



# WHAT WORKS

## Preventing Excessive Alcohol Consumption

### *Evidence-Based Interventions for Your Community*



**E**xcessive alcohol consumption is a risk factor for many health and social problems, contributing to 88,000 deaths each year in the United States.<sup>1</sup> In 2006, the estimated economic cost of excessive drinking in the U.S. was \$223.5 billion.<sup>2</sup> Drinking too much can cause immediate harm such as injuries from motor vehicle crashes, violence, and alcohol poisoning, and drinking too much over time can cause chronic diseases, such as cancer and heart disease.<sup>1</sup>

This brochure is designed to help public health program planners, community advocates, educators, and policymakers find proven intervention strategies—including programs, services, and policies—for preventing excessive alcohol consumption and related harms. It can help decision makers in both public and private sectors make choices about what intervention strategies are best for their communities. This brochure summarizes information in *The Guide to Community Preventive Services (The Community Guide)*, an essential resource for people who want to know what works in public health. Use the information in this brochure to help select intervention strategies you can adapt for your community to:

- Reduce excessive alcohol use, including binge drinking and underage drinking.
- Reduce the risk of chronic conditions such as liver disease, high blood pressure, heart disease, and cancer.
- Reduce violent crime, motor vehicle injuries, and alcohol-exposed pregnancies.
- Reduce youth access to alcohol.

The Community Guide provides evidence-based findings and recommendations from the Community Preventive Services Task Force (Task Force) about community preventive services, programs, and policies to improve health. Learn more about The Community Guide and what works to reduce excessive alcohol consumption and related harms by visiting [www.thecommunityguide.org/alcohol/index.html](http://www.thecommunityguide.org/alcohol/index.html).

## THE PUBLIC HEALTH CHALLENGE

### Excessive drinking has a substantial public health impact

Average Annual Alcohol-Attributable Deaths in the U.S. (2006 to 2010)

Cause	Number of Annual Fatalities
Chronic causes (e.g., liver disease)	38,253
Acute causes (e.g., homicide)	49,544
Total for all causes	87,798

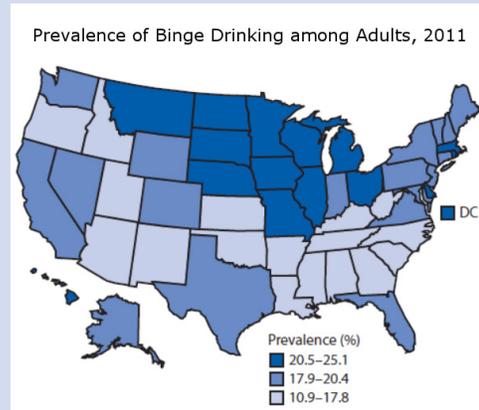
Source: Alcohol-Related Disease Impact (ARDI), 2014.

- Drinking too much alcohol is responsible for **88,000 deaths** annually, including 1 in 10 deaths among working-age adults in the U.S.<sup>1</sup>
- Excessive alcohol use costs the U.S. **\$223.5 billion—or \$1.90 per drink**—in 2006 due to lost workplace productivity, healthcare expenses, and crime. Federal, state, and local governments paid **42%** of these costs—or **80 cents per drink**.<sup>2</sup>
- About 9 in 10 excessive drinkers are **not** alcohol dependent, or addicted to alcohol.<sup>3</sup>

For national and state estimates of alcohol-related deaths and years of potential life lost, see CDC's Alcohol-Related Disease Impact (ARDI) application at [www.cdc.gov/ardi](http://www.cdc.gov/ardi).

For more information on excessive alcohol consumption in the U.S., including state-by-state data, see [www.cdc.gov/alcohol](http://www.cdc.gov/alcohol).

### Binge drinking is the main problem



Source: Behavioral Risk Factor Surveillance System (BRFSS), 2011

- Binge drinking is defined as having 4 or more drinks on an occasion (2–3 hours) for women, or 5 or more drinks on an occasion for men.<sup>4</sup>
- Binge drinking is the most common and most dangerous pattern of excessive drinking. It is responsible for **more than half** of the deaths and **three-quarters** of the economic costs associated with excessive alcohol use.<sup>1,2</sup>
- **1 in 6** adults binge drinks about four times a month, consuming about eight drinks per binge.<sup>5</sup>
- About **1 in 4 high school students** report binge drinking.<sup>6</sup>

