

The Potential Impact of ABC Privatization on Alcohol Consumption and Alcohol- Related Harms

A Report to the Joint Subcommittee
on Strategies and Models for the
Prevention and Treatment of Substance Abuse

September 22, 2010



Work Group Goals

- 1. To assess the potential impact of ABC privatization on alcohol consumption and alcohol-related harm based on prior research**
- 2. To identify strategies that could mitigate the potential negative impact of privatization**

Historical Context of Privatization of Liquor in Virginia

- Eight Principles recommended for state liquor control, Senate Document 5 - January 1934
 - The private profit motive, with its incentive to encourage sale and consumption of alcoholic beverage, should be minimized.
 - In order to encourage temperance, the plan should discourage use of hard liquor and give relative encouragement to use of lighter alcoholic beverages.
- Recognition of increased dangerousness of liquor relative to alcohol and beer, due to percentage of concentration of alcohol

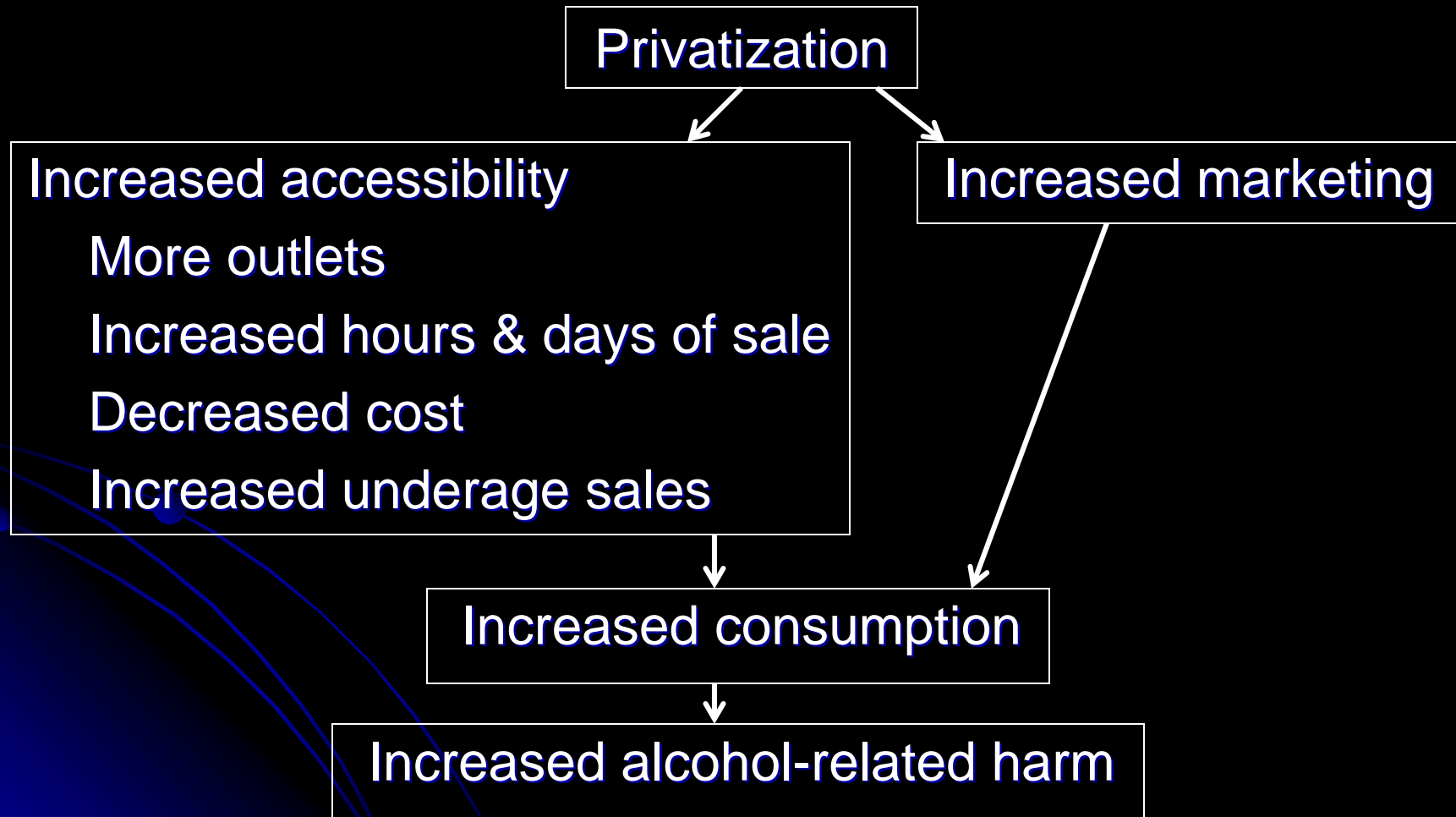
The Cost of Problem Drinking

- Approximately 79,000 deaths attributable to excessive alcohol use each year in the US (CDC, 2010)
- 3rd leading lifestyle cause of death in the US (Mokdad et al., 2004)
