

Substance Abuse, Gambling and Other Risky Behaviors Among Arizona Youth

Results of the Risk and Protective Survey
2006

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NCPG Annual Conference 2007

What is the Arizona Youth Survey?

- The Arizona Criminal Justice Commission (ACJC) is mandated to measure the attitudes and prevalence of substance use, as well as the prevalence of gang activity among Arizona youth
- ACJC has been conducting a substance use survey since 1988, but in 2002 changed to the risk and protective factor model

Communities that Care Model

- A risk and protective factor model based on the simple premise that
 - To prevent a problem from happening, you need to identify the factors that increase the risk of that problem developing and find ways to reduce those risks
- Developed by J. David Hawkins, Ph.D.; Richard F. Catalano, Ph.D; and a team of researchers at the University of Washington in Seattle

Study Findings

- There is a connection between identified risk factors and the following behaviors:
 - Substance Use
 - Violence
 - Delinquency
 - School Drop Out
 - Teen Pregnancy
- In other words, the risk factors identified through Hawkins' and Catalano's research can be used to predict subsequent risky behaviors in youth
- Communities should implement programs that address both risk and protective factors simultaneously

What are Risk and Protective Factors?

- **Risk factors** are those conditions or situations that increase the likelihood that a youth will develop one or more health and/or behavior problems in adolescence
- **Protective factors** are the conditions or situations which decrease the likelihood of future behavior problems

Risk and protective factors placed in four domains

- Community
- School
- Family
- Peer/Individual

Community Domain

- | | |
|---|---|
| <ul style="list-style-type: none">• Risk Factors<ul style="list-style-type: none">– Low Neighborhood Attachment– Community Disorganization– Transitions and Mobility– Laws and Norms Favor Drug Use– Perceived Availability of Drugs– Perceived Availability of Handguns | <ul style="list-style-type: none">• Protective Factors<ul style="list-style-type: none">– Opportunities for Prosocial Involvement– Rewards for Prosocial Involvement |
|---|---|

Family Domain

- | | |
|---|---|
| <ul style="list-style-type: none">• Risk Factors<ul style="list-style-type: none">– Poor Family Management– Family Conflict– Family History of Antisocial Behavior– Parent Attitudes Favor Antisocial Behavior– Parent Attitudes Favor Drug Use | <ul style="list-style-type: none">• Protective Factors<ul style="list-style-type: none">– Family Attachment– Family Opportunities for Prosocial Involvement– Family Rewards for Prosocial Involvement |
|---|---|

School Domain

- | | |
|---|---|
| <ul style="list-style-type: none">• Risk Factors<ul style="list-style-type: none">– Academic Failure– Low Commitment to School | <ul style="list-style-type: none">• Protective Factors<ul style="list-style-type: none">– Opportunities for Prosocial Involvement– Rewards for Prosocial Involvement |
|---|---|

Peer/Individual Domain

- | | |
|--|--|
| <ul style="list-style-type: none">• Risk Factors<ul style="list-style-type: none">– Rebelliousness– Early Initiation of Antisocial Behavior– Early Initiation of Drug Use– Attitudes Favorable to Antisocial Behavior– Attitudes Favorable to Drug Use– Perceived Risk of Drug Use– Interaction with Antisocial Peers– Friends' Use of Drugs– Rewards for Antisocial Behavior– Depression Scale– Gang Involvement– Intention to Use Drugs | <ul style="list-style-type: none">• Protective Factors<ul style="list-style-type: none">– Religiosity– Social Skills– Belief in Moral Order– Interaction with Prosocial Peers– Prosocial Involvement– Rewards for Prosocial Involvement |
|--|--|

Generalizations about Risk Factors

- Reduce one risk factor, and you'll effect a number of problem behaviors
 - An example can be made with cardiovascular disease: when you reduce one risk factor, such as smoking, you will decrease the risk of cardiovascular disease, ALONG WITH risks for emphysema and lung, throat, and mouth cancer.

More Generalizations...

