

Using Intervening Variables to Evaluate SPF SIG in Maine

*SPF SIG Evaluators Meeting
Washington, DC
July 14-15, 2009*



PRESENTATION FOCUS

- ③ **How we are using/evaluating
Intervening Variables in Maine**
- ③ **Findings (State and Community)**
- ③ **Next Steps/Conclusion**

Intervening Variables and Evaluation



Goal of SPF SIG in Maine

- ③ Reduce alcohol use among youth (especially 14-18 year olds) - REQUIRED
- ③ Reduce high risk drinking among adults (especially 18-25 year olds) - REQUIRED
- ③ Reduce misuse of prescription drugs (especially 18-25 year olds) - OPTIONAL



Implementing SPF SIG in Maine

- ⊙ Statewide implementation as part of a larger Public Health Infrastructure (Healthy Maine Partnership)
 - ⊙ Collaboration between Maine Office of Substance Abuse, Maine Centers for Disease Control and Maine Department of Education
 - ⊙ Tobacco, Chronic Disease, Nutrition, Physical Activity, Substance Abuse
 - ⊙ 8 Public Health Districts → 16 Counties → 28 Coalitions

Maine's Public Health Infrastructure





Strategies in 2007-2008

- ◎ For the year 2007 – 2008 the HMP coalitions implemented **465 alcohol-related prevention activities** across the state
 - ◎ Disseminated parental monitoring campaign through **321** channels (e.g., media outlet, doctor office, store); almost **400,000** individuals exposed to messages.
 - ◎ Invited **2,098** local merchants to participate in Responsible Beverage Service; **1,018** staff trained.
 - ◎ Worked with **98** police departments to enhance the effectiveness of local enforcement policies and practices; **30** model policies adopted.

Evaluating SPF SIG In Maine

⊙ Short-term Outcomes (State and Community Level)

- ⊙ Access/availability
- ⊙ Parental monitoring/
Family communication
- ⊙ Enforcement
- ⊙ Social/Community
Norms

⊙ Long-term Outcomes

- ⊙ State Level Outcome
Evaluation
 - ⊙ *Consumption Patterns*
 - ⊙ *Consequences*
 - ⊙ *Motor vehicle crashes/DUIs*
 - ⊙ *Abuse/dependence*
 - ⊙ *Poisonings*
- ⊙ Community Level Outcome
Evaluation
 - ⊙ *Consumption Patterns*



Source of Our Data

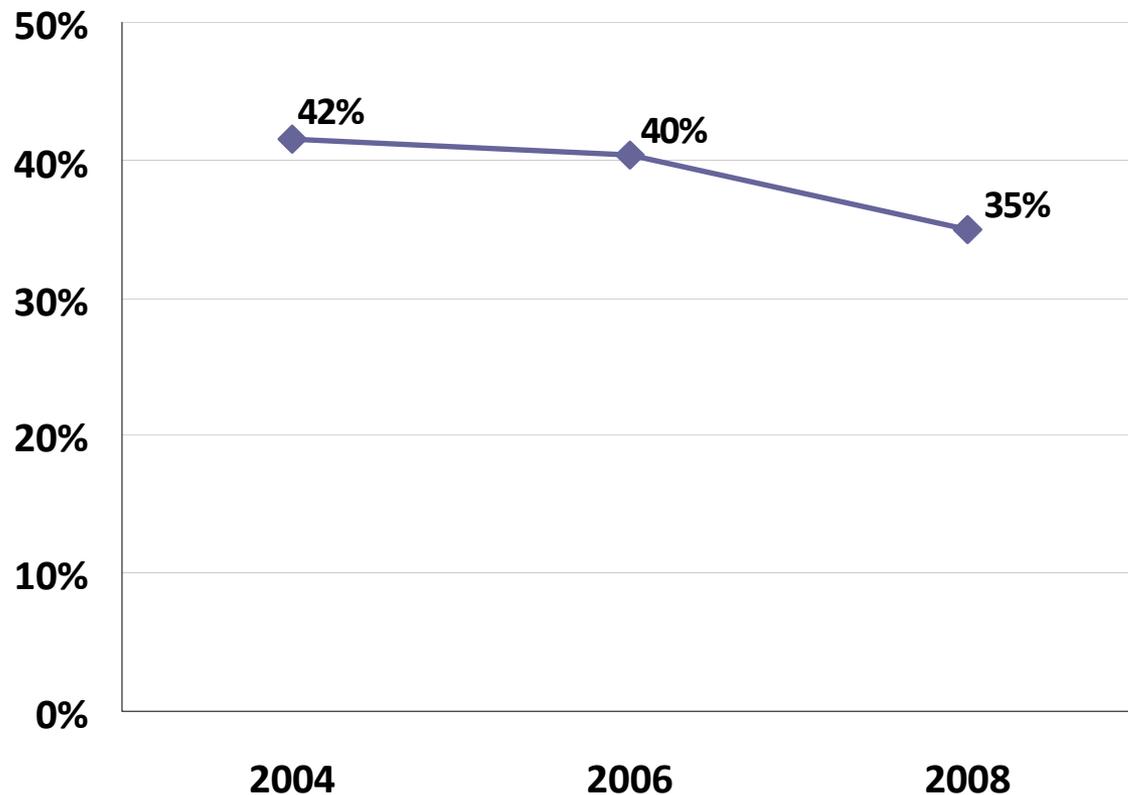
- ◎ **2008 Maine Youth and Drug Alcohol Survey**
 - ◎ 340 public schools participated
 - ◎ Response rate of 81.1%, with 74,593 total useable responses
 - ◎ Responses represent grades 6 – 12
- ◎ **MYDAUS data have been collected since 1998**

