

A conversation with CDC's Alcohol Program, September 5, 2014

Participants

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Note: These notes were compiled by the Open Philanthropy Project and give an overview of the major points made by CDC Alcohol Program staff.

Summary

The Open Philanthropy Project spoke with Dr. Robert Brewer and other staff of the Centers of Disease Control and Prevention (CDC) Excessive Alcohol Use Prevention Team (Alcohol Program) as part of the Open Philanthropy Project's investigation into alcohol policy. Conversation topics included:

- The public health impact of excessive drinking in the U.S.
- The CDC Alcohol Program's priorities
- Current investment in the prevention of excessive drinking in the U.S.
- The role of foundations and philanthropy in this area

The Public Health Impact of Excessive Drinking in the US

Excessive drinking is responsible for 88,000 deaths in the US each year, including 1 in 10 deaths among working-age adults. These deaths result in over 2.5 million years of potential life lost (YPLLs), shortening the lives of those who've died by an average of 30 years. Further, excessive drinking cost the US economy \$224 billion in 2006, or \$1.90 a drink. These costs were largely due to lost productivity, health care expenses, and criminal justice costs. As a result, about \$2 in \$5 of these costs were paid by government.

Binge drinking, defined as 4 or more drinks on an occasion by women or 5 or more drinks on an occasion by men, is responsible for:

- Three-quarters of the total economic cost of excessive drinking in the U.S.
- Half of the deaths due to excessive drinking, and
- Two-thirds of the years of life lost due to excessive drinking

Binge drinking is by far the most common pattern of excessive drinking in the U.S. Roughly 90% of adult excessive drinkers binge drink, and about 90% of the alcohol

consumed by underage youth is done while binge drinking. Furthermore, contrary to popular opinion, most binge drinkers are *not* alcohol dependent or alcoholics.

There are other categories of excessive drinkers in addition to binge drinkers. These include the following:

- Underage drinkers (i.e., youth under age 21 years who consume alcohol)
- Pregnant drinkers
- Individuals who report high weekly alcohol consumption (8 or more drinks a week for women or 15 or more drinks a week for men), with or without binge drinking

Overview of the CDC Alcohol Program

The Alcohol Program is a small but growing program at CDC, with three full-time employees and an FY2015 budget of \$3 million. The Alcohol Program focuses on strengthening the scientific foundation for the prevention of excessive drinking by monitoring excessive alcohol use and related harms (e.g., alcohol poisoning); conducting applied public health research on excessive drinking and on strategies to prevent it; and supporting the implementation of effective prevention strategies in states and communities (e.g., funding state alcohol epidemiologists).

Monitoring and reporting on the epidemiology and prevention of excessive alcohol use

The Alcohol Program categorizes much of its work as public health surveillance. This work includes:

- Analyzing and reporting of alcohol data from CDC surveys, such as the Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Surveillance System.
- Developing and supporting tools for assessing the health impacts of excessive drinking in states and communities, including the Alcohol-Related Disease Impact (ARDI) application, which was funded by the Robert Wood Johnson Foundation.
- Monitoring risk factors for excessive alcohol use, including youth exposure to alcohol advertising on television and on the internet.
- Tracking and reporting on the status of effective policy and environmental strategies for reducing excessive alcohol use in states by developing Prevention Status Reports and supporting targeted legal research.

Applied public health research

The Alcohol Program has worked closely with the Community Guide to systematically evaluate the effectiveness of several policy and environmental strategies to reduce excessive alcohol use. This scientific evidence was then presented to the independent, non-federal [Community Preventive Services Task Force \(Task Force\)](#), who reviewed the science and have recommended several high-impact strategies for reducing excessive alcohol use and related harms (www.thecommunityguide.org/alcohol), including increasing alcohol taxes,

regulating alcohol outlet density (i.e., the concentration of alcohol retailers in states and communities), and commercial host (“dram shop”) liability, which holds alcohol retailers legally responsible for harms caused by illegal alcohol sales.

In 2011, the Alcohol Program funded a research collaborative to model the social and health effects of state alcohol tax increases (e.g., 5, 10, and 25 cents per drink, as well as a 5% sales tax). Researchers specifically evaluated how these tax increases would affect the amount people pay for alcohol based on their drinking pattern (e.g., excessive vs. non-excessive) and personal characteristics (e.g., age and sex); and the impact of these tax increases on employment. These studies showed that excessive drinkers pay most of the increased cost of alcohol following alcohol tax increases, and that alcohol taxes can actually *increase* employment in states. A web tool developed by the research team (available at: www.CAMY.org) provides state-specific estimates of the cost of the four hypothetical alcohol tax increases to individuals as well as the potential impact of these tax increases on employment, based on findings from these research studies.

Separate studies done by members of the research collaborative evaluated the impact of a 2009 alcohol tax increase in Illinois. The researchers found that sexually-transmitted disease (STD) rates and motor vehicle crash deaths declined significantly in Illinois following this alcohol tax increase even after accounting for other factors that might have influenced these outcomes.

Supporting States and communities in the prevention of excessive alcohol use

The Alcohol Program currently provides funding for State Alcohol Epidemiologists in New Mexico and Michigan, and anticipates funding these positions in additional states in the future. In addition to data analysis and program evaluation, these alcohol epidemiologists work closely with community coalitions, liquor control agencies, and public health programs (e.g., injury prevention and tobacco control programs) to assess the problem of excessive drinking and educate and inform the public about evidence-based prevention strategies. For example, the State Alcohol Epidemiologist in New Mexico recently worked with community coalitions to assess alcohol outlet density.

The Alcohol Program provides funding for State Alcohol Epidemiologists through cooperative agreements between the states and the federal government. The Alcohol Program then monitors their work and provides technical assistance to help enhance their effectiveness. However, these individuals are recruited and hired by state public health agencies, or their designated representative, and are thus committed to addressing excessive drinking in their state.

The Alcohol Program is also funding the development of tools that will support the implementation of Community Guide strategies in states and communities. For example, the Alcohol Program has been working with partners to develop program tools that summarize the public health impact of excessive drinking, the evidence

base for a particular prevention strategy, and case studies that illustrate how states and communities have put these recommendations into practice. The first two tools are focusing on the regulation of alcohol outlet density and Dram shop liability (also known as commercial host liability). The Alcohol Program is also developing a guide to assist communities in measuring alcohol outlet density, and is supporting legal research to help characterize the current alcohol policies in states.

In addition to developing tools to support public health practice, the Alcohol Program educates and informs states and communities about effective prevention strategies for excessive drinking through publications and presentations, including a series of publications on the epidemiology and prevention of excessive alcohol use that were released as part of the [CDC's Vital Signs series](#).

Investing in the Prevention of Excessive Alcohol Use

There is currently a large implementation gap between the scientific evidence supporting the effectiveness of population-based strategies for reducing excessive alcohol use, such as those recommended by the Community Preventive Services Task Force and included in the Community Guide (www.thecommunityguide.org/alcohol), and the public health resources and capacity to bring these interