



April 9th, 2014

New York State Gaming Commission Forum on Problem
Gambling and Commercial Casino Development

Expanded Gambling, Responsible Gaming & Addiction

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Topics to Cover

- Prevalence and Etiology of Gambling Disorder
- Impact of Gambling Expansion on Gambling-Related Problems
- Responsible Gaming Programs: Best Practices
- Current Research Gaps and Future Directions

“Objects” of Addiction

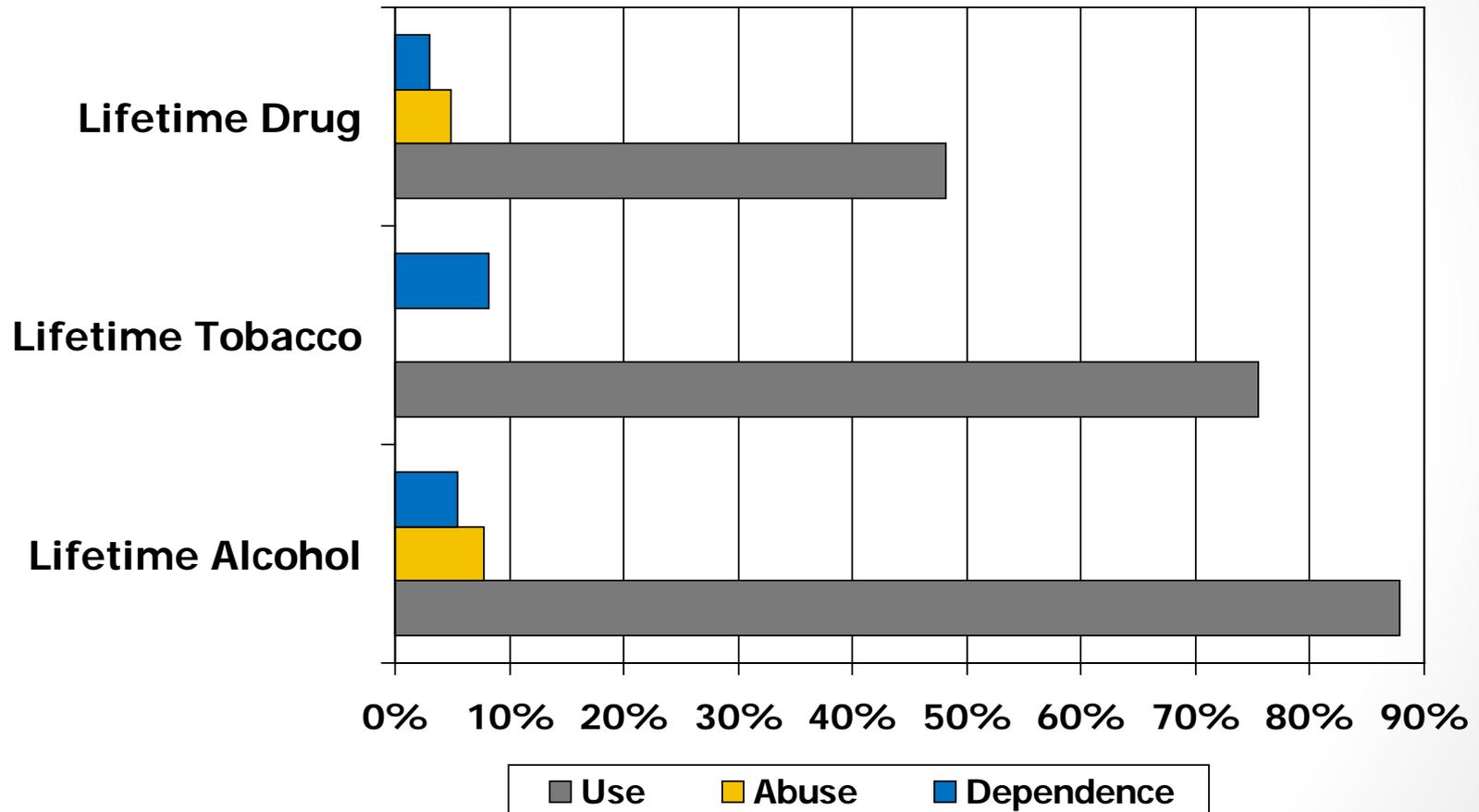
- Addiction is often viewed as a property of the objects themselves.
 - Cigarettes
 - Alcohol
 - Drugs
 - Fast food
 - Halloween candy
 - Oreos?



“Objects” of Addiction – DSM-IV & NIH

- DSM-IV did not use the term “addiction”
 - Substance Use Disorders
 - Alcohol
 - Drugs
 - Impulse Disorders NOC
 - Gambling
- National Institutes of Health
 - National Institute of Drug Abuse
 - National Institute of Alcohol Abuse and Alcoholism

Rates of Substance Use and Substance Use Disorders



- Abuse and dependence rates from National Comorbidity Survey Replication: Kessler et al., 2004, 2005
- Use rates from the 2005 National Survey on Drug Use and Health: SAMHSA, 2007

Comparing the Neurobiology of Drug Taking with Activity Addictions

- With Drug Taking
 - Imposter molecules vie for receptor sites (i.e., proteins on which to bind) with naturally occurring neurotransmitters
- With Activities (e.g., shopping, gambling)
 - Behavior & experience stimulate the activity of naturally occurring molecules (i.e., neurotransmitters)

Emerging Trends

- DSM 5 contains pertinent revisions:
 - Substance-related disorders are now “Substance-related and addictive disorders”
 - Gambling disorders now reside in this category instead of separately
 - Internet gaming disorder and caffeine use disorder did not make the cut but are listed as conditions for which more research is needed.

Another Way of Looking at Addiction: Syndrome Model of Addiction

Shaffer, H., LaPlante, D., LaBrie, R., Kidman, R., Donato, A., Stanton, M. (2004)
Toward a Syndrome Model of addiction: Multiple expressions, common etiology.
Harvard Review of Psychiatry, 12, 367-374.

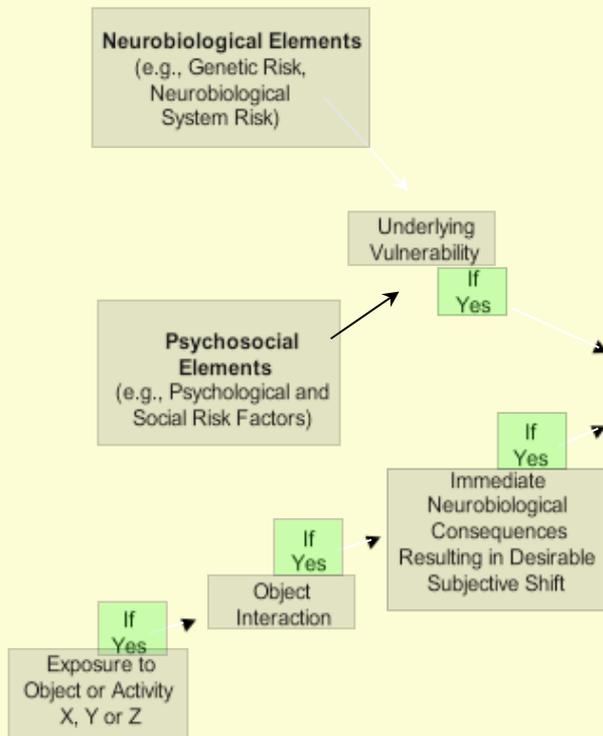
Shaffer, H. J., LaPlante, D. A., & Nelson, S. E. (Eds.). (2012). The APA Addiction Syndrome Handbook (Vol. 1. Foundations, Influences, and Expressions of Addiction). Washington, D.C.: American Psychological Association Press.