www.maine.gov/maineosa/survey/home.php

Initial Findings

Statewide Change in Consumption Since 2004

Previous 30-Day Use of Alcohol by High School Students, by Year



Change in Intervening Variables Since 2004

	2004	2006	2008
Caught by Parents*	38%	39%	41%
Easy to Get*	69%	66%	63%
Parents Think Wrong*	82%	83%	85%
Caught by Police	10%	11%	12%
Cool for Drinking*	45%	45%	41%
Community Thinks Wrong	68%	67%	69%
Clear Family Rules	80%	81%	81%

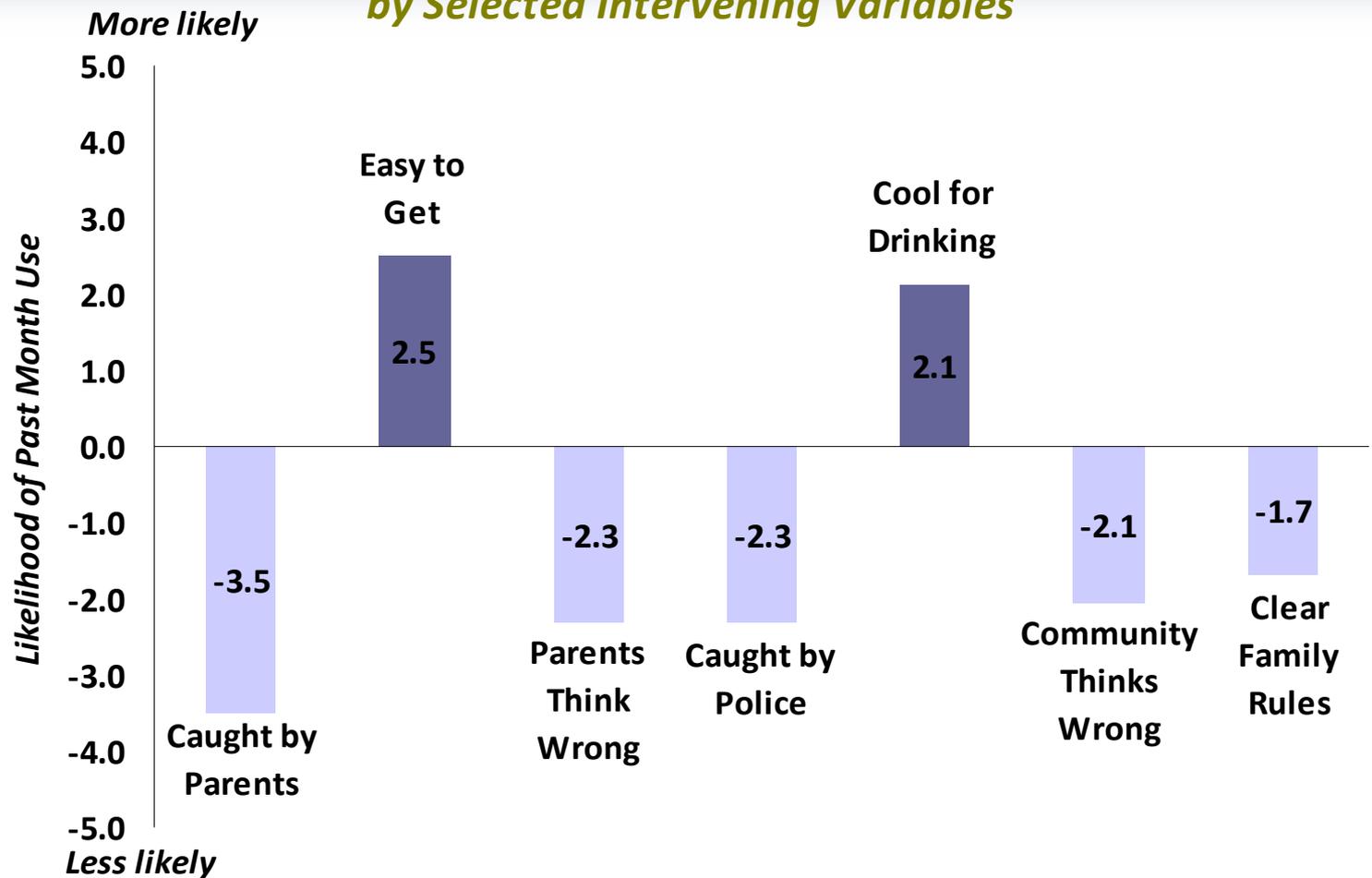
Exploratory Analysis

Looking at the Role of Intervening Variables