- Risk factors show much consistency in effects across different races, cultures, and classes
- Protective factors may buffer exposure to risk

A Community-Wide Approach

- Affects the entire social environment
- Develops a broad base of support and teamwork
 - No one solves the problems alone
- Brings results that are long lasting

Benefits to Communities

- The survey offers comprehensive information of the participation of students in high-risk and antisocial behaviors.
- Provides communities with an individualized profile of local risk factors to be decreased, and local protective factors to be increased.
- Reduction of risk factors has been shown to result in decreased anti-social and high-risk behaviors, improved performance, and enhanced life outcomes.

Survey Measurements

- Risk and Protective Factors
- Lifetime, 30-day, and age of onset for alcohol, tobacco, and other drugs
- Antisocial Behaviors
- School Safety
- Gambling (added in 2006)

Random Sample

- Conducted to ensure the ability to generalize the results at the state level
- Sampled by county, type of school, and size of school
- Also sample by the largest cities in Maricopa County

Data Collection

- Schools voluntarily agree to administer the survey
- Prior participating schools, random sample schools, and schools in Weed and Seed areas and Drug Free Communities are invited to participate
- Any school can volunteer to participate in the survey

Data Collection Continued

- Parents are given advance notice of the survey, **and** have the option for their child to not take the survey
- Surveys are administered in the individual classrooms at the school, and teachers are given all instructions to administer the survey
- Students have 45 minutes to complete the survey, and are given the option to not participate in the survey

Anonymity

- All students are guaranteed that responses are anonymous and that teachers will not see their answers
 - They are specifically asked not to put their names on the survey
 - When class is over, all students place their surveys in an envelope and the last student seals the envelope before giving it to the teacher

Validity of the Data

- Previous research has found that results found in self-report surveys, especially among youth, are generally an accurate representation of a youth's activities
- Careful design of survey instrument to ensure honest responses from participants

Validity Measures

- Five measures were included to eliminate surveys that were determined dishonest
 - We asked: "How honest were you in filling out the survey?"
 - Indicated they used a non-existent drug
 - Reported an impossibly high level of multiple drug use
 - Indicated more use in the past 30-days than in the lifetime
 - Age inconsistent with their grade level

2006 Arizona Youth Survey Results

- 60,401 valid surveys
- 362 schools
- Representative of all 15 counties
- Increased from 2004, which was comprised of 266 schools with a sample of 40,960; and from 2002, which comprised of 59 schools with 12,203 valid surveys

Demographics of Participants

	Grade 8		Grade 10		Grade 12		2006 Total	
	#	%	#	%	#	%	#	%
Total Sample	26,872	44.5	19,581	32.4	13,948	23.1	60,401	100
Gender								
Male	12,687	48.5	9,074	47.6	6,620	48.4	28,381	48.2
Female	13,467	51.5	9,990	52.4	7,048	52	30,505	51.8
Race/Ethnicity								
White	11,016	42.5	8,581	45.1	7,164	52.4	26,761	45.7
Native American	1,509	5.8	1,128	5.9	757	5.5	3,394	5.8
Hispanic	10,277	39.6	6,972	36.7	4,127	30.2	21,376	36.5
African American	1,163	4.5	893	4.7	536	3.9	2,592	4.4
Asian or Pacific Islander	715	2.8	565	3	518	3.8	1,798	3.1
Other	1,280	4.9	877	4.6	559	4.1	2,896	4.8

*Numbers and Percentages listed here reflect only those students who answered each of the demographic questions. Therefore, the numbers and percentages in the total column do not add up to the final completion rate indicated in the text of the report.