- In 2005, there were more than 1.6 million hospitalizations (NIAAA) and more than 4 million emergency room visits (NCHS) for alcohol-related conditions
- Cost of excessive alcohol consumption in 1998 estimated at \$184.6 billion (NIAAA, 2000)

What is “Alcohol-Related Harm” ?

- Motor-vehicle crashes
- Accidents (e.g., falls, fires, drowning)
- Violence and crime (e.g., fights, homicides, domestic violence)
- Child abuse/neglect
- Suicide
- HIV/AIDS (as a result of unprotected sex)
- Job absenteeism and reduced productivity
- Other health problems (e.g., liver cirrhosis, cancer)

Presumed Linkage between Privatization and Alcohol-Related Harms



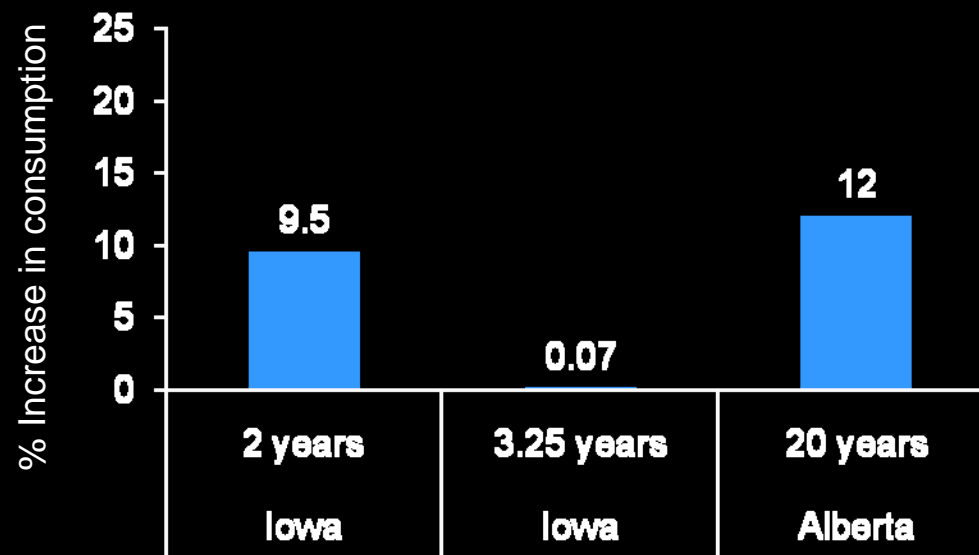
Impact of Privatization

- Campbell et al. (2009) reviewed privatization studies in which there was a “dramatic” increase in off-premise outlets
 - A total of 17 studies
 - 11 events of privatization
 - 8 states, two Canadian provinces
 - Used relatively strong research designs
 - Most were studies of privatization of wine; spirits in only one state and one province

Impact of Privatization (cont'd)

- Across 17 studies, “The median relative increase in alcohol sales [of the privatized beverage] subsequent to privatization was 42.0%.”
- Studies of three events of privatization reported inconsistent results
- “Minimal decline” in sales of other alcoholic beverages (median decrease of 2.1% across 5 studies)