- ◎ **Constructed simple ratios from cross-tabulations**
 - ◎ **Likelihood of drinking alcohol in the past 30 days by intervening variable:**
$$\text{30-Day Rate Alcohol EASY} / \text{30-Day Rate Alcohol HARD} = \text{Likelihood of Drinking in Past Month}$$
- ◎ **Significance testing shows all results are statistically significant at the $p < .05$ level.**

Comparative Likelihood of Past 30 Day Alcohol Use

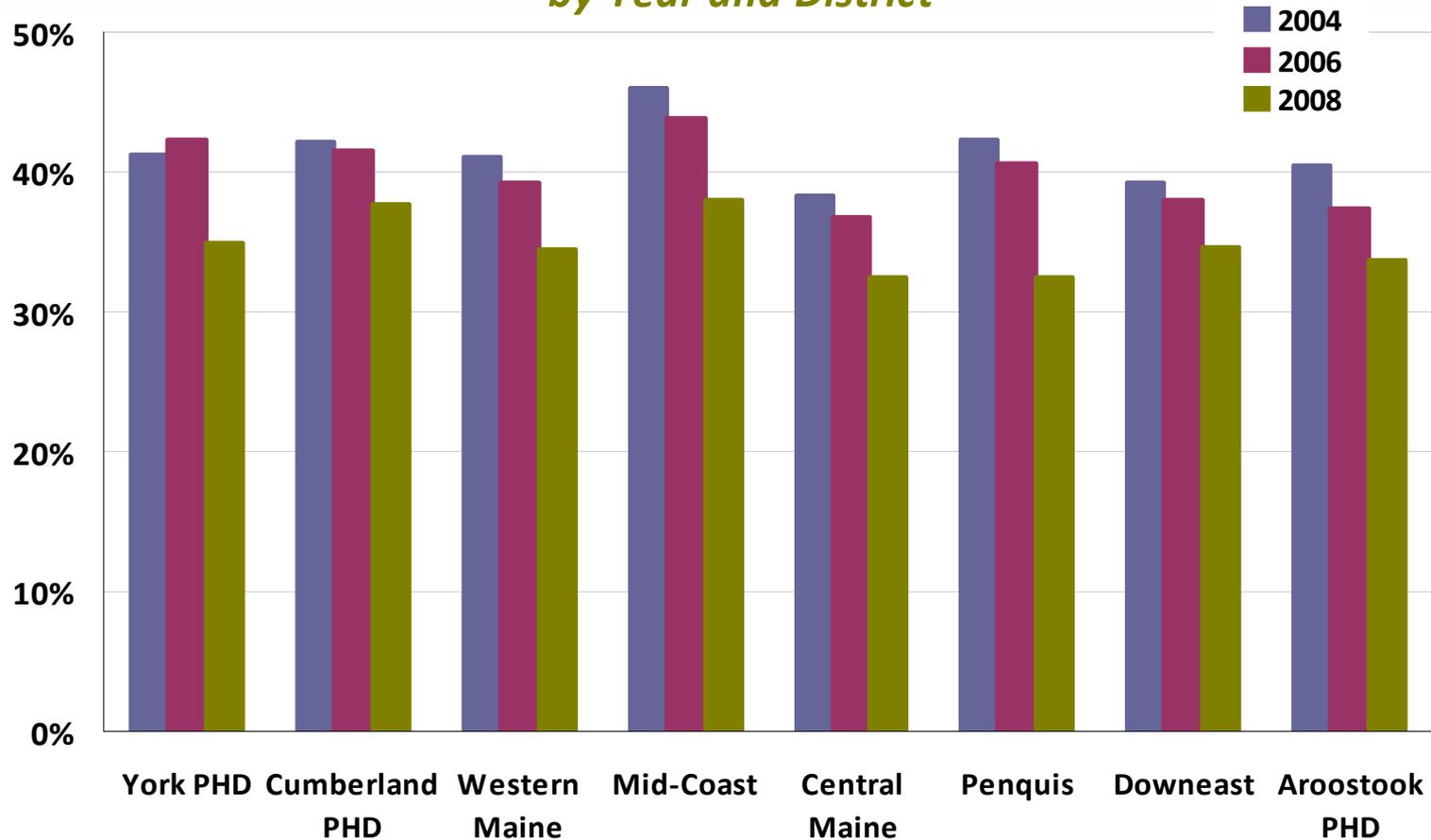
*Likelihood of Using Alcohol in the Past 30 Days,
by Selected Intervening Variables*



