

Using Evidence for Public Health Decision Making:

Preventing Excessive Alcohol Consumption and Related Harms





Introduction

This presentation summarizes findings of the Task Force on Community Preventive Services on the effectiveness of interventions aimed at preventing excessive alcohol consumption and related harms.





Introduction

This presentation can be used with the following two overview slide sets available on the Community Guide web site (www.thecommunityguide.org):

- 1. "The Community Guide: A Brief Overview"
 - How the Community Guide is developed under guidance of the Task Force on Community Preventive Services
- 2. "The Community Guide: Systematic Reviews to Inform Task Force Recommendations"
 - Description of the Community Guide methods and how the Task Force uses information to form recommendations





Overview

- What is Excessive Alcohol Consumption and Why Address It?
- Background Information
- Task Force Findings for Interventions Aimed at Preventing Excessive Alcohol Consumption





What is Excessive Alcohol Consumption and Why Address It?





What is Excessive Alcohol Consumption?

- Excessive alcohol consumption can take the form of heavy drinking, binge drinking, or both
- Heavy drinking is defined as consuming:
 - More than two drinks a day on average for men
 - More than one drink a day on average for women
- Binge drinking is defined as consuming:
 - Five or more drinks during a single occasion for men
 - Four or more drinks during a single occasion for women





What is Excessive Alcohol Consumption?

- Another form of excessive alcohol consumption is underage drinking
- Underage drinking:
 - Is illegal
 - Often involves consumption in quantities and settings that can lead to serious immediate and long-term consequences





Why Does the Community Guide Address Excessive Alcohol Consumption?

Public Health Impact of Excessive Drinking:

- 79,000 deaths and 2.3 million Years of Potential Life Lost (YPLL) in the United States each year
- Third leading preventable cause of death in the United States
- Most excessive drinkers are not alcohol dependent





Why Does the Community Guide Address Excessive Alcohol Consumption?

- Excessive alcohol consumption is a risk factor for:
 - Health problems such as liver disease, cancer, high blood pressure, and psychological disorders
 - Unintentional injuries such as motor vehicle injuries, falls, burns, and firearm injuries
 - Violence, including child maltreatment and intimate partner violence





RISK FACTOR

POTENTIAL CONDITION

Underage & Binge Drinking

Motor Vehicle Crashes Interpersonal Violence HIV, STDs **Unintended Pregnancy Fetal Alcohol Spectrum Disorder Alcohol Dependence**

For more information: http://www.cdc.gov/alcohol/





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What Interventions were Reviewed?

- Interventions directed toward the general population:
 - Regulation of alcohol outlet density
 - Maintaining limits on days of sale
 - Maintaining limits on hours of sale
 - Increasing alcohol taxes
 - Overservice law enforcement initiatives
 - Dram shop liability laws
- Interventions directed toward underage drinkers:
 - Enhanced enforcement of laws prohibiting sales to minors





Background Information





Who Makes the Recommendations?

The Task Force on Community Preventive Services (Task Force) is an **independent**, **nonfederal**, **volunteer body of experts** in public health and prevention research, practice, and policy, appointed by the CDC Director to:

- Prioritize topics for systematic review
- Oversee systematic reviews conducted by Community Guide staff
- Develop evidence-based recommendations using the systematic review results
- Identify areas that need further research





What Questions Does the Task Force Ask about Each Intervention?

- Does it work?
 - o How well?
 - For whom?
 - Under what circumstances is it appropriate?
- What does it cost?
 - o How do the intervention's benefits compare with its cost?
- Are there barriers to its use?
- Are there any other benefits or harms?
- Are there any unanticipated outcomes?





What Do Task Force Findings Mean?

- Recommended

 strong or sufficient
 evidence that the intervention is effective
- Recommended Against— strong or sufficient evidence that the intervention is harmful or not effective
- Insufficient Evidence the available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective





Task Force Findings: Strong and Sufficient Evidence

- Strong and sufficient evidence judgments reflect the:
 - Number of available studies
 - Research design of those studies
 - Quality with which those studies were executed
 - Overall magnitude of the effects (size of the outcome)
 - Consistency of the study findings





Task Force Findings: Insufficient Evidence

- Insufficient evidence means that additional research is needed to determine whether or not the intervention is effective
- This does NOT mean that the intervention does not work
- In some cases there are not enough studies to draw firm conclusions. Reasons include:
 - Lack of studies
 - Lack of studies with rigorous methods





Task Force Findings: Insufficient Evidence cont'd

- In other cases, there are a sufficient number of studies, but the findings are inconsistent. Reasons include:
 - Confounding variables
 - Inconsistency in how the intervention was implemented
 - A substantial number of studies indicating minimal or negative effects