Syndromes

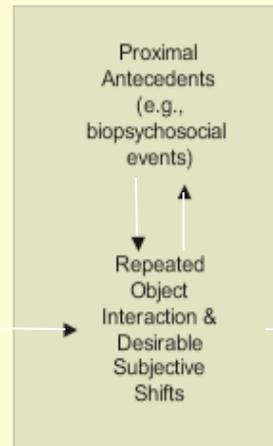
- Variety of related signs & symptoms reflect an underlying disorder
- Not all signs & symptoms are present at all times
- Unique & shared components co-occur
- Distinctive temporal progression

Addiction Syndrome

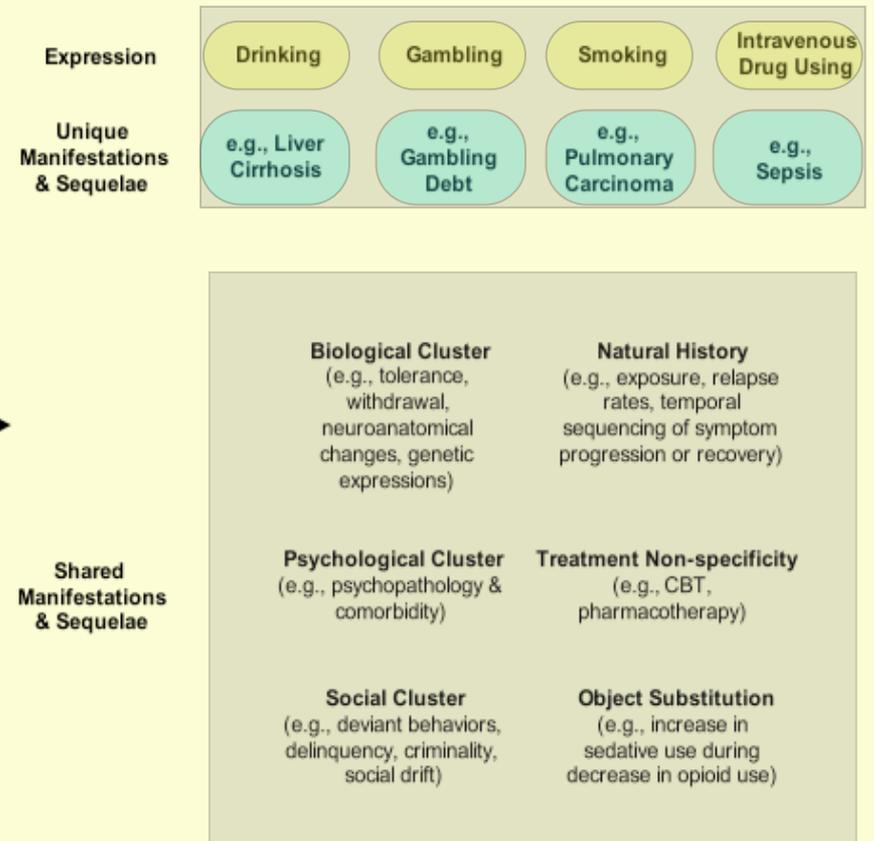
Distal Antecedents of the Addiction Syndrome