At the Community Level

Community Level Change in Consumption Since 2004

*Previous 30-Day Use of Alcohol by High School Students,
by Year and District*



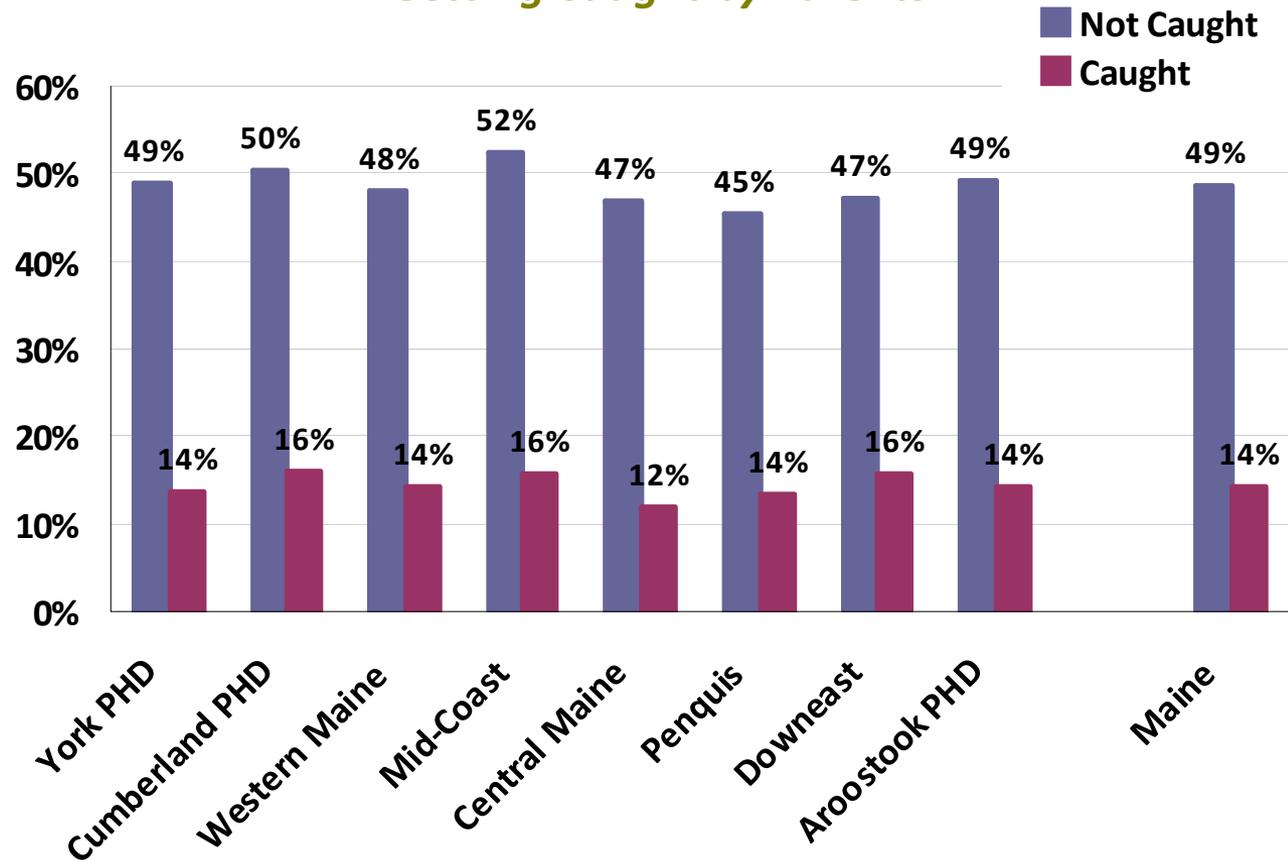
Percent Change in Intervening Variables Since 2006