## EVALUATING THE EVIDENCE

- The Task Force findings and recommendations for interventions strategies to prevent excessive alcohol consumption are based on systematic reviews of the available evidence.
- The systematic reviews look at the results of research and evaluation studies published in peer-reviewed journals and other sources.
- Each systematic review looks at the intervention strategy's effectiveness and how it works in different populations and settings. If found effective, cost and return on investment are also reviewed when available.
- For each intervention strategy, a summary of the systematic review, evidence gaps, and journal publications can be found on the Preventing Excessive Alcohol Consumption section of the website at [www.thecommunityguide.org/alcohol/index.html](http://www.thecommunityguide.org/alcohol/index.html).

### ▶ Community Preventive Services Task Force

The Guide to Community Preventive Services (The Community Guide) is an essential resource for people who want to know what works in public health. It provides evidence-based findings about public health interventions and policies to improve health and promote safety. The Community Preventive Services Task Force (Task Force)—an independent, nonfederal, unpaid body of public health and prevention experts—bases its findings on systematic reviews of the scientific literature. With oversight from the Task Force, scientists and subject matter experts from the Centers for Disease Control and Prevention conduct these reviews in collaboration with a wide range of government, academic, policy, and practice-based partners.

More information about how the Task Force conducts its reviews is available at [www.thecommunityguide.org/about/methods.html](http://www.thecommunityguide.org/about/methods.html).

## SUMMARIZING THE FINDINGS ON EXCESSIVE ALCOHOL CONSUMPTION

All ten Task Force findings and recommendations on preventing excessive alcohol consumption are available online at [www.thecommunityguide.org/alcohol](http://www.thecommunityguide.org/alcohol). Six of the ten Task Force recommendations related to reducing excessive alcohol consumption are below.

- ✓ **Increasing alcohol taxes.** Increasing the price of alcohol by raising taxes has proven effective in reducing consumption, leading to fewer deaths and injuries due to motor vehicle crashes, liver disease, violence, and other alcohol-related problems. For every 10% increase in price, alcohol consumption is expected to decrease by more than 7%. Public health effects are expected to be proportional to the size of the tax increase. Higher alcohol prices may also reduce underage drinking.
- ✓ **Dram shop liability.** Dram shop (or commercial host) liability refers to laws that hold alcohol retailers liable for injuries or deaths caused by a patron who was illegally served or sold alcohol because they were either intoxicated or under the age of 21 at the time of service. Commercial host liability is effective in preventing and reducing alcohol-related harms. For example, there was a median 6.4% reduction in deaths resulting from motor vehicle crashes in states with commercial host liability.
- ✓ **Regulation of alcohol outlet density.** Alcohol outlet density refers to the number and concentration of alcohol retailers (e.g. bars, restaurants, and liquor stores) in an area. Higher alcohol outlet density is associated with excessive alcohol use and related harms, including injuries and violence. Alcohol outlet density is often regulated by licensing or zoning regulations. States vary in the extent to which they allow local governments to regulate the licensing and placement of retail alcohol outlets.
- ✓ **Electronic screening and brief interventions (e-SBI).** The delivery of screening and brief interventions for excessive alcohol use using electronic devices, such as computers, is effective for reducing self-reported excessive alcohol consumption and alcohol-related problems among intervention participants. Some e-SBI programs are fully automated while others combine screening by a health professional with the automated delivery of counseling services. The use of e-SBI can reduce the amount of time required to deliver screening and counseling services.
- ✓ **Enhanced enforcement of laws prohibiting sales to minors.** Enforcing minimum drinking age laws through retailer compliance checks and sanctions is effective in reducing sales of alcohol to minors in commercial settings by a median of 42 percent. Enhanced enforcement programs are often part of multi-component, community-based efforts to curb underage drinking.

The Task Force **recommends against** the further **privatization of retail alcohol sales** in settings with current government control of retail sales. Privatization, which allows non-governmental retailers to sell a type of alcoholic beverage (e.g. distilled spirits), was found to increase the per capita sales of the privatized beverage type by a median of 44.4%, and decrease the sale of other types of alcohol by 2.2%. Privatization often results in increases in alcohol outlet density, days and hours of sales, and alcohol advertising, which are associated with increased consumption and alcohol-related harms.

## PUTTING THE TASK FORCE FINDINGS TO WORK

As a public health decision maker, practitioner, community leader, or someone who can influence the health of your community, you can use The Community Guide to create a blueprint for success.