Task Force Findings: Insufficient Evidence cont'd

- One major use of insufficient evidence findings is to influence future research.
 These findings can:
 - Identify promising, but understudied, topics with important public health implications
 - Help to allocate scarce research funds to those topics, which might otherwise be allocated to topics where strong or sufficient evidence already exists





Task Force Findings for Interventions Aimed at Preventing Excessive Alcohol Consumption





Task Force Findings

Intervention	Finding
Interventions Directed Toward the General Population	
Regulation of alcohol outlet density	Recommended based on sufficient evidence
Maintaining limits on days of sale	Recommended based on strong evidence
Maintaining limits on hours of sale	Recommended based on sufficient evidence
Increasing alcohol taxes	Recommended based on strong evidence
Overservice law enforcement initiatives	Insufficient Evidence
Dram shop liability	Recommended based on strong evidence
Interventions Directed Toward Underage Drinkers	
Enhanced enforcement of laws prohibiting sales to minors	Recommended based on sufficient evidence





Regulation of Alcohol Outlet Density

- An alcohol outlet is a place where alcohol may be legally sold for the buyer to drink:
 - At the place of purchase (on-premises outlets, such as bars or restaurants)
 - Elsewhere (off-premises outlets, such as liquor stores)
- Density refers to the number of alcohol outlets in a given area or population





Regulation of Alcohol Outlet Density

- Alcohol outlet density regulation is defined as applying regulatory authority to:
 - Reduce alcoholic beverage outlet density
 - Limit the increase of alcoholic beverage outlet density
- Regulation is often implemented through licensing or zoning processes





Regulation of Alcohol Outlet Density: Task Force Finding

The Task Force **recommends** the use of regulatory authority (through licensing, zoning, and other means) to limit alcohol outlet density for the prevention of excessive alcohol consumption and related harms, on the basis of **sufficient evidence** of a positive association between outlet density and these outcomes.





Maintaining Limits on Days of Sale

- Limiting the days when alcohol can be sold is intended to prevent excessive alcohol consumption and related harms by regulating access to alcohol
- Most policies limiting days of sale target weekend days (usually Sundays)





Maintaining Limits on Days of Sale

- May apply to alcohol outlets in which alcohol may be legally sold for the buyer to drink:
 - At the place of purchase (on-premises outlets, such as bars or restaurants)
 - Elsewhere (off-premises outlets, such as liquor stores)
- In the U.S., policies may be made at the state level and, where not prohibited by state pre-emption laws, at local levels





Maintaining Limits on Days of Sale: Task Force Finding

On the basis of **strong evidence**, the Task Force **recommends** maintaining existing limits on the days on which alcoholic beverages are sold, as one strategy for the prevention of excessive alcohol consumption and related harms.

 Evidence for this recommendation is based on studies assessing the effects of repealing limits on sales of alcoholic beverages on weekend days





Maintaining Limits on Hours of Sale

- One strategy to prevent excessive alcohol consumption and related harms is to limit access by regulating the hours during which alcohol can legally be sold. Approaches may include:
 - Maintaining existing limits in response to efforts to expand hours of sale
 - Expanding current limits on hours of sale





Maintaining Limits on Hours of Sale

- Policies limiting hours of sale may apply to alcohol outlets that sell alcohol for consumption:
 - At the place of purchase (on-premises outlets, such as bars or restaurants)
 - Elsewhere (off-premises outlets, such as liquor stores)
- In the U.S., policies may be made at the state level and, where not prohibited by state pre-emption laws, at local levels





Maintaining Limits on Hours of Sale: Task Force Finding

The Task Force **recommends** maintaining limits on hours of alcohol sale in on-premises settings based on sufficient evidence of effectiveness for reducing excessive alcohol consumption and related harms.





Maintaining Limits on Hours of Sale: Task Force Finding cont'd

- Two separate analyses were conducted to determine if an increase in hours of sale in on-premises outlets was associated with an increase in alcohol-related harms:
 - Sufficient evidence was found for increasing hours sales by two or more hours
 - Insufficient evidence was found for increasing sales by less than two hours





Maintaining Limits on Hours of Sale: Task Force Finding cont'd

- All evidence was from studies of events in high-income nations; no studies were conducted in the United States
- No studies assessed the effects of increasing hours of alcohol sales in offpremises settings





Increasing Alcohol Taxes

Alcohol excise taxes:

- Affect the price of alcohol
- Are intended to reduce alcohol-related harms, raise revenue, or both
- May be implemented at the state and federal level
- Are beverage-specific (i.e., they differ for beer, wine, and spirits)
- Usually are based on the amount of beverage purchased (not on the sales price), so their effects can erode over time due to inflation if they are not adjusted regularly





Increasing Alcohol Taxes: Task Force Finding

The Task Force **recommends** increasing the unit price of alcohol by raising taxes based on **strong evidence** of effectiveness for reducing excessive alcohol consumption and related harms.