Percent Change in Selected Intervening Variables Since 2006

	Caught by Parents	Easy to get	Parents Think Wrong	Caught by Police	Cool for Drinking	Community Thinks Wrong	Clear Family Rules
York PHD	6%	-2%	4%	13%	-7%	6%	2%
Cumberland PHD	3%	-4%	-1%	1%	-6%	2%	1%
Western Maine	6%	-3%	2%	1%	-8%	3%	1%
Mid-Coast	8%	-7%	2%	21%	-12%	7%	0%
Central Maine	5%	-6%	2%	15%	-10%	4%	1%
Penquis	10%	-4%	5%	6%	-15%	6%	1%
Downeast	7%	-8%	1%	29%	-6%	4%	-1%
Aroostook PHD	9%	-4%	3%	3%	-12%	2%	4%
Maine	3%	-3%	1%	4%	-8%	2%	1%

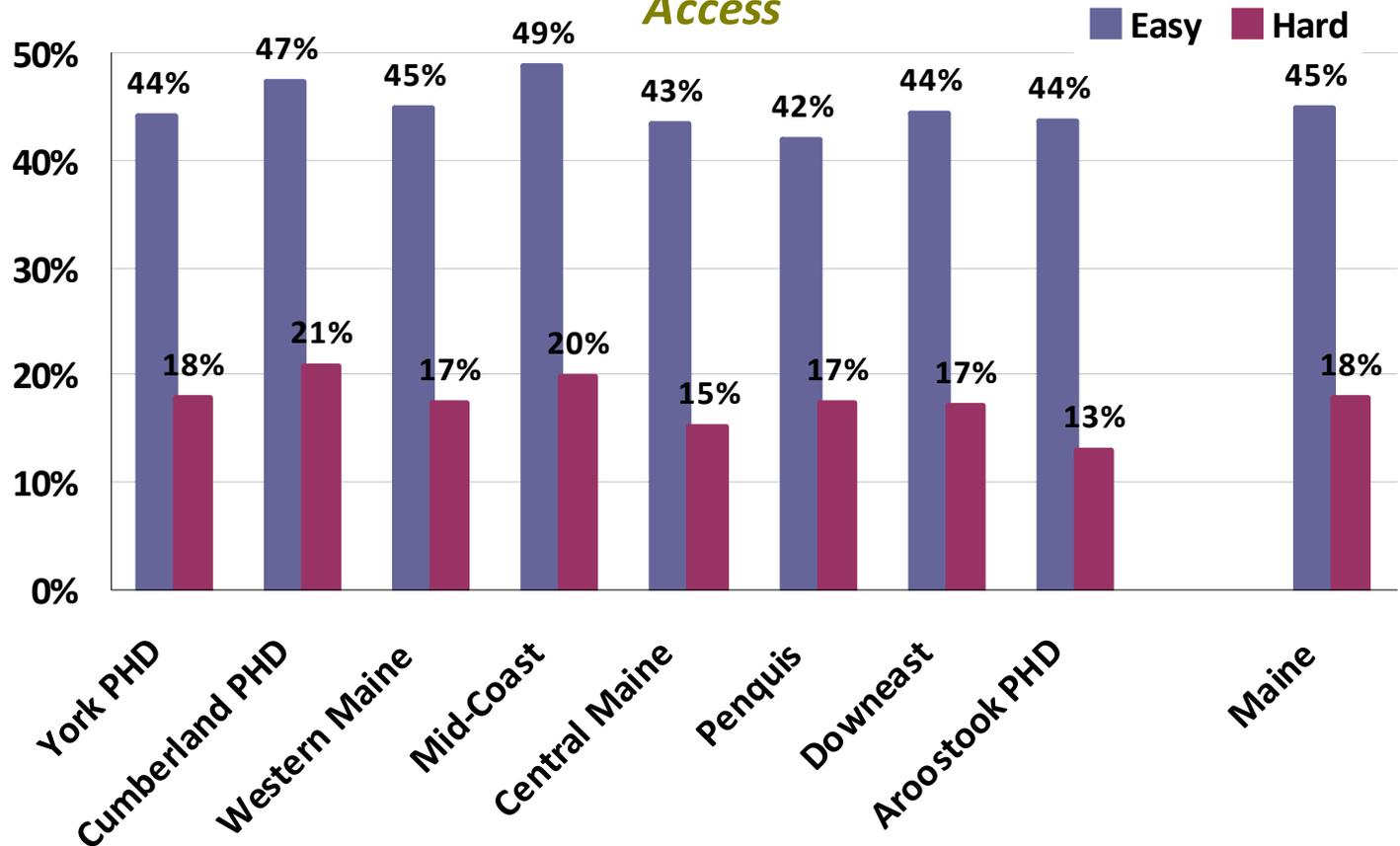
Consumption Rates and Getting Caught by Parents