2006 Lifetime Drug Use

Percentage of Arizona Students Who Have Used Drugs in Their Lifetime

	8th Grade	10th Grade	12th Grade	Total
Alcohol	50.4	67.6	74.5	61.7
Cigarettes	30.8	43.8	50.0	39.6
Smokeless Tobacco	8.0	11.8	15.6	11.0
Marijuana	18.3	34.0	42.6	29.2
Inhalants	15.2	11.9	9.8	12.9
Hallucinogens	2.1	4.1	5.6	3.6
Cocaine	3.6	7.6	11.6	6.8
Sedatives	10.0	14.3	17.4	13.2
Stimulants	3.4	7.1	8.5	5.9
Ecstasy	1.9	3.4	4.4	3.0
Heroin	1.4	2.1	2.8	2.0
Methamphetamines	2.6	5.0	6.6	4.3
Steroids	1.6	2.0	2.2	1.9
Prescription Drugs	9.8	16.0	20.0	14.3

2006 Lifetime Drug Use

- Alcohol and Cigarettes are the most used substances
- Only looking at illicit drug use:
 - Marijuana, prescription drugs, and sedatives are the most used
- Inhalants is the only category in which use decreases as grade increases

2006 Past 30-Day Drug Use

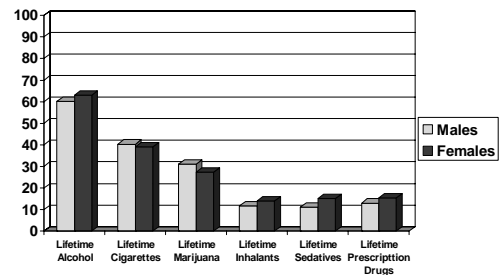
Percentage of Arizona Students Who Have Used Drugs in the Past 30-Days

	8th Grade	10th Grade	12th Grade	Total
Alcohol	24.1	39.2	47.0	34.4
Cigarettes	10.5	17.1	21.8	15.3
Smokeless Tobacco	2.7	4.0	5.4	3.8
Marijuana	8.5	15.7	18.1	13.1
Inhalants	6.2	3.1	1.7	4.1
Hallucinogens	1.0	1.7	1.7	1.4
Cocaine	1.7	2.9	3.3	2.5
Sedatives	4.5	6.6	7.1	5.8
Stimulants	1.5	2.9	2.6	2.2
Ecstasy	0.8	1.0	0.9	0.9
Heroin	0.7	0.7	0.8	0.7
Methamphetamines	1.0	1.7	1.4	1.3
Steroids	0.8	1.0	1.0	0.9
Prescription Drugs	4.5	7.3	8.1	6.3

2006 Alcohol Data

2006 State Results				
	8th Grade	10th Grade	12th Grade	Total
Lifetime Alcohol Use	50.4%	67.6%	74.5%	61.7%
30-Day Alcohol Use	24.1%	39.2%	47.0%	34.4%
Binge Drinking (Past 2 weeks)	13.4%	22.4%	28.2%	19.9%
Been Drunk or High at School (Past Year)	13.0%	21.1%	21.4%	17.6%
Alcohol Sort of Easy or Very Easy to Get	51.4%	70.5%	77.9%	64.2%
Past 30 Days Ride with a Drunk	31.4%	32.2%	32.5%	31.9%
Past 30 Days Drink and Drive	6.6%	8.9%	17.9%	10.0%

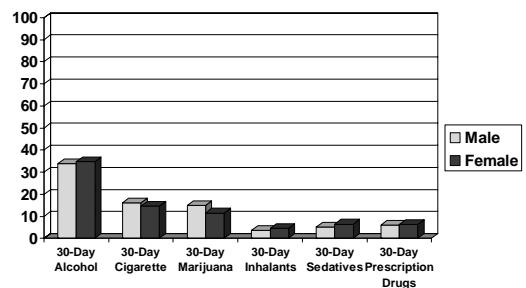
Gender Differences in Lifetime Drug Use



Gender Differences

- Females show higher lifetime use in 4 of the 6 substances
 - Alcohol, inhalants, sedatives, and prescription drugs
- Trends are changing from males using more