Premorbid Addiction Syndrome

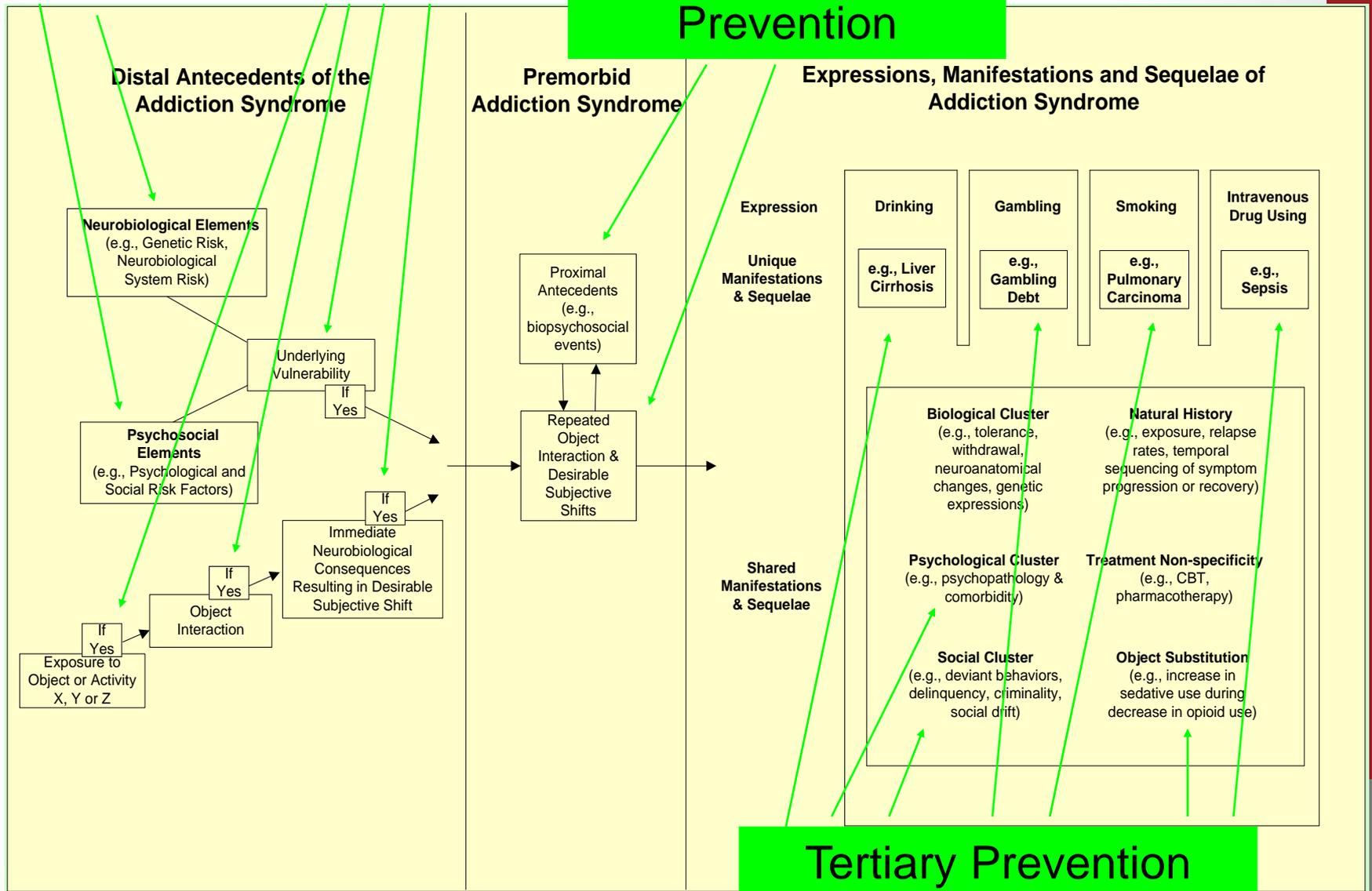


Expressions, Manifestations and Sequelae of Addiction Syndrome



Primary Prevention

Secondary Prevention



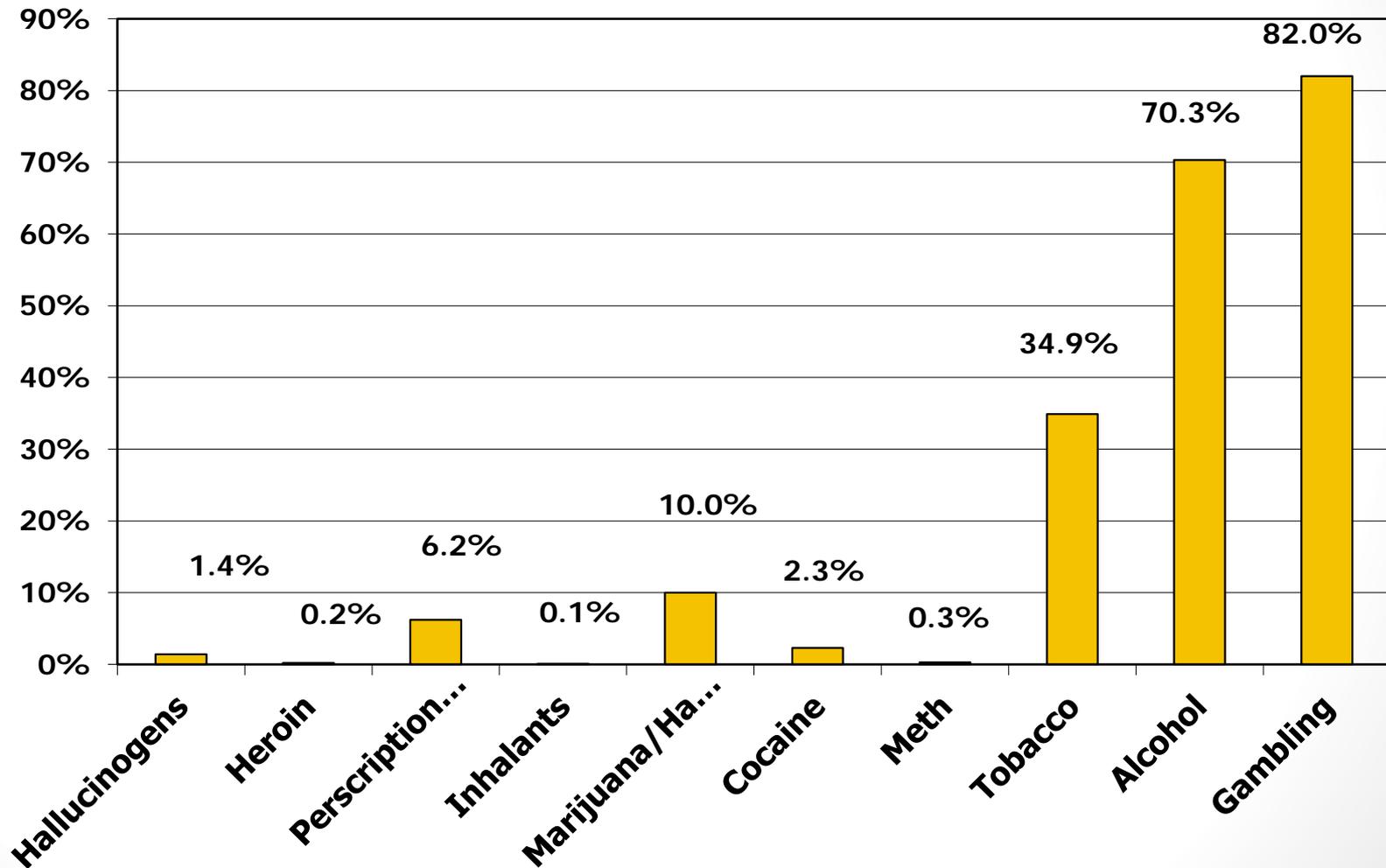
Tertiary Prevention (Treatment)

DSM-5 criteria for disordered gambling

1. Pre-occupied with gambling
2. Unable to cut back or control
3. Irritable or restless when attempts to cut back
4. Risks more money to reach desired level of excitement
5. Gambles to escape problems or depressed mood
6. Chases losses
7. Lies about gambling to family, etc
8. Risks or loses relationships or jobs because of gambling
9. Relies on others for financial needs

Four out of nine
criteria = diagnosis
of disordered
gambling

Past Year Rates of Substance Use and Gambling



Past Year Rates of Gambling Disorder

| Country | Subclinical Problems | Gambling Disorder | Country | Subclinical Problems | Gambling Disorder |
|-----------|----------------------|-------------------|-------------|----------------------|-------------------|
| Austria | 0.4% | 0.7% | Iceland | 1.3% | 0.3% |
| Belgium | 2.4% | 0.8% | Macau | 2.5% | 1.8% |
| Canada | 2.4% | 0.8% | Norway | 0.6% | 0.2% |
| Denmark | 0.3% | 0.1% | Singapore | 1.2% | 1.4% |
| Finland | 2.1% | 1.0% | Switzerland | 0.8% | 0.5% |
| Germany | 0.2% | 0.2% | UK | 1.8% | 0.7% |
| Hong Kong | 1.9% | 1.4% | USA | 2.3% | 0.6% |

Risk Factors for Gambling Disorder

Well-established risk factors for gambling disorder

| | |
|--------------------------------------|---|
| Being young | Thrill seeking / Desire for thrills |
| Being male | Believing in the ability to control random events |
| Being unemployed/having low income | Abusing alcohol or other drugs |
| Having easy access to gambling | Having a criminal history |
| Starting to gambling at an early age | Having other psychiatric/mood disorders |

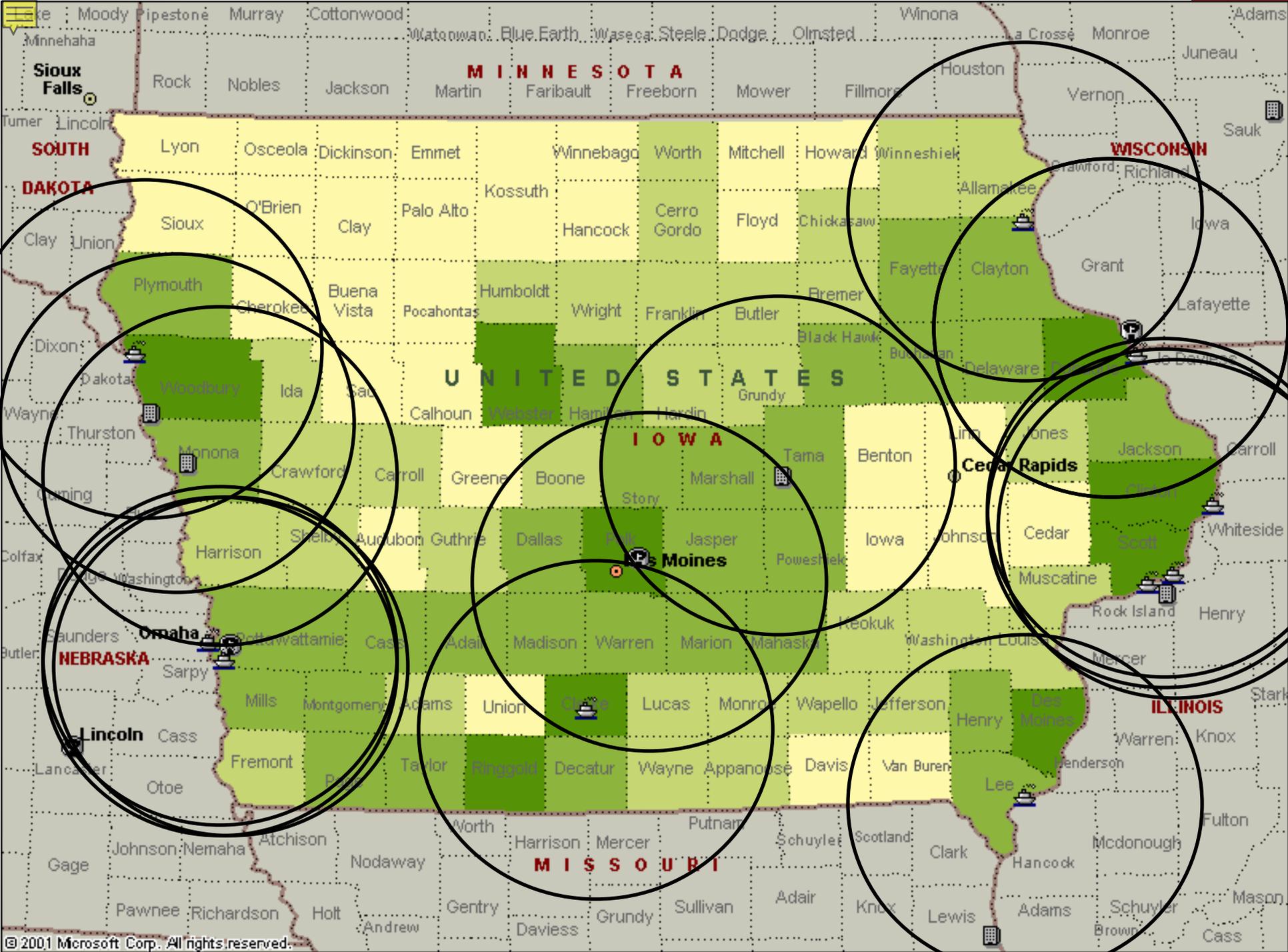
Kessler et al., 2009

- Disordered gamblers had significantly elevated prevalence of mood disorders, anxiety disorders, conduct disorder, and substance use disorders
- 96% of respondents who qualified for disordered gambling also met criteria for at least one other mental health disorder in their lifetime