- ✓ Identify your community's needs. Review the intervention strategies recommended by the Task Force and determine which ones best match your needs. Adopt or adapt evidence-based programs, services, and policies that can prevent excessive alcohol consumption and related harms in your community.
- ✓ Consult CDC's Prevention Status Reports on Excessive Alcohol Use at [www.cdc.gov/psr/alcohol](http://www.cdc.gov/psr/alcohol) to learn the status of public health policies to prevent excessive drinking, including alcohol taxes, dram shop liability, and local authority to regulate alcohol density in your state.
- ✓ Consult CDC's Prevention of Excessive Alcohol Use at [www.cdc.gov/alcohol/fact-sheets/prevention.htm](http://www.cdc.gov/alcohol/fact-sheets/prevention.htm) for more information on the prevention of excessive drinking.



## FOR MORE INFORMATION

**The Community Guide: Preventing Excessive Alcohol Consumption**

[www.thecommunityguide.org/alcohol](http://www.thecommunityguide.org/alcohol)

**Alcohol Program, National Center for Chronic Disease Prevention and Health Promotion, CDC**

[www.cdc.gov/alcohol](http://www.cdc.gov/alcohol)

**CDC Vital Signs: Binge Drinking**

[www.cdc.gov/VitalSigns/bingedrinking](http://www.cdc.gov/VitalSigns/bingedrinking)

**National Prevention Strategy Resources on Preventing Drug Abuse and Excessive Alcohol Use**

[www.surgeongeneral.gov/initiatives/prevention/strategy/preventing-drug-abuse-excessive-alcohol-use](http://www.surgeongeneral.gov/initiatives/prevention/strategy/preventing-drug-abuse-excessive-alcohol-use)



## THE COMMUNITY GUIDE IN ACTION

### New Mexico Enforces Policies to Combat Binge Drinking



In New Mexico in 2004, many adults who reported drinking in bars reported consuming ten or more drinks and driving after doing so, contributing to the high rate of alcohol-attributable motor vehicle crash deaths in the state. In 2005, the state launched a campaign to increase enforcement of existing liquor laws as part of a campaign to reduce alcohol-impaired driving. As a result, between 2004-2005 and 2007-2008, New Mexico saw a 16 percent decrease in binge drinking intensity (the number of drinks consumed on the last binge drink occasion) from 8.3 to 7.0 drinks per occasion among adult binge drinkers who reported drinking in bars and clubs. Read more on this story at [www.healthypeople.gov/2020/healthy-people-in-action/story/reducing-binge-drinking-new-mexicos-driving-while-intoxicated](http://www.healthypeople.gov/2020/healthy-people-in-action/story/reducing-binge-drinking-new-mexicos-driving-while-intoxicated).

### Omaha Targets Alcohol Outlet Density



In 2010, Nebraska had the second highest adult binge drinking prevalence in the nation. The number of liquor licenses being granted was growing at a rate of twice the increase in the state's population. In Omaha, underage drinking and youth access to alcohol had become a critical public health issue. The community responded by launching the LOCAL (Let Omaha Control its Alcohol Landscape) campaign to push for measures to address alcohol outlet density. In October 2012, the Omaha City Council passed a land-use ordinance that included new nuisance abatement standards for alcohol outlets. Alcohol retailers who did not comply with the ordinance faced losing their certificate of occupancy. Read more on this story at [www.cdc.gov/pcd/issues/2013/12\\_0090.htm](http://www.cdc.gov/pcd/issues/2013/12_0090.htm).

## REFERENCES

<sup>1</sup>Stahre M, Roeber J, Kanny D, Brewer RD, Zhang X. Contribution of excessive alcohol consumption to deaths and years of potential life lost in the United States. *Prev Chronic Dis* 2014;11:130293.

<sup>2</sup>Bouchery EE, Harwood HJ, Sacks JJ, Simon CJ, Brewer RD. Economic costs of excessive alcohol consumption in the United States, 2006. *Am J Prev Med* 2011;41:516-24.

<sup>3</sup>Esser MB, Hedden SL, Kanny D, Brewer RD, Groer JC, Naimi TS. Prevalence of Alcohol Dependence Among US Adult Drinkers, 2009-2011. *Prev Chronic Dis* 2014;11:140329.