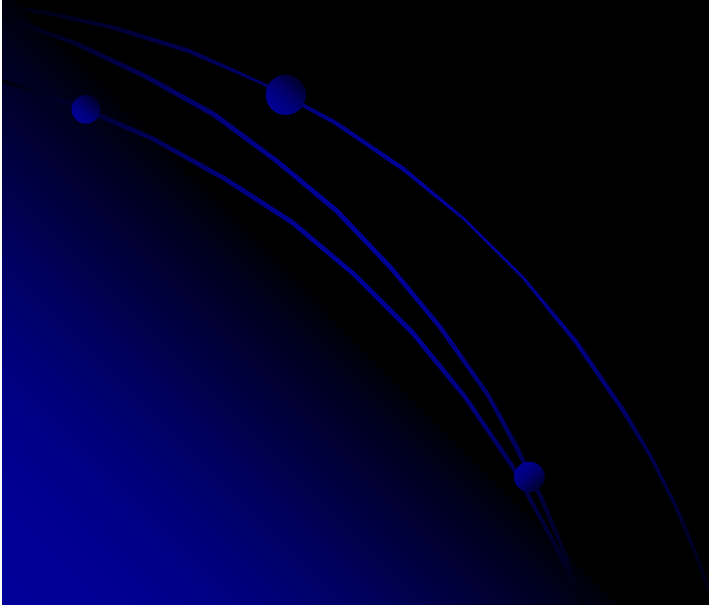
Studies of Privatization of Spirits



State/Province and Follow-up
Period after Privatization

Campbell et al. Conclusion

- “These studies indicate that privatization increases the sales of privatized beverages but has little effect on the sales of non-privatized alcoholic beverages.”



Impact of Outlet Density

- Outlet density = the number of outlets per area/population
- Campbell et al. examined 23 studies of off-premise alcohol density
- 18 (75.0%) found a positive association between off-premise outlet density and consumption and/or alcohol-related harm, including:
 - Violent crime
 - Injury
 - Drunk driving & motor-vehicle crashes
 - Child Abuse

Campbell et al. Conclusions

- “...Most of the studies included in this review reported that greater outlet density is associated with increased alcohol consumption and related harms, including medical harms, injuries, crime and violence.”
- Similar conclusions reached by Popova and colleagues in a review of 44 studies

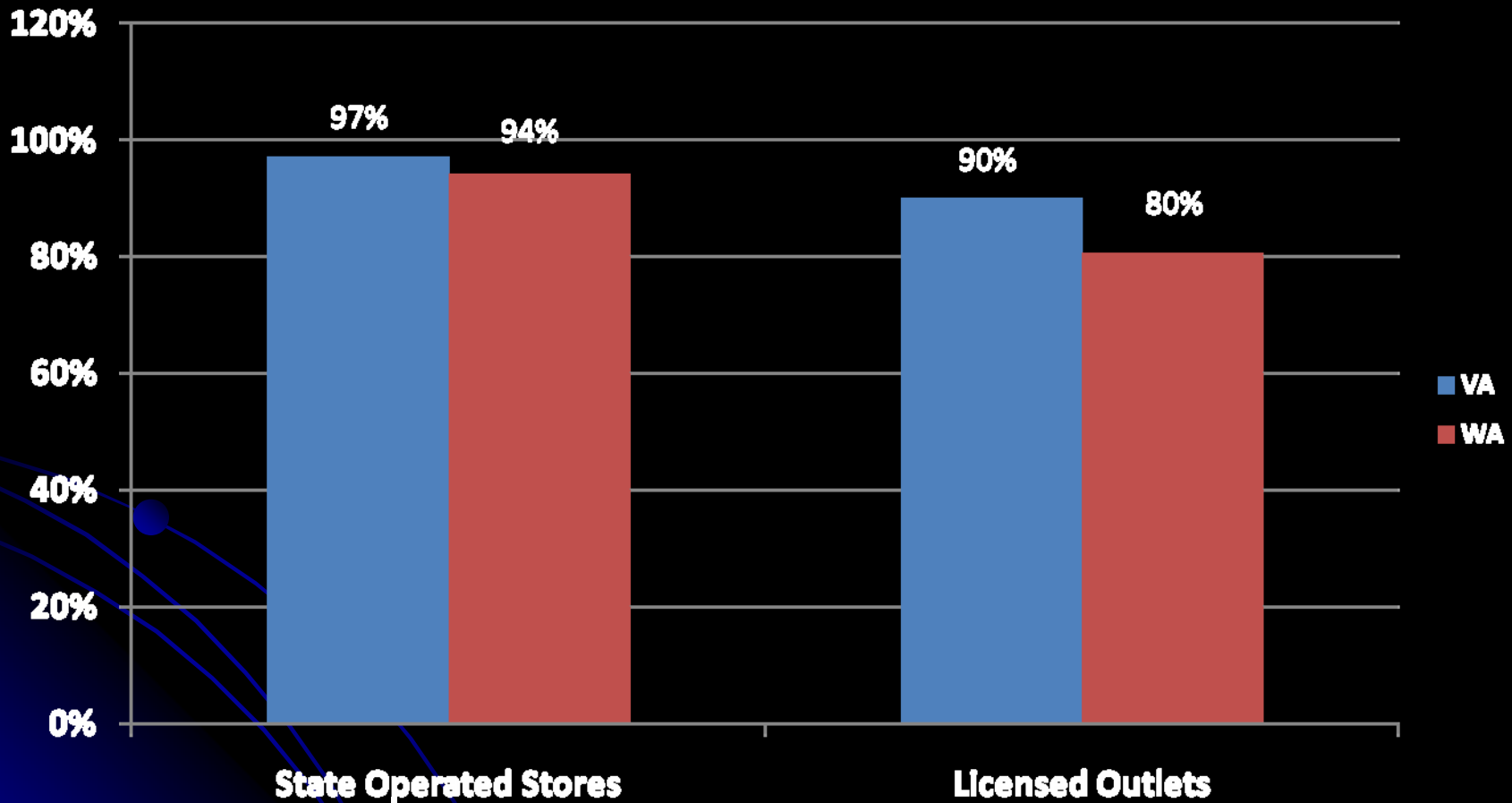
Impact of Removing Limits on Days of Sale