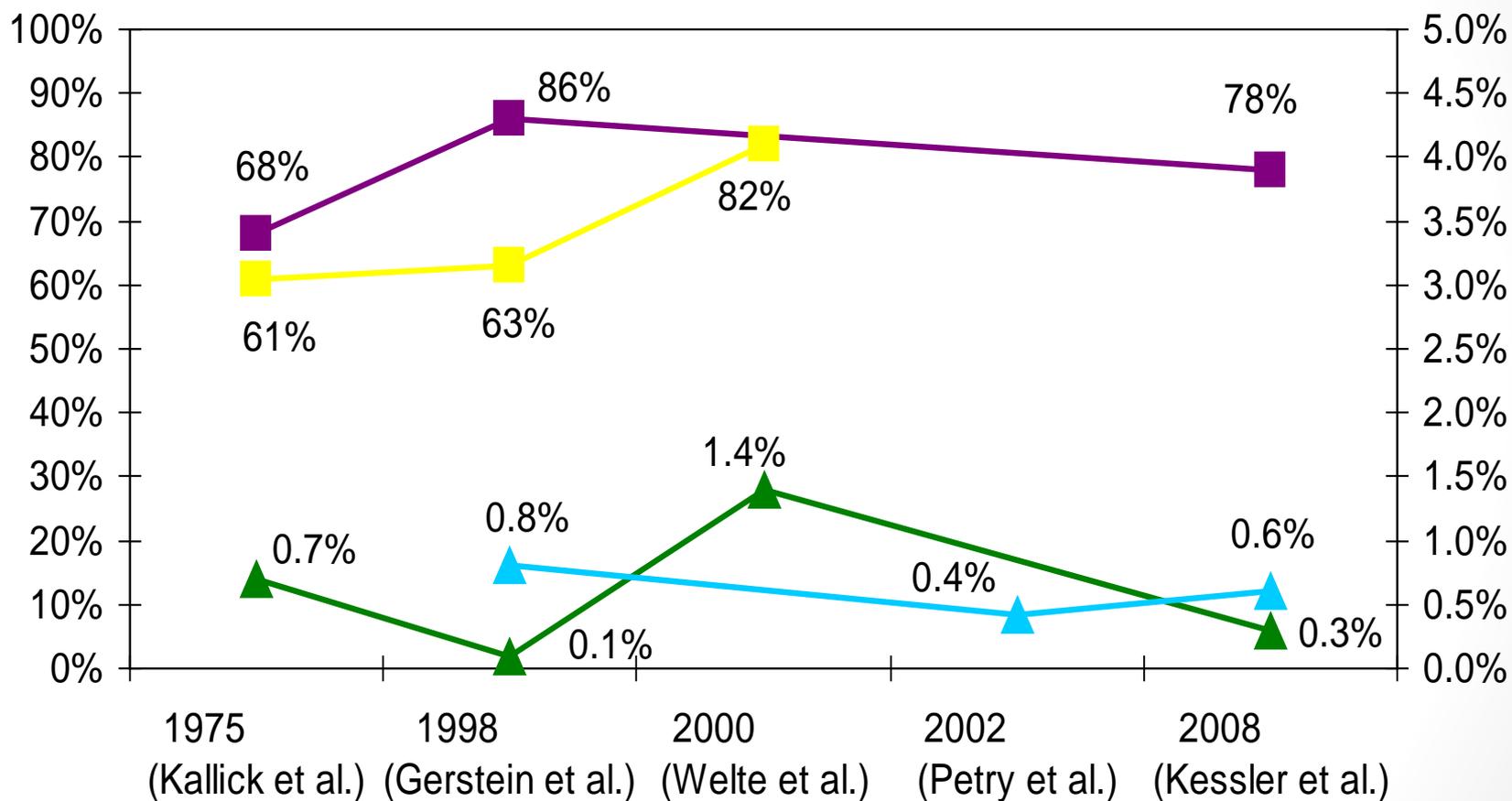
| Disorder class | Prevalence |
|---|------------|
| Substance use disorders (e.g., alcohol dependence) | 76.3% |
| Anxiety disorders (e.g., panic disorder, PTSD) | 60.3% |
| Mood disorders (e.g., depression, bipolar disorder) | 55.6% |
| Impulse-control disorders (e.g., ADHD) | 42.3% |

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Population Prevalence



■ Past Year Gambling

■ Lifetime Gambling

▲ Past Year Disordered Gambling

▲ Lifetime Disordered Gambling

Gambling Impact Study

- Report completed for the State of Florida by Spectrum Gaming Group
- The Division on Addiction provided an assessment of likely social costs associated with expanded gambling.

Spectrum Gaming Group. (2013, October 28). *Gambling Impact Study*. http://www.leg.state.fl.us/GamingStudy/docs/FGIS_Spectrum_28Oct2013.pdf.

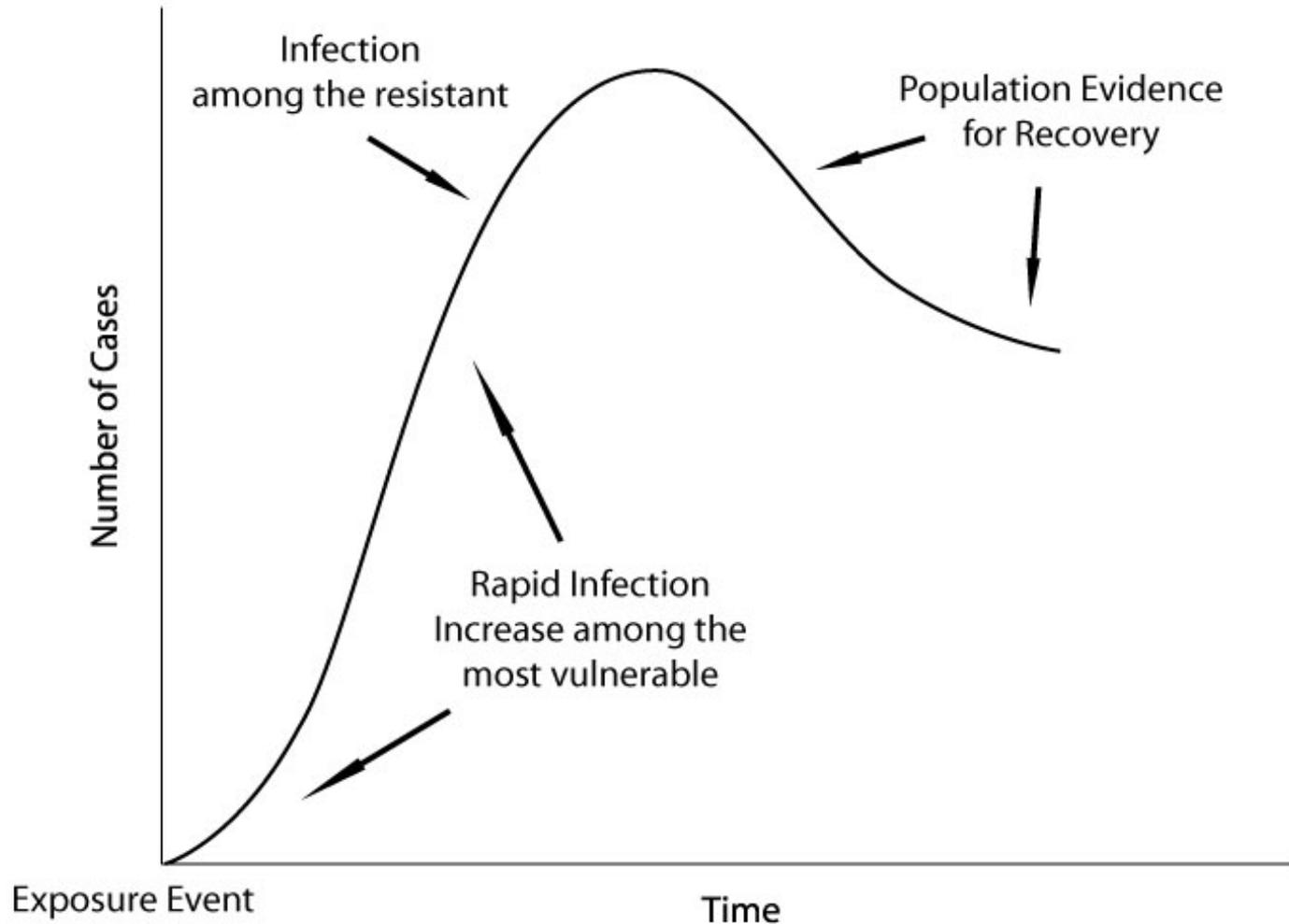
Gambling Impact Study

- Reviewed:
 - Peer review literature: 17 articles
 - Grey literature: 44 reports from 16 states
- Coded studies according to methodological quality
- Examined relationships between expansion and gambling problems