Past Month Use of Alcohol, by Perceived Risk of Getting Caught by Parents



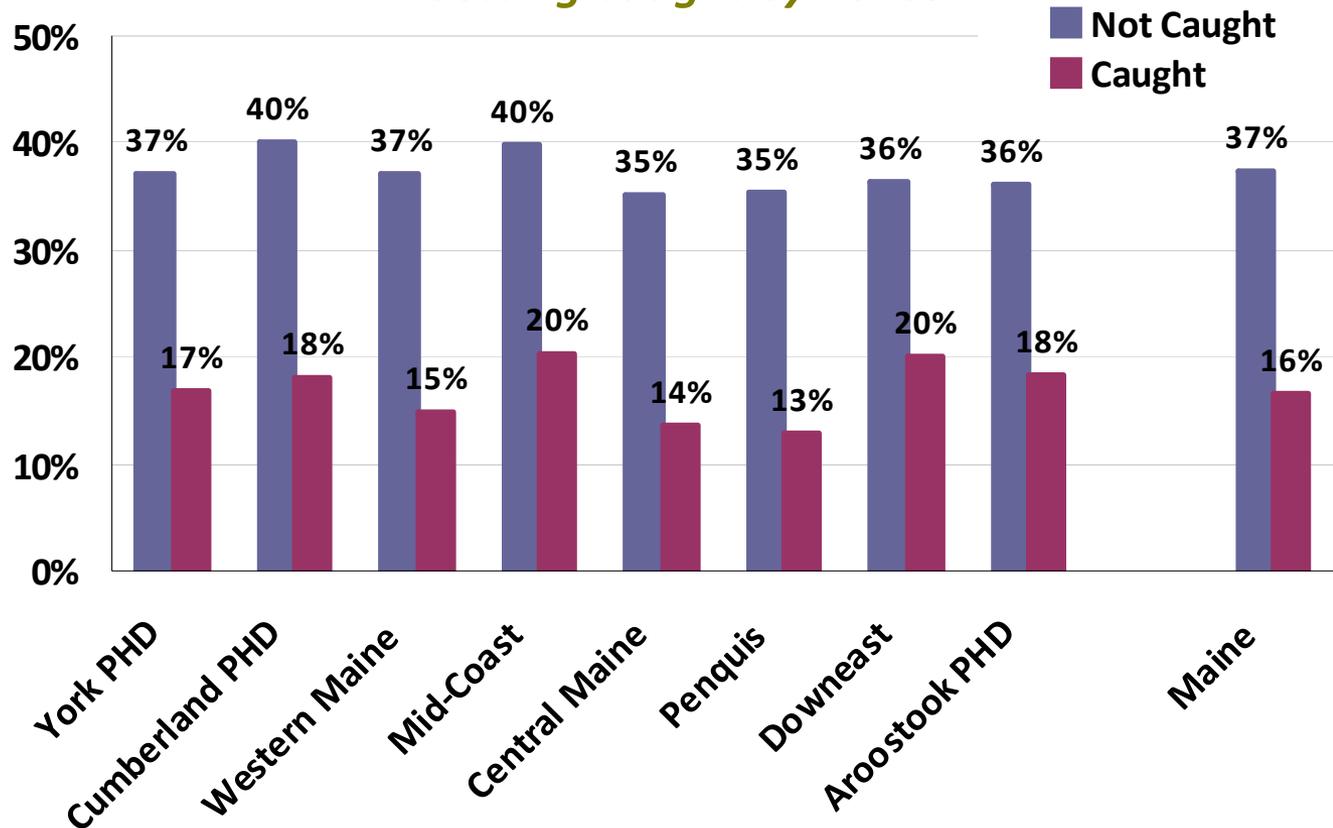
Consumption Rates and Access