- Review by the Task Force on Community Preventive Services—sponsored by CDC (2008)
 - Two studies in the US and two in Sweden qualified for review
- A 1995 repeal of a ban on Sunday sales in New Mexico was associated with a 30% increase in motor vehicle fatalities on Sundays (McMillan et al., 2006 & 2007)
 - Caveat: All packaged alcohol
 - Communities passing the local option to re-ban Sunday sales experience a substantial drop in ARC rates on Sundays
- A study of the effects of increased days of sale in 12 states indicated increases in the per capita consumption of spirits (+3.5%) and beer (+2.4%) (Stehr, 2007)

Impact of Price

- Review of 21 studies assessing the influence of price on spirits consumption (Elder et al., 2010)
 - All but 3 studies found that higher prices were related to lower consumption
 - For spirits, a 10% increase in price was associated with an average (median) decrease of 7.9% in consumption
 - Several studies also found that increased alcohol prices and taxes were associated with decreases in various measures of alcohol-related harm

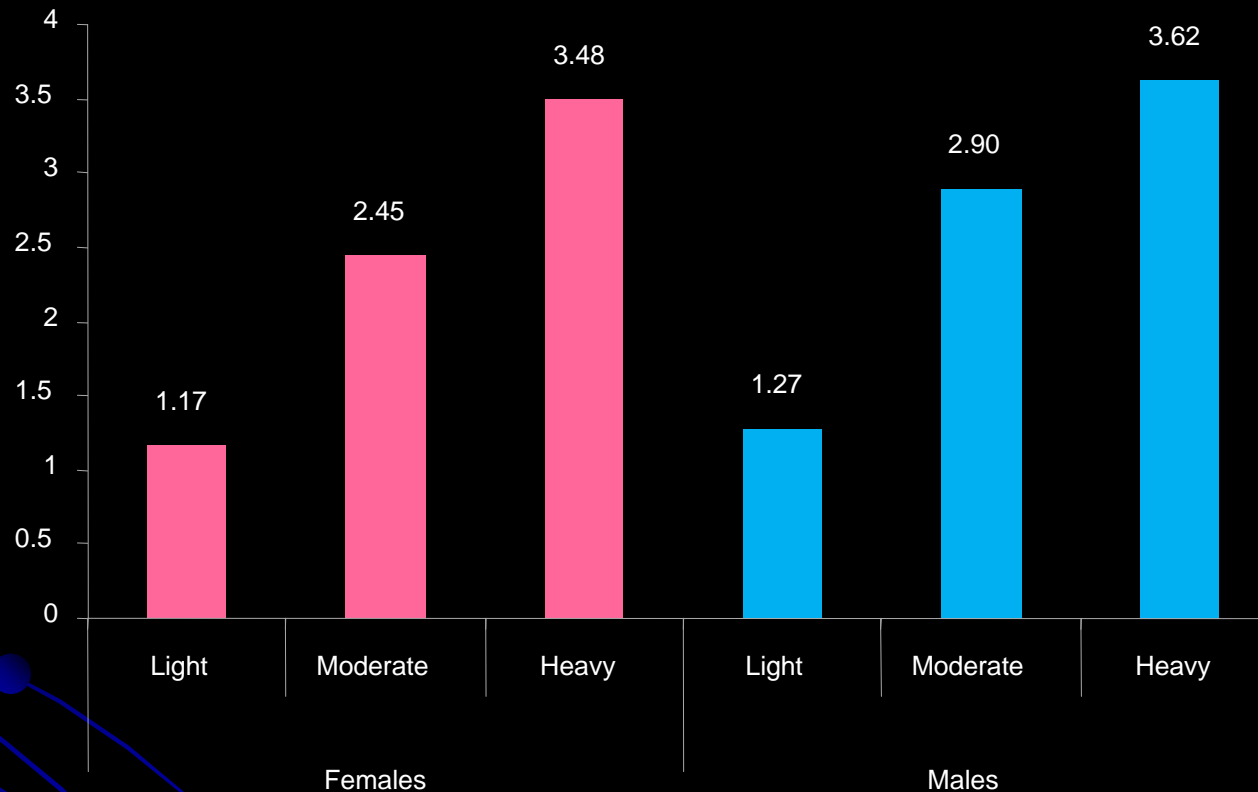
Under Age Buyer Compliance Rates



Consumption and Alcohol-Related Harm

- Increased accessibility to alcohol is associated with increased consumption
- Increased consumption results from:
 - Those who are current abstainers begin drinking and/or
 - Current drinkers drink more
- Overall, increased volume of alcohol consumption increases the risk for a variety of alcohol-related harms

Average Relative Risk (RR) for Disease by Drinking Category



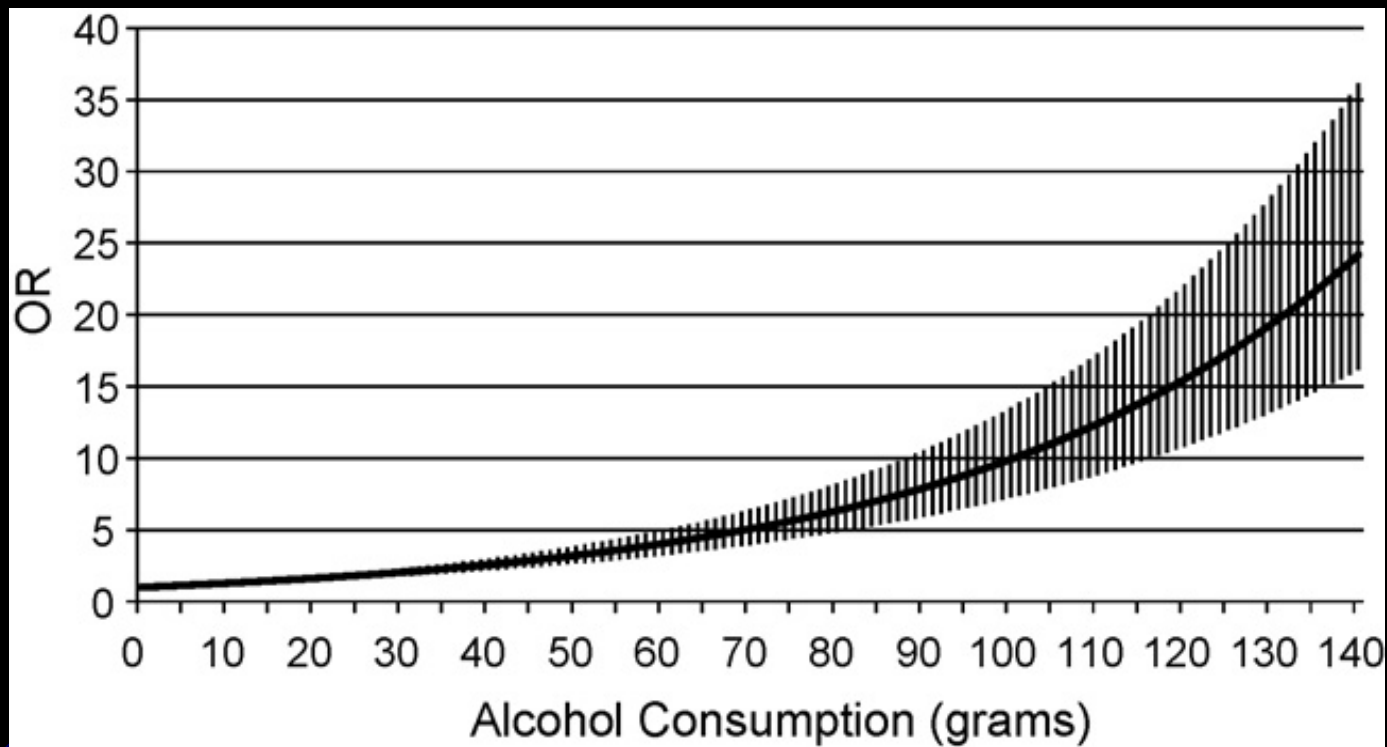
Includes multiple types of cancer, diabetes, hypertension, strokes, liver cirrhosis, and cardiovascular disease.

