance Abuse	15.7	15.8	17.7	18.2
Incarcerated Relative	17.1	18.2	19.1	18.3
Separation or Divorce	34.6	35.4	34.7	34.8
Parents/Adults treated violently	4.4	5	6.1	8.9
Physical abuse	5.5	6.2	6.6	5.2
Emotional abuse	19.1	20	22.8	19.3
Sexual abuse	4.4	4.5	6.1	4.4
Physical neglect	4.7	5	5.9	4.2
Emotional neglect	16.8	18.9	21.7	14.7

Youth Mental Health





Severe & Intense:

2018 = 7.8%

2020 = 9.7%

2022 = 13.1%

2024 = 10.5%

3 months before shutdown

3 months after reopening (reflects shutdown)

2 years after in person school

Environment conducive to youth gambling/gaming



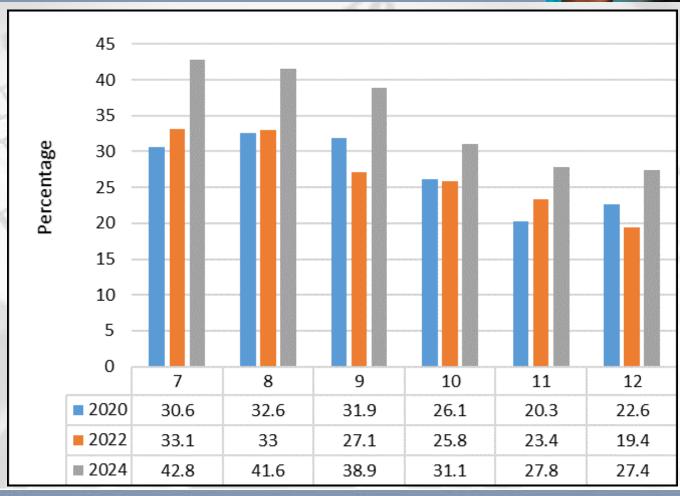
- 1. Higher early initiation of online gaming and gambling
- 2. Merging of gambling and gaming (loot boxes/mystery boxes)
- 3. Increased advertising
- 4. Increased use of smartphones and other electronic devices
- 5. Increased use of social media
- 6. Social acceptability, easy access and availability
- 7. No school policies or procedures related to gaming and gambling
- 8. Lack of community involvement and parental awareness re: gambling and to a lesser extent gaming

Adolescent 'Gaming'



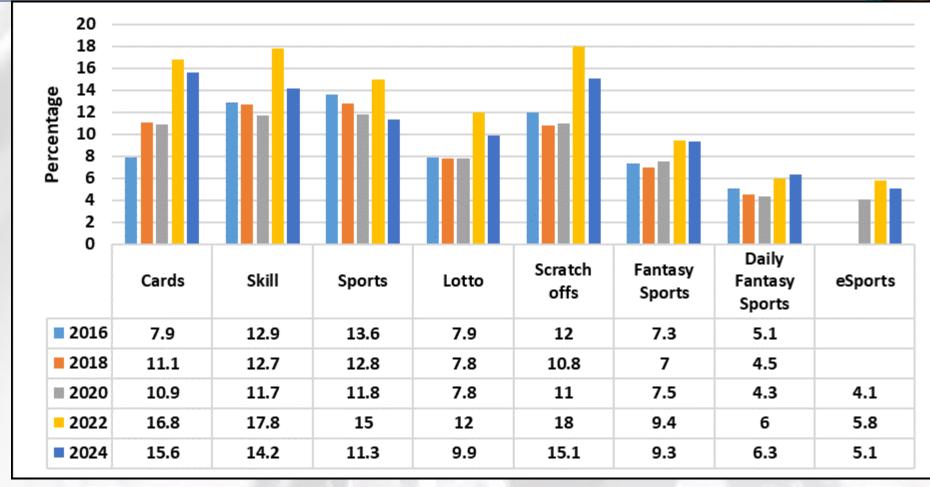
'Daily' Gaming Two or More Hours per Day

Gaming activity is any gaming-related activity that has been played either from a computer/lap-top or from a gaming console or any other kind of device (phone, tablet) on or offline



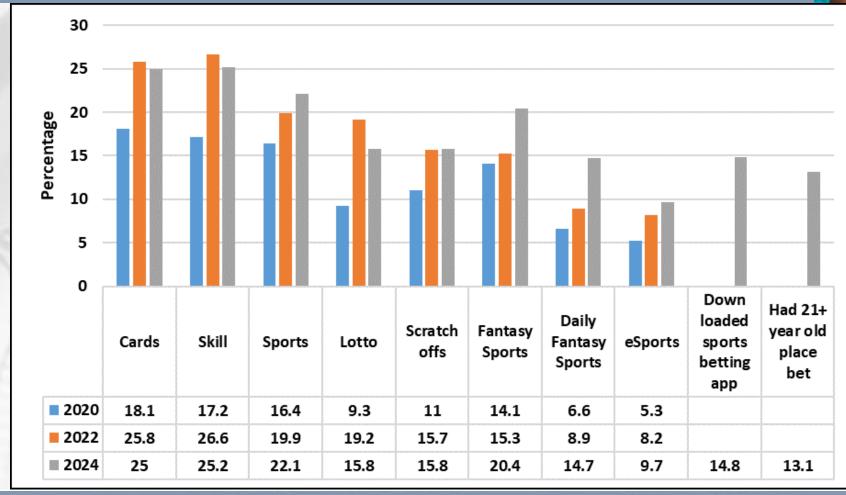
Adolescent Gambling 7th-12th grade combined





Adolescent Gambling - 11th & 12th grade males





Adolescent Gambling within the Game



Have you ever spent money on Mystery boxes in a game?