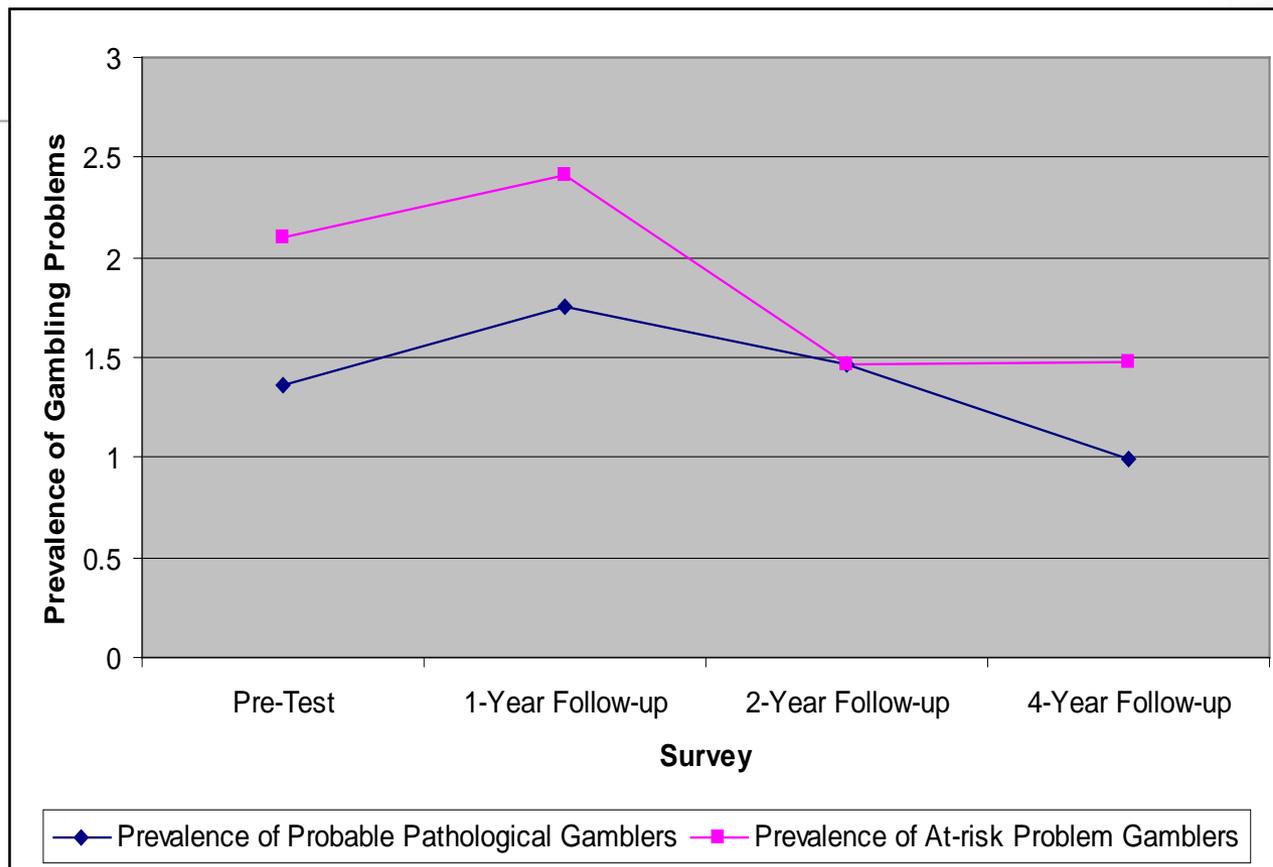
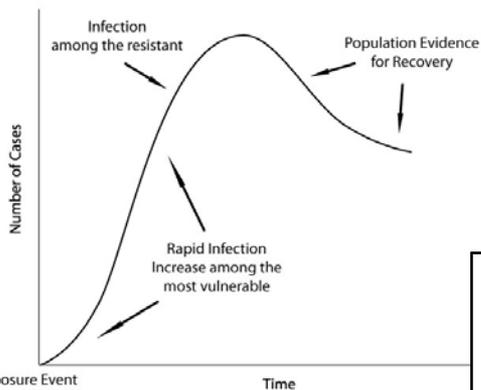
Gambling Impact Study

- Peer review literature findings
 - No conclusive evidence of a relationship between gambling expansion and gambling-related problems
 - Very few high quality studies
- Grey literature findings
 - Small set of studies finding extent of expansion relating positively to gambling problem rates
 - Overall no conclusive evidence of a relationship between gambling expansion and gambling-related problems
 - Very few high quality studies

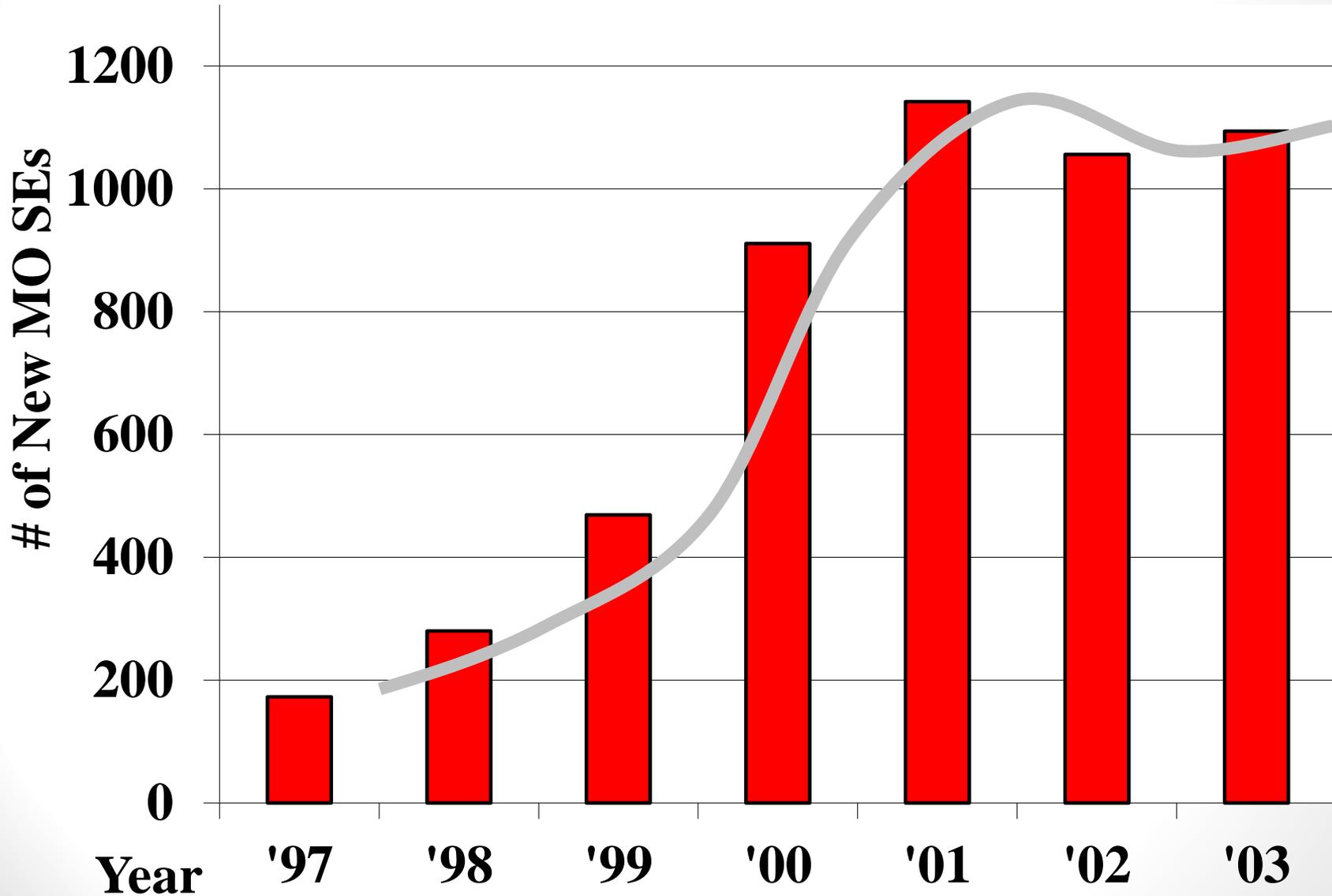
Typical Course of Infection



Rates of Disorder by Time



Self-Excluders Enrolled by Year



Time1

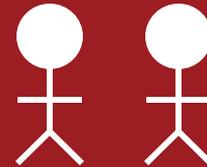
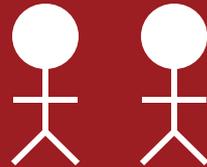
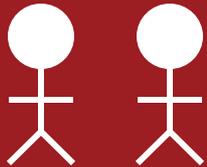
Time2