Gender Differences in 30-Day Usage



Heavy Substance Use and Antisocial Behavior

	8th Grade			10th Grade			12th Grade			Total		
	2002	2004	2006	2002	2004	2006	2002	2004	2006	2002	2004	2006
Binge Drinking	14.1	16.0	13.4	26.0	25.1	22.4	32.2	32.5	28.2	23.7	22.7	19.9
Drunk or High at School	15.4	13.2	13.0	20.4	20.8	21.1	23.8	22.2	21.4	19.6	17.7	17.6
Sold Illegal Drugs	5.7	5.0	4.9	9.9	8.9	9.1	10.0	9.8	9.8	8.4	7.3	7.4
Stolen a Vehicle	3.3	4.8	4.6	3.6	4.4	4.7	2.1	2.6	3.1	3.0	4.2	4.3
Been Arrested	9.1	8.7	8.3	8.0	9.1	9.3	8.2	9.1	7.8	8.5	8.9	8.5
Carried a Handgun	6.7	6.5	7.6	5.0	5.9	7.5	4.9	5.5	7.0	5.6	6.1	7.5

School Safety Issues

	8th Grade			10th Grade			12th Grade			Total		
	2002	2004	2006	2002	2004	2006	2002	2004	2006	2002	2004	2006
Carried a Gun to School in Past 12 Months	1.4	1.5	1.6	1.3	1.5	1.6	0.9	1.3	1.4	1.3	1.5	1.6
In a Fight at School at Least Once in the Past 12 Months	21.5	27.6	25.6	12.4	17.1	15.7	6.5	9.9	8.9	14.0	20.2	18.0
I Do Not Feel Safe at My School	21.6	25.6	25.3	13.3	22.2	23.5	7.3	16.3	17.1	14.6	22.4	22.8
Did Not go to School at Least One Day in the Past Month Because Felt Unsafe At School or On the Way to School	5.3	11.3	10.7	2.3	7.8	7.8	2.6	5.6	5.0	3.5	8.8	8.4
Carried a Weapon to School at Least Once in the Past 30 Days	5.4	6.3	6.9	5.8	5.6	7.3	6.8	5.2	6.0	5.9	5.8	6.8
Been Threatened or Injured With a Weapon on School Property in the Past 12 Months	10.0	16.1	15.5	9.0	13.5	13.9	5.6	10.1	9.5	8.4	13.9	13.6
Been Bullied at Least Once in the Past Year	N/A	N/A	38.2	N/A	N/A	24.5	N/A	N/A	14.3	N/A	N/A	28.2

Gambling Questions

- How often in the past 12 months have you:
 - a. Gambled at a casino?
 - b. Played the lottery or scratch-off tickets?
 - c. Bet on team sports?
 - d. Played cards for money?
 - e. Bet money on horse races?
 - f. Played bingo for money or prizes?
 - g. Gambled on the Internet?
 - h. Bet on dice games such as craps?
 - i. Bet on games of personal skill such as pool, darts, or bowling?

Gambling Participation in Lifetime

	8 th Grade	10 th Grade	12 th Grade	Total
Casino	5.5	4.8	5.1	5.1
Lottery	35.7	29.6	23.9	30.6
Bet on Sports	37.0	34.5	28.6	34.0
Cards	33.4	34	31.4	33.1
Horses	8.1	7.4	6.0	7.3
Bingo	27.4	19.2	12.1	20.7
Internet	8.9	7.3	5.9	7.6
Dice	13.2	13.6	10.9	12.8
Games of Skill	28.1	27.6	23.6	26.8

Gambling Participation

- About 48,000 youth responded to the gambling questions
- 60.8% of youth who answered the gambling questions reported gambling in their lifetime
- Betting on sports what the highest reported activity – different from other studies

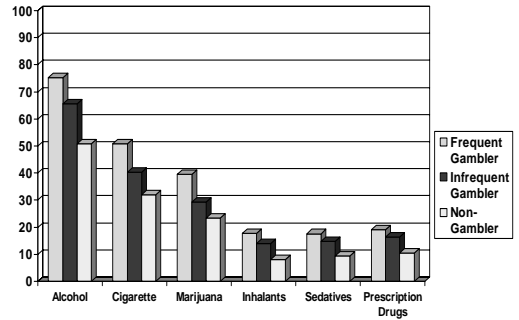
Gambling Participation For Frequent Gamblers