<sup>4</sup>National Institute of Alcohol Abuse and Alcoholism. NIAAA council approves definition of binge drinking [PDF-1.62MB]. NIAAA Newsletter 2004; No. 3, p. 3

<sup>5</sup>Kanny D, Liu Y, Brewer RD, Lu H. Binge Drinking — United States, 2011. *MMWR* 2013;62 (Suppl): 77-80.

<sup>6</sup>Kann L, Kinchen SA, Shanklin S, et al. Youth Risk Behavior Surveillance—United States, 2013. *CDC Morb Mort Surveil Summ* 2014;63(SS-04):1-168.

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#### TASK FORCE FINDINGS ON EXCESSIVE ALCOHOL CONSUMPTION

The Community Preventive Services Task Force (Task Force) has released the following findings on what works in public health to prevent excessive alcohol consumption and related harms. These findings are compiled in The Guide to Community Preventive Services (The Community Guide) and listed in the table below. Use the findings to identify intervention strategies you could use for your community.

Legend for Task Force Findings:  Recommended  Insufficient Evidence  Recommended Against (See reverse for detailed descriptions.)

Intervention	Task Force Finding
<b>Interventions Directed to the General Population</b>	
Increasing alcohol taxes	
Regulation of alcohol outlet density	
Dram shop liability	
Maintaining limits on days of sale	
Maintaining limits on hours of sale	
Electronic screening and brief interventions (e-SBI)	
Overservice law enforcement initiatives	
Responsible beverage service training	
Privatization of retail alcohol sales	
<b>Interventions Directed to Underage Drinkers</b>	
Enhanced enforcement of laws prohibiting sales to minors	

Visit the "Preventing Excessive Alcohol Consumption" page of The Community Guide website at [www.thecommunityguide.org/alcohol](http://www.thecommunityguide.org/alcohol) to find summaries of Task Force findings and recommendations on preventing excessive alcohol consumption. Click on each topic area to find results from the systematic reviews, included studies, evidence gaps, and journal publications.

## UNDERSTANDING THE FINDINGS

The Task Force bases its findings and recommendations on systematic reviews of the scientific literature. With oversight from the Task Force, scientists and subject matter experts from the Centers for Disease Control and Prevention conduct these reviews in collaboration with a wide range of government, academic, policy, and practice-based partners. Based on the strength of the evidence, the Task Force assigns each intervention to one of the categories below.

CATEGORY	DESCRIPTION	ICON
<b>Recommended</b>	There is strong or sufficient evidence that the intervention is <b>effective</b> . This finding is based on the number of studies, how well the studies were designed and carried out, and the consistency and strength of the results.	
<b>Insufficient Evidence</b>	There is <b>not enough evidence</b> to determine whether the intervention is effective. This does not mean the intervention does not work. There is not enough research available or the results are too inconsistent to make a firm conclusion about the intervention's effectiveness. The Task Force encourages those who use interventions with insufficient evidence to evaluate their efforts.	
<b>Recommended Against</b>	There is strong or sufficient evidence that the strategy is <b>harmful or not effective</b> .	

Visit the "Systematic Review Methods" page on The Community Guide website at [www.thecommunityguide.org/about/methods.html](http://www.thecommunityguide.org/about/methods.html) for more information about the methods used to conduct the systematic reviews and the criteria the Task Force uses to make findings and recommendations.

## RESOURCES

You can use the following resources to guide the implementation of evidence-based strategies and put the Task Force findings to work.

- **Prevention Status Reports on Excessive Alcohol Use**  
CDC Office for State, Tribal, Local, and Territorial Support  
[www.cdc.gov/psr/alcohol](http://www.cdc.gov/psr/alcohol)
- **National Prevention Strategy**  
Preventing Drug Abuse and Excessive Alcohol Use  
[www.surgeongeneral.gov/initiatives/prevention/strategy/preventing-drug-abuse-excessive-alcohol-use](http://www.surgeongeneral.gov/initiatives/prevention/strategy/preventing-drug-abuse-excessive-alcohol-use)
- **CDC Vital Signs**  
Binge Drinking  
[www.cdc.gov/vitalsigns/bingedrinking](http://www.cdc.gov/vitalsigns/bingedrinking)
- **Preventing Excessive Alcohol Use Fact Sheet**  
CDC Alcohol Program  
[www.cdc.gov/alcohol/fact-sheets/prevention.htm](http://www.cdc.gov/alcohol/fact-sheets/prevention.htm)