Time3

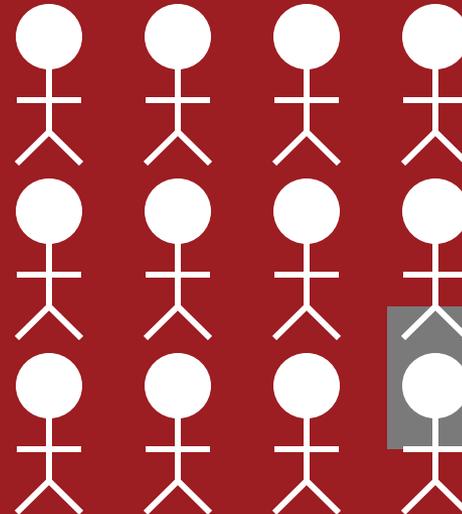
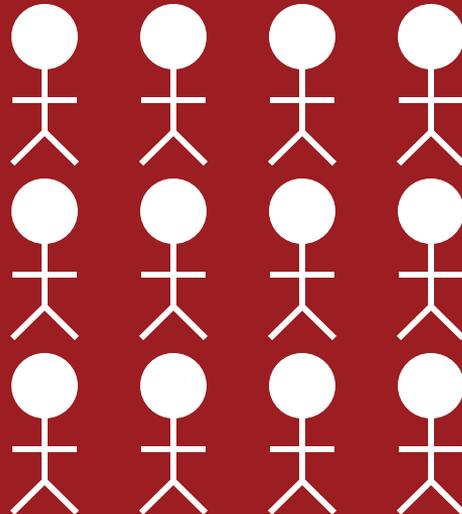
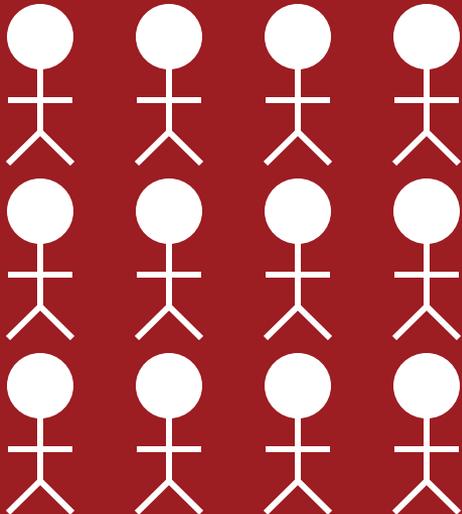
Disorder



Problems



No Problems



Time1

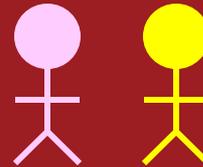
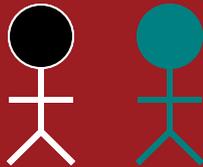
Time2

Time3

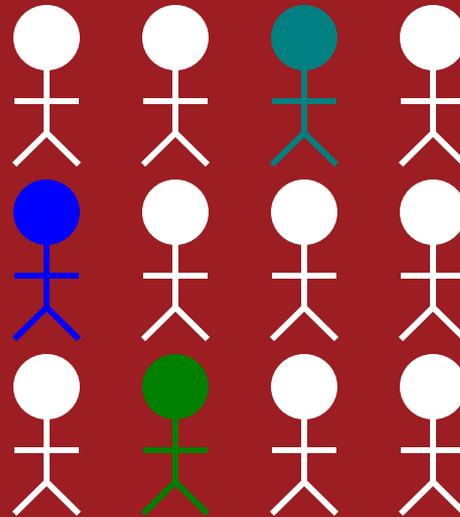
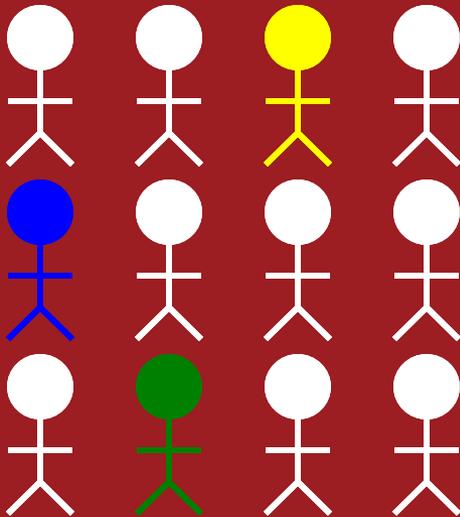
Disorder



Problems



No Problems



Take-home points

- Exposure can increase rates of gambling problems, but adaptation also plays a role.
- Exposure will likely have its greatest effect on those who are already vulnerable to gambling disorder and/or highly involved in other forms of gambling.

Topics to Cover

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- Responsible Gaming Programs: Best Practices
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Responsible Gambling Programs

- Gambling expansion is widespread and ongoing
- In response, key stakeholders have both encouraged and required operators to implement responsible gambling training programs

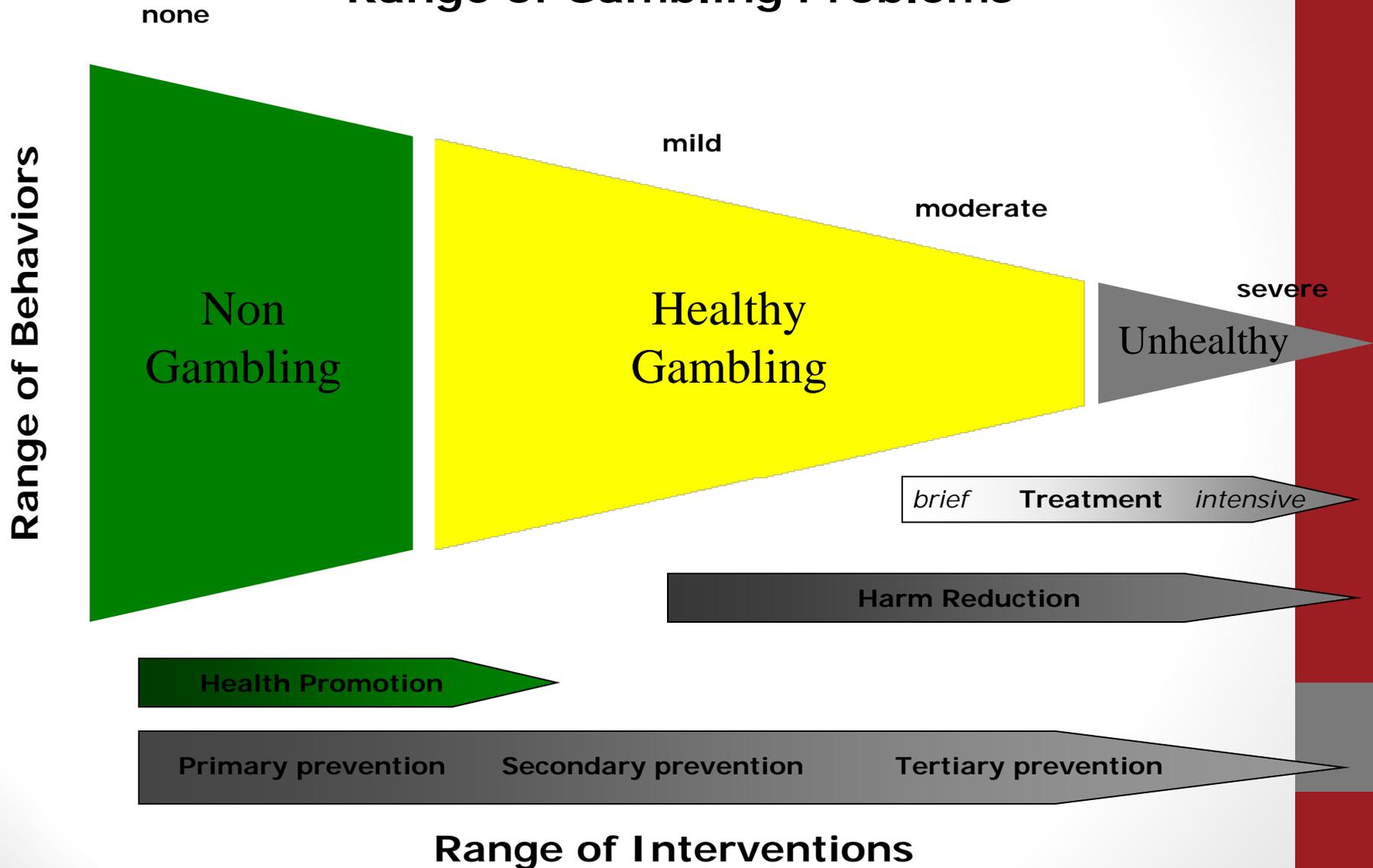


Public Health Framework for Safe Gaming

- What are the goals of a public health framework?
- How does science inform a public health framework?
- How does a public health framework apply to gambling policies?