Past Month Use of Alcohol, by Perceived Ease of Access



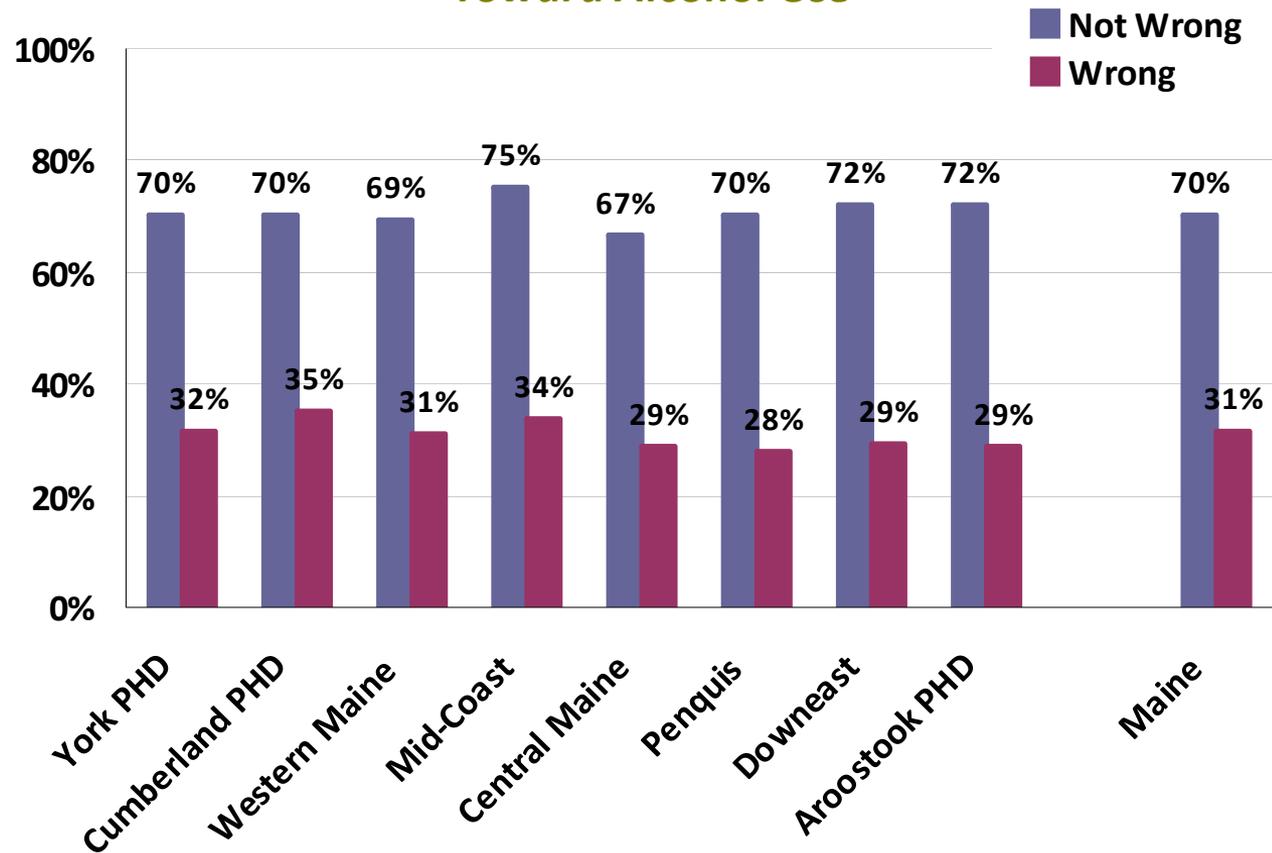
Consumption Rates and Getting Caught by Police