	8 th Grade	10 th Grade	12 th Grade	Total
Casino	1.3	1.3	1.0	1.2
Lottery	11.7	7.9	5.3	8.8
Bet on Sports	14.2	12.9	8.8	12.4
Cards	12.1	11.8	10.2	11.5
Horses	2.7	2.3	1.6	2.3
Bingo	7.6	4.4	2.4	5.2
Internet	3.9	3.3	2.6	3.4
Dice	5.7	5.8	4.3	5.3
Games of Skill	11.1	10.3	8.3	10.1

Gambler Categories

- Non-gamblers
 - Responded “Never”
- Infrequent gamblers
 - Responded “Before, but not in the past year,” or “A few times in the past year”
- Frequent gamblers
 - Responded “Once or twice a month,” “Once or twice a week,” or “Almost everyday”

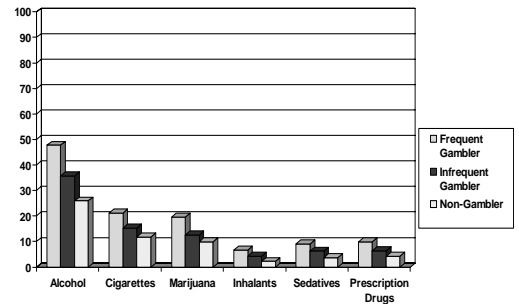
Lifetime Substance Use



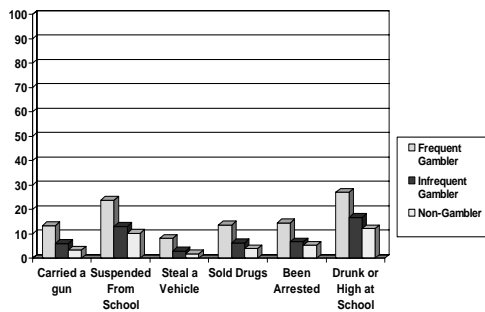
Gamblers and Substance Use

- In all instances “Frequent Gamblers” reported higher levels of use, with “Infrequent Gamblers” having the second highest level of use
- Same pattern is found with other problem behaviors

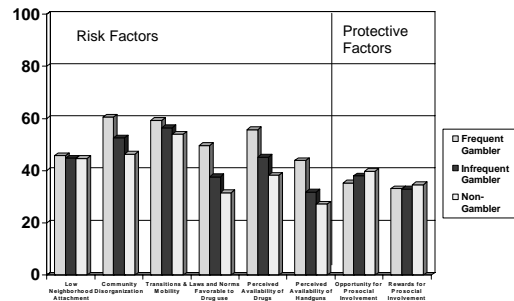
Past 30-Day Use



Antisocial Behavior



Community Risk and Protective Factors



How information can be used

- To assess the prevalence of risk, protection, and outcomes in the community
- To identify areas exposed to highest overall levels of aggregate risk and lowest levels of protection
- To prioritize risk and protective factors for preventive action
- To monitor changes in targeted risk and protective factors at both neighborhood and community levels
- To monitor changes in substance abuse, delinquent behavior and other outcomes at both neighborhood and community levels

Reports Published

- State Report
- County Reports
- Arizona Gambling Profile Report
- Gambling Fact Sheet
- AYS Overview Fact Sheet
- More Fact Sheets to come!

How Information is Distributed

- Available on website www.azcjc.gov
- Only published reports
- Mailed to individual schools and other interested parties
- IMAP – Internet Mapping and Analysis Project
 - <http://www.azcjc.gov/sac/imap.asp>

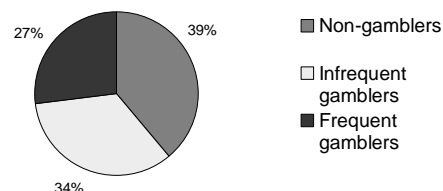
Youth Info on OPG web www.problemgambling.az.gov

- Arizona Gambling Profile Report
- Gambling Fact Sheet
- Tips and Information on Youth Gambling for: Parents, Educators, Teens, Community, College youth

What States are Using Surveys and Can You Compare Results?