Public Health Framework

Range of Gambling Problems



Responsible Gaming

The primary objective of a responsible gaming framework is to prevent and reduce harm associated with gambling in general, and excessive gambling in particular, while respecting the rights of individuals who safely engage in recreational gambling

Principles of Responsible Gaming Programs

1. **Commit** to preventing and reducing gambling-related harms
2. **Work collaboratively** with fellow key stakeholders
3. **Identify** common short and long-term **priorities**
4. **Use scientific evidence** to guide policy
5. **Monitor** the **impact** of installed policies

Toward Evidence-based Practices

- Do no harm
- Untested treatments pose significant individual and public health threats



Possible Consequences of Gambling Interventions

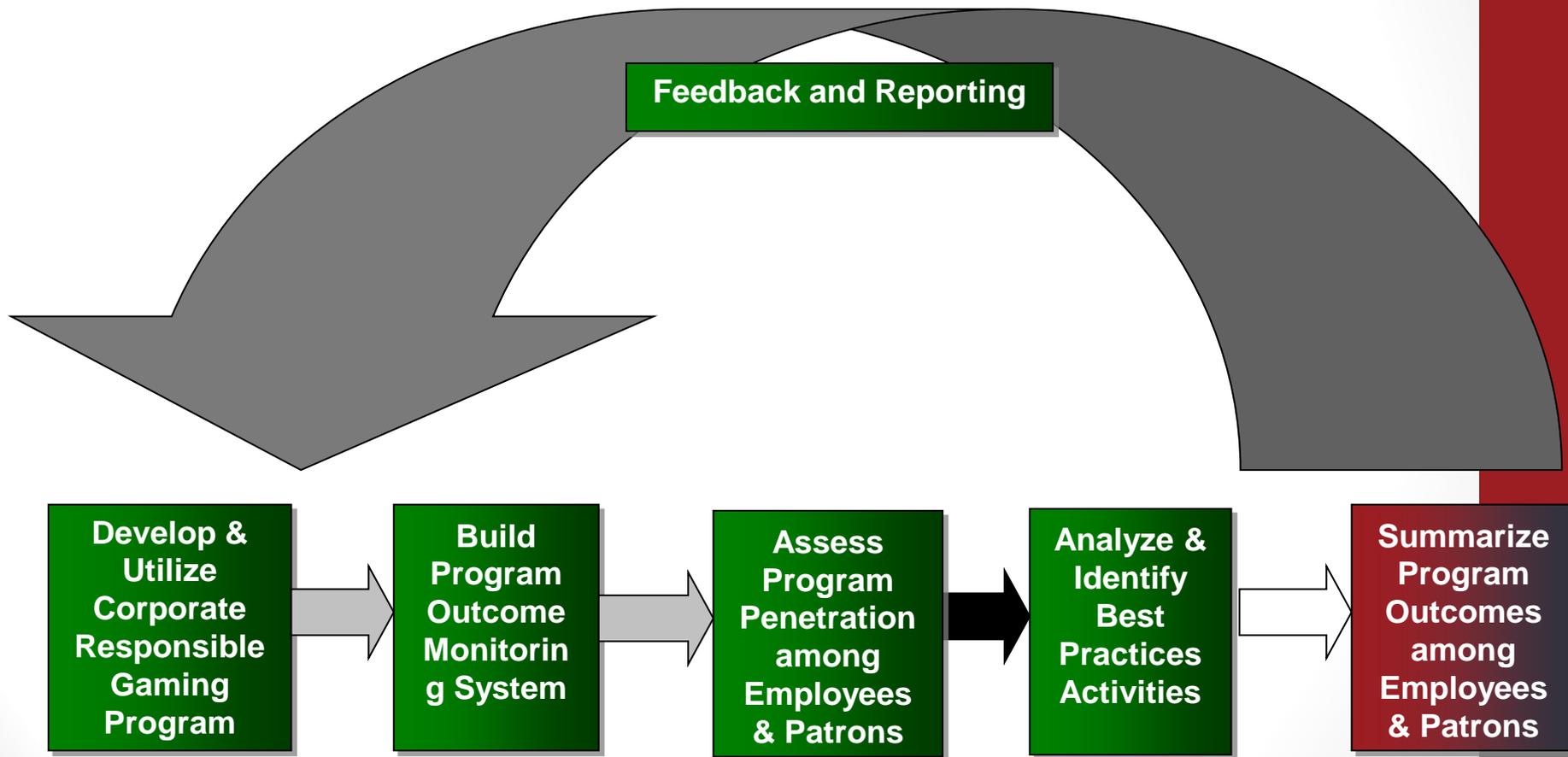
- Decrease gambling related problems
- Increase gambling related problems
- Have no effect on gambling related problems
- Influence gambling related problems indirectly through other factors
- Have unanticipated consequences



Program Evaluation

- Although well intentioned, prevention, intervention, and treatment programs are rarely evaluated
 - Psycinfo yielded just **4** responsible gambling training evaluations in the peer review literature
- Without evaluation, we do not know whether a program's results will be:
 - **Positive**
 - **Negative**
 - **Neutral**

Program Evaluation: Guide to Activities

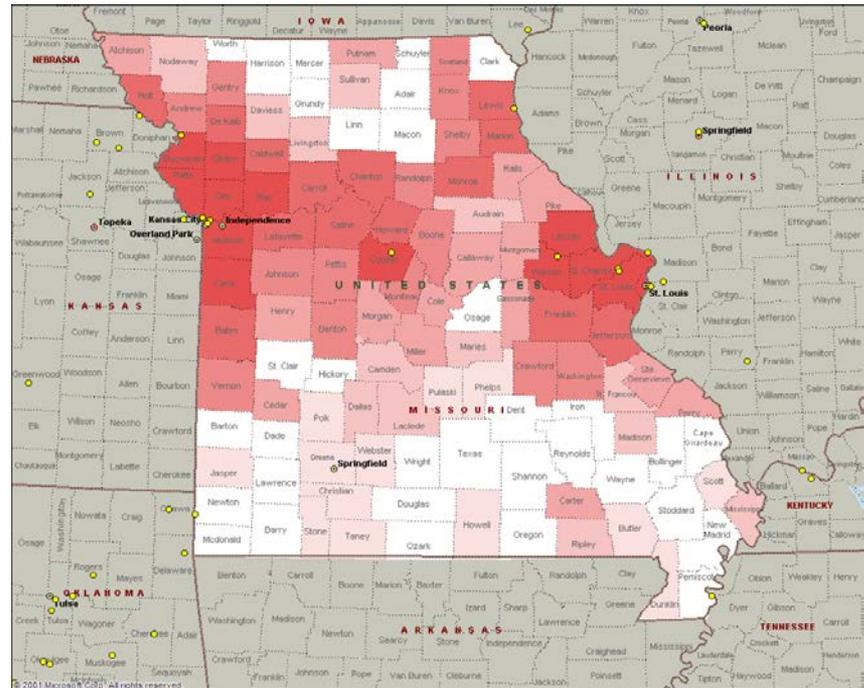


Casino Self Exclusion Programs

- Individuals enter into an agreement with the casino banning them from entering the casino for a specified period.
 - Some programs are state-, province-, or company-wide; others are restricted to a single casino.
 - Some programs allow people to ban themselves only for life, others for a few years.
 - Some casinos enforce the ban with legal actions, others simply escort self-excluders out of the casino.
 - Some self-exclusion policies include forfeiture of winnings.