Source: Rehm, Room, Graham, Monteiro, Gmel & Sempos, (2003)

Episodic Alcohol Consumption and Injuries

- Increase in odds per 10 grams (2/3 drink) increase in consumption
 - Intentional injury (5 studies) +38%
 - Falls (5 studies) +25%
 - MVA (8 studies) +24%

Source: Taylor et al., 2010



Dose-response curve for the amount of alcohol consumed 3 hours prior and the odds of **non-motor** vehicle accident injury

15 grams = 1 drink

Source: Taylor, Irving, Kanteres, Room, Borges, Cherpitel, Greenfield, Rehm, 2010, *Drug and Alcohol Dependence*

Summary of Major Findings

- Preponderance of evidence suggests that privatization generally leads to increases in consumption
 - Caveat 1: Most studies were of wine
 - Caveat 2: Likely affected by how privatization is implemented
 - Caveat 3: Difficult to control for other factors that influence consumption
- Large majority of studies show a positive association between off-premise outlet density and consumption and/or alcohol-related harm

Summary cont'd

- Evidence from a small number of studies indicates that increasing days of sale increases consumption and traffic fatalities
- Consistent finding that higher alcohol prices and alcohol taxes are associated with reductions in alcohol consumption

Summary cont'd

- Data from two states, including Virginia, suggest that state-operated stores are less likely to sell alcohol to underage buyers
- Results from numerous studies show that increases in alcohol consumption lead to increases in alcohol-related disease, violence and accidents
 - Any increase has negative consequences

Impaired Judgment (Boudreaux, 2010)


- Compared 18 “control” states with other states and DC on alcohol-related deaths, binge drinking and drunk-driving fatalities
- Weak study design (cross-sectional) that did not control for other differences (e.g., on-premise outlet density, socio-demographics, law enforcement)
- Control states vary in how they regulate alcohol
 - Only 9 of 18 control states directly operate stores
- Reporting deaths as rate per 100,000 (33.79 in control states vs. 34.64 in license states) masks the statewide impact: 65 deaths per year in Virginia

Strategies to Mitigate the Potential Negative Impact of Privatization

- Limit the number of outlets
- Restrict marketing
- Zoning restrictions
 - Limit proximity to college/university campuses
 - Limit clustering, especially in high crime neighborhoods
- Limit days and hours of sales
- Increase excise tax
- Increase enforcement activities
 - Increase number of ABC Agents (compliance checks)
 - Other (e.g., stronger enforcement of drinking and driving laws)
- Increases prevention efforts

Recommendations

Given the public health risks, if privatization:

1. Implement strategies to mitigate potential harm
 2. Monitor impact of privatization on consumption and alcohol-related harm
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