- More States are using this process to develop prevention and education services for gambling. Among them:
 - Arizona
 - Delaware
 - Oregon
 - New York
 - Nebraska
 - Iowa
 - Minnesota
 - Louisiana
 - Kentucky

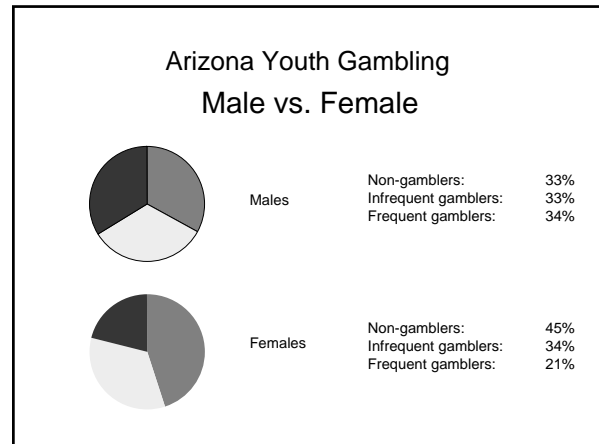
Arizona Youth Gambling



Frequent gambler = gambling at least once a month

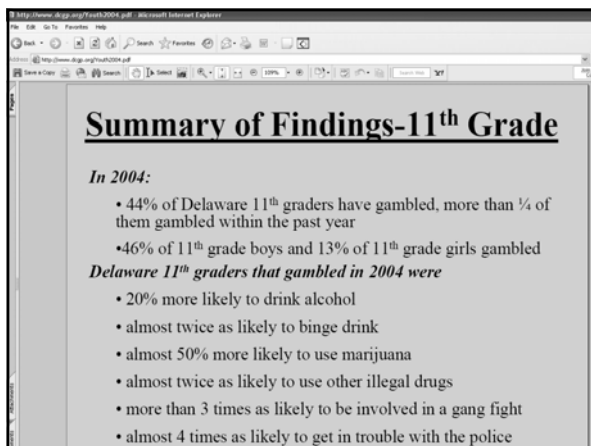
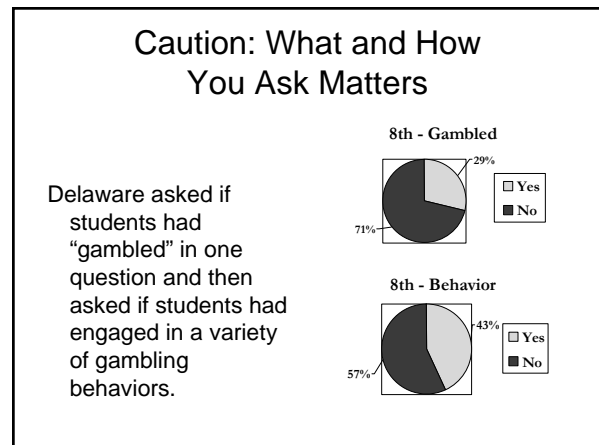
Other Jurisdictions

- Nebraska
 - 21% have gambled in past 30 days (6,8,10,12)
- Delaware
 - 29% of 8th Graders in past year
 - 31% of 11th Graders in past year
- Ontario
 - 34.9% of 15-18 year olds
- Questions are asked differently (past year/30 days, etc.) but results are fairly consistent



Other Jurisdictions In the past year, have you gambled for money?

- Nebraska 2003
45.9% male / 19.0 female
- Delaware 2004
42% male / 35% female
- Minn. 2004
"More boys gamble than girls; boys gamble more frequently than girls."



Summary of Findings Nebraska Risk and Protective Factor Studies 2003 and 2005

Gambling involvement is positively correlated with SA and all other risk factors for substance use

Nebraska Youth Problem Gambling Prevention Pilot Study R for A

“Research has documented that problem gambling among youth is highly correlated with substance abuse and related problems. The most effective way communities can tackle this problem is to employ environmental strategies that have demonstrated effectiveness in changing behavior.”