 Public health effects are expected to be proportional to the size of the tax increase





Overservice Law Enforcement Initiatives

- Overservice law enforcement initiatives are proactive community efforts to increase the enforcement of laws that prohibit the service of alcoholic beverages to intoxicated customers
- Alcohol Beverage Control personnel or plainclothes or uniformed police carry out enforcement, which may include fines or licensing actions





Overservice Law Enforcement Initiatives

- Overservice law enforcement initiatives often involve two more components:
 - Notifying alcohol beverage outlets of enforcement plans in order to foster the awareness that is essential for effective deterrence
 - Providing information or training to help outlet managers and staff comply with overservice laws by learning how to better recognize intoxicated customers and by providing strategies to prevent overservice





Overservice Law Enforcement Initiatives

- Because overservice laws are not actively enforced in many communities, overservice law enforcement initiatives often involve increases in enforcement from low baseline levels
- Not all U.S. states provide definitions of intoxication in their overservice regulations, and the definitions in use are inconsistent





Overservice Law Enforcement Initiatives

- Law enforcement officers and servers may recognize patron intoxication by:
 - Tracking the number of alcoholic beverages served
 - Looking for physiological and behavioral characteristics that become more apparent as alcohol consumption increases (e.g., bloodshot eyes, flushed face, slurred speech, lack of balance and coordination)





Overservice Law Enforcement Initiatives: Task Force Finding

The Task Force concludes there is insufficient evidence to determine the effectiveness of overservice law enforcement initiatives as a means to reduce excessive alcohol consumption and alcohol-related harms, because of the small number of available studies and inconsistent findings.





Dram Shop Liability

- Dram shop liability allows the owner or server of a retail alcohol establishment where a customer recently consumed alcoholic beverages to be held legally responsible for the harms inflicted by that customer
- Examples of harms may include death, injury, or other damages as a result of an alcohol-related car crash





Dram Shop Liability

- Historically, the term "dram shop" referred to any establishment where alcohol was sold; a dram was a measure of alcohol
- Some states impose restrictions on dram shop liability by:
 - Capping the amount of compensation allowed in suits
 - Increasing the evidence required to demonstrate responsibility
 - Imposing statutes of limitations





Dram Shop Liability: Task Force Finding

The Task Force concludes on the basis of strong evidence that dram shop liability is effective in preventing and reducing alcohol-related harms.





Enhanced Enforcement of Laws Prohibiting Sales to Minors

- Enhanced enforcement programs initiate or increase the frequency of retailer compliance checks for laws against the sale of alcohol to minors in a community
- Retailer compliance checks, or "sting operations," are conducted by, or coordinated with, local law enforcement or alcohol beverage control (ABC) agencies, and violators receive legal or administrative sanctions





Enhanced Enforcement of Laws Prohibiting Sales to Minors

- Enhanced enforcement programs are often conducted as part of multicomponent, community-based efforts to reduce underage drinking
- Many also include strategies to increase perceived risk of detection by publicizing the increased enforcement activities. These messages can be delivered by:
 - Mass media
 - Sending letters to all local alcohol retailers





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Enhanced Enforcement of Laws Prohibiting Sales to Minors: Task Force Finding

The Task Force **recommends** enhanced enforcement of laws prohibiting sale of alcohol to minors, on the basis of **sufficient evidence** of effectiveness in limiting underage alcohol purchases.

 Further research will be required to assess the degree to which these changes in retailer behavior affect underage drinking





Where Can You Find More Information?

For more information about Task Force findings and recommendations on the prevention of excessive alcohol consumption please visit:

http://www.thecommunityguide.org/alcohol/index.html





References

Campbell CA, Hahn RA, Elder R, Brewer R, Chattopadhyay S, Fielding J, Naimi TS, Toomey T, Briana Lawrence B, Middleton JC, Task Force on Community Preventive Services. The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *Am J Prev Med* 2009;37(6):556-69.

Elder RW, Lawrence B, Ferguson A, Naimi TS, Brewer RD, Chattopadhyay SK, Toomey TL, Fielding JE, Task Force on Community Preventive Services. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *Am J Prev Med* 2010;38(2):217-29.

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Visit the Community Guide Web site and find out what works to promote health and safety in your community. Learn about:

- Evidence-based Task Force findings and recommendations
- Systematic review methods
- Interventions on 18 public health topic areas
- How to use the Community Guide
- And more!

www.thecommunityguide.org





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