Past Month Use of Alcohol, by Perceived Risk of Getting Caught by Police



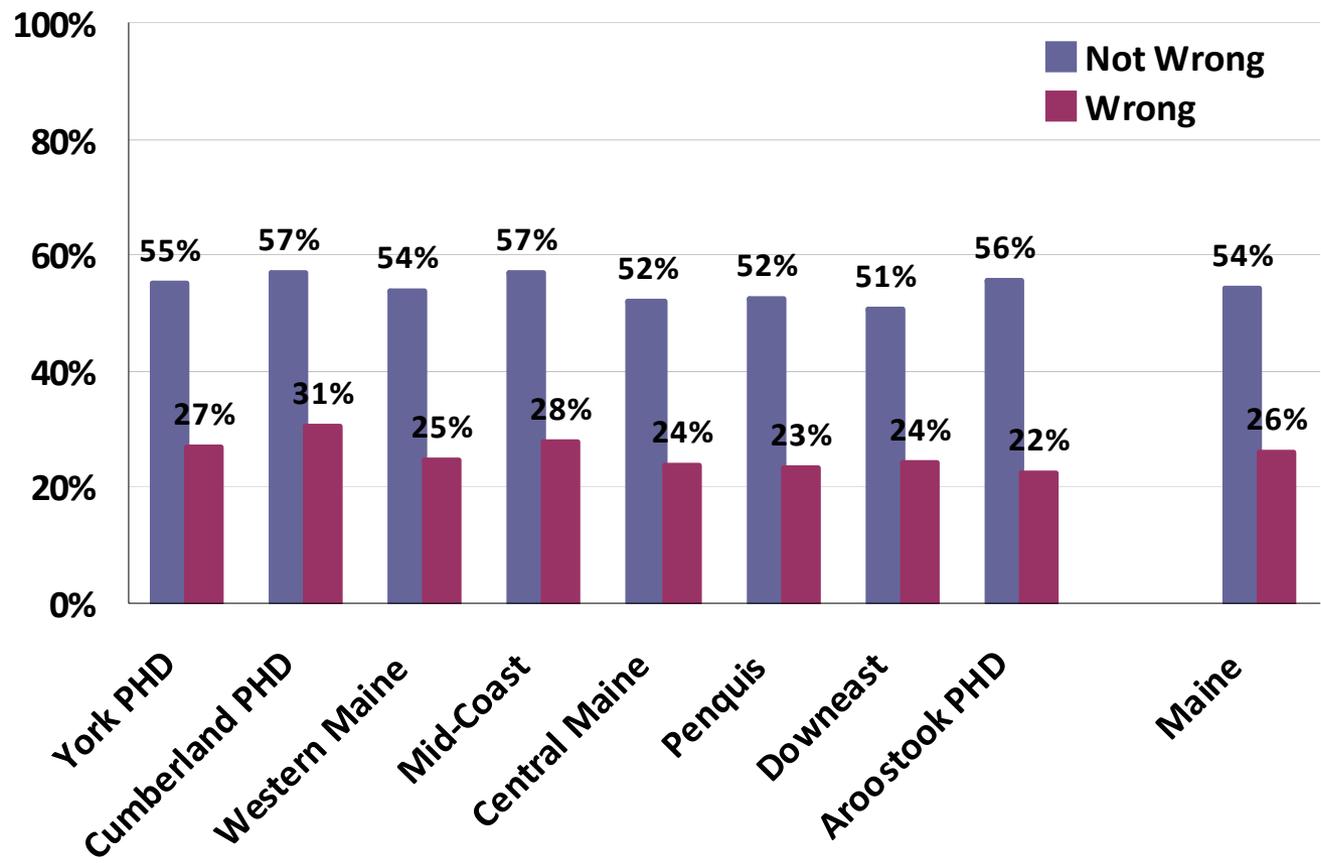
Consumption Rates and Parental Attitudes

*Past Month Use of Alcohol, by Parental Attitudes
Toward Alcohol Use*



Consumption Rates and Community Norms

*Past Month Use of Alcohol, by Community
Attitudes Toward Alcohol Use*



Next Steps for Analysis



Next Steps (Planned)

- ◎ **Test relationship between the strategies implemented and the change seen in intervening variables at the Community level.**
- ◎ **Test the relationships among the strategies, intervening variables and the changes in State-level Consequences.**



CONCLUSIONS

- ③ **Intervening variables can be evaluated as shorter-term outcome measures.**
- ③ **Intervening variables are critical to local/community-level evaluation, especially when consequence data are not useable/available.**
- ③ **Data suggest that strategies selected to address intervening variables impact consumption patterns.**

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