General Observations

Gambling is only characteristic that correlates across all domains as being associated with higher risk factors and lower protective factors.
– Correlation is not causation

Percentage of Students Reporting Risk in the Family Domain (AZ 2006)

	8 th Grade	10 th Grade	12 th Grade	Total
Poor Family Management	47.9	45	44.8	46.1
High Family Conflict	52.2	42.2	38.3	45.3
Family History of Antisocial Behavior	42.7	43.2	38.6	41.8
Parental Attitudes Favor Antisocial Behavior	48.5	50	45.9	48.3
Parental Attitudes Favor Drug Use	29.1	41.1	40.1	35.9

Using Survey Results for Prevention: Washington by Linda Graves



Washington State Problem Gambling Program
Media campaign by Jones Advertising, Seattle

TARGET AUDIENCE:

- Mothers ages 35-45, both white and minorities
- Have children in the age range of 10-18 years old

PURPOSE:

- Create awareness of the dangers of problem gambling
- Call to action to learn more and intervene

Why target moms instead of kids?

- Parents, mothers in particular, are still the strongest influencers of their children's behavior
- Mothers are far more aware of their children's behavior than fathers.
- Mothers have the ability to intervene
- Mothers can be cost effectively targeted



Why target moms instead of kids?



- Kids are unlikely to be concerned with their own behavior
- Youth don't always see gambling activities as gambling
- Kids are much more difficult (and therefore costly) to reach, more fragmented media use

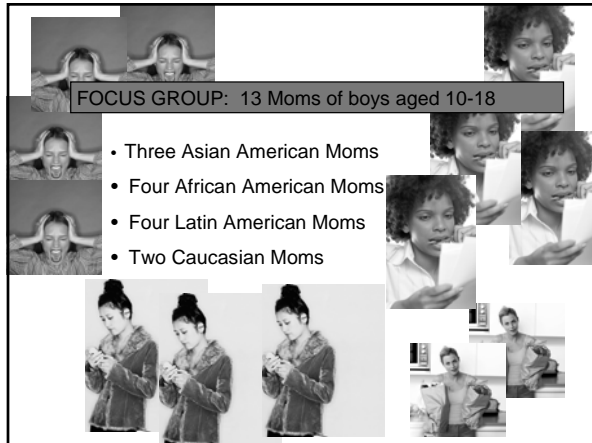
The strongest correlations of problem gambling among youth are:

- Parents who gamble
- The age at which the child first gambles
- Household income under \$30,000
- Minorities gambling more than whites
- Males are 3-4 times more likely to gamble than females



FOCUS GROUP: 13 Moms of boys aged 10-18

- Three Asian American Moms
- Four African American Moms
- Four Latin American Moms
- Two Caucasian Moms



Media firm tested three messages with focus group

- If your child is showing signs of problem gambling, you need to intervene
- If your child gambles when he is young, he is more likely to be a problem gambler at an older age
- If your child gambles, he is more likely to be involved in harmful and illegal activities



So What??

- Inclusion of gambling questions in youth surveys yields a wealth of information about the need for gambling prevention/education.
- Survey results can be used to guide the development of youth prevention and education activities.
 - When to provide education (early!)
 - Who to target (male students) (moms)
 - What activity (sports, cards, lottery)

For the Future

- Maintaining these surveys over time allows for baselines and ability to measure the impact of prevention and education efforts.
- Continuing to monitor the data allows for more effective prevention planning and focusing scarce resources on the populations most in need.

Resources

- Arizona Youth Survey
 - www.azcjc.gov
 - www.problemgambling.az.gov
- Other state surveys
 - www.apgsa.org
 - Click on "Member States" to find contact information for your area.

Contact Information

- Michelle Neitch, Research Analyst
Az Criminal Justice System:
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- Paula Burns, Ed/Prevention Administrator
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