Missouri Study

- Study of participants in Missouri's statewide self-exclusion program who enrolled between 1997 and 2003
- One of the first studies to assess long term (i.e., 4-10 years) self-exclusion experiences and outcomes



Follow-Up Participants

- 5,125 people enrolled in Missouri's self-exclusion program (MVEP) between 1997-2003
- We randomly selected 20% from each stratum and assigned them randomly to one of five blocks
- We targeted the first two blocks (419 SEs) for interviews in '07 and '08
- We completed interviews with 113 (27%)

Follow-Up Outcomes

- 109 gambled at Missouri casinos prior to SE enrollment
 - Only 9 gambled in Missouri casinos after SE enrollment
 - The proportion visiting out-of-state casinos did not increase.
- 28 (25%) quit all gambling, 20 (18%) quit casino gambling, and 65 (58%) did not quit gambling
 - About half of those who quit returned to gambling
 - However, they gambled less than before
- Participants reported fewer gambling problems in the past 6 months than prior to SE enrollment

MVEP Breaches

- Eighteen participants (16%) attempted to enter Missouri casinos after enrolling in the MVEP
 - 1 reported ~400 attempted entries
 - Other 17 tried to enter an average of 4.7 times
- 9 of the 18 (50%) entered at some point without being caught
- 10 of the 18 (56%) were caught at least once



MVEP Satisfaction

- 68% were satisfied with MVEP
- Some of the 32% of participants who were dissatisfied provided reasons:
 - Permanence of the ban
 - Program not explained adequately upon sign-up
 - Staff implementing the program were rude
 - Program made gambling worse
 - Still easy to get into casinos
 - Able to go to other states



Treatment Experiences

| Treatment Type | When Participants Received Treatments (N = 113) | | |
|--|---|--------------|--------------|
| | Ever | Before MVEP | After MVEP |
| Any Treatment | 59.3% | 43.4% | 53.1% |
| Gambling Treatment | 37.2% | 15.0% | 33.6% |
| Gamblers Anonymous | 33.6% | 12.4% | 28.3% |
| Gambling Treatment Program | 23.9% | 7.1% | 21.2% |
| Gambling Treatment Extended Care or Aftercare Sessions | 2.7% | 1.8% | 1.8% |
| Substance Use Treatment | 15.0% | 9.7% | 8.8% |
| Alcoholics/Narcotics Anonymous | 12.4% | 8.8% | 8.0% |
| Inpatient Alcohol/Drug Dependency Treatment | 6.2% | 6.2% | 0.9% |
| Outpatient Alcohol/Drug Dependency Treatment | 6.2% | 3.5% | 1.8% |
| Mental Health Treatment | 25.7% | 20.4% | 23.0% |
| Outpatient Mental Health Treatment | 20.4% | 19.5% | 17.7% |
| Inpatient Mental Health Treatment | 8.0% | 6.2% | 6.2% |
| Budget or Pressure Relief Meetings | 7.1% | 1.8% | 7.1% |
| Other | 36.3% | 24.8% | 27.4% |

Self-Exclusion Conclusions

- Self-exclusion programs appear to have promise.
- Their effectiveness may be due to their providing a straightforward first step for at-risk gamblers to begin to address their problems. The very act of enrolling may be the strongest part of the intervention.
- More longitudinal and prospective research is needed to determine longterm outcomes.
- Reconsider the length of the self exclusion ban in light of SE satisfaction and empirical evidence

Conclusions

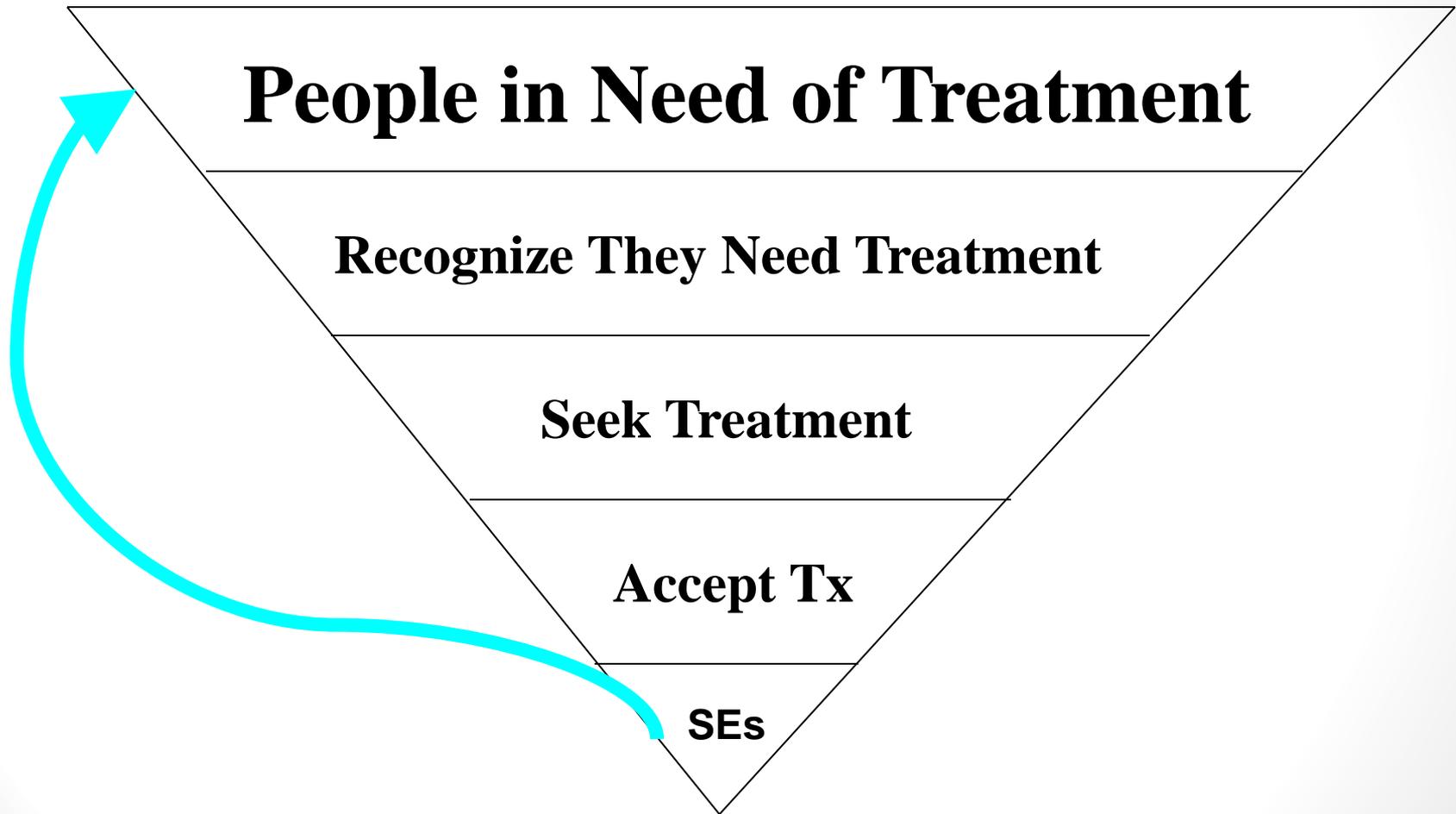
- Self-exclusion was accompanied by other healthy initiatives
 - i.e., marked increase in the proportion of SEs who received gambling treatment, from 15% before enrollment to 34% between enrollment and interview

General Limitations of Responsible Gambling Programs

- Self-exclusion and other responsible gambling resources are only helpful if people can access them easily



Treatment Pyramid





General Conclusions

- Responsible Gambling Programs and policies may work best if they are framed as a set of tools available to individuals experiencing problems;
- It is important to increase the visibility of these programs and remove any barriers to involvement;
- Within a venue, all employees, not just floor staff ought to be trained in the principles and practices of these programs.

Additional Resources

- www.divisiononaddiction.org
 - Division on Addiction's main website
 - Current projects and publications
- www.basisonline.org
 - Brief science reviews and editorials on current issues in the field of addictions (gambling, alcohol, tobacco, illicit drugs, addictions & the humanities)
 - Addiction resources available, including self-help tools
- www.thetransparencyproject.org
 - Public repository of privately-funded addiction datasets
- snelson@hms.harvard.edu
 - Email me if you have any questions