Currency: 'How often have you done the following gaming activities:

"spent money to get a mystery box in a game" "spent money on coins (apex or jewels, etc.)"

buy loot boxes	(2022)/m	ystery box	(2024)
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Grades 7-12	Daily	Weekly	Monthly	Few x Year	Never
2022	2.3	1.5	4.1	10.4	81.6
2024	5.4	2.5	7.3	23.2	61.6
Use Currency 24	6.5	3.4	11.4	38.1	40.6

1010	Percentage Buying		Use
Chan	Mystery Boxes		Currency
Grade in School	2022	2024	2024
7	19	39.8	65.2
8	17	41.2	64.8
9	19	40	63.7
10	19	35.9	55.5
11	19	35.3	50.6
12	17	36.7	47.1

Adolescent Gambling within the Game



Risky Loot Box Inventory (RLI) Indicators

Play games longer than I intended to, so I can earn mystery boxes (control)

Bought more mystery boxes after failing to get valuable items (chasing losses)

The thrill of opening mystery boxes has encouraged me to buy more (impulse, emotional regulation)

han logo	Scored Positive on RLI among males	
Grade in School	2022	2024
7	2.2	6.7
8	3.1	6.6
9	2.7	7.1
10	5.1	6.6
11	4.4	7.8
12	3.2	6.4

Gambling Problems: Brief Adolescent Gambling Screen (Stinchfield et al., 2017)

3 questions

- 1. How often have you skipped hanging out with friends who do not gamble/bet to hang out with friends who do gamble/bet?
- 2. How often have you felt that you might have a problem with gambling/betting?
- 3. How often have you hidden your gambling/betting from your parents, other family members or teachers?

Likert scale 0 (never); 1 (sometimes); 2 (many times); 3 (all the time). 0-9 4+ is indicative of problem gambling

Disordered Gambling Rates in Wood County, Ohio



Prevalence	Prevalence	Prevalence	Prevalence	Prevalence
2016	2018	2020	2022	2024*
3.0%	3.0%	2.7%	6.7%	

^{*} Change from NODS-CLiP to Brief Adolescent Gambling Screen (Stinchfield et al., 2017)

Males 2024	Females 2024
3.0%	1.1%

Bottom line... youth gambling



- 1. Gambling prevalence has remained relatively constant
- 2. Gaming and purchasing of loot boxes/mystery boxes has dramatically increased
- 3. There is ample evidence of the relationship between loot box purchasing and gambling & problem gambling
- 4. Among older (grades 11 & 12) male adolescents post introduction of legalized sports wagering in Ohio- sports wagering, fantasy sports wagering and daily fantasy sports wagering has significantly increased
- 5. 14.8% of male adolescents (grades 11 & 12) report having downloaded a sports betting app
- 6. 13.1% of male adolescents (grades 11 & 12) report having had a 21 yearold place a sports wager for them

Bottom line... youth sports gambling



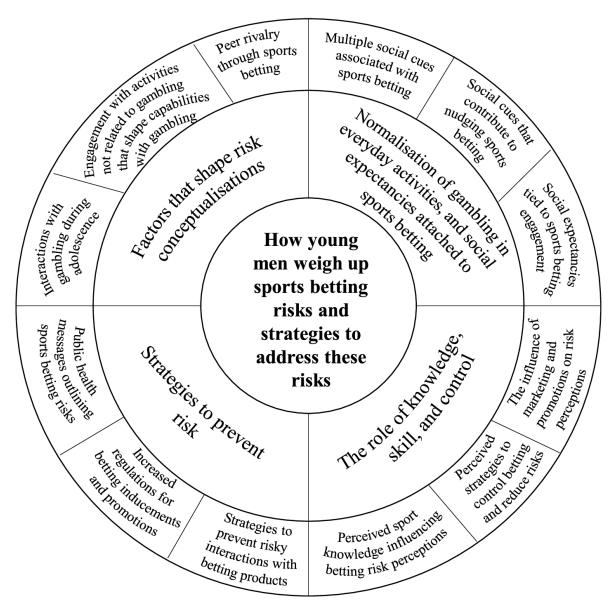
- 7. As mental health problems increase so does gambling in general, betting on fantasy sports, e-sports wagering, betting money on collegiate/professional/amateur sports, and having an older person (age 21+) place a wager on sports for older males (grades 11 & 12)
- 8. For the entire sample (grades 7-12; males & females), as mental health issues increased in severity so did betting on e-sports, fantasy sports, collegiate/professional/amateur sports, and having an older person (age 21+) place a sports wager for them

Other notable findings...



- Sports wagering problems among adults is the second most often cited problem by callers to the Ohio Helpline
- 2. States with sports wagering have witnessed a significant increase in calls to the Helpline
- Problem/disordered gambling amongst adolescents in Ohio has not risen YET. This could significantly increase the prevalence of young adults with a gambling disorder
- 4. Prevention of adolescent problem gambling is typically neglected in our schools, by parents and by mental health professionals

Young men's perceptions about the risks associated with sports betting: a critical qualitative inquiry



Nyemcsok, C., Pitt, H., Kremer, P. et al. Young men's perceptions about the risks associated with sports betting: a critical qualitative inquiry. *BMC Public Health* 22, 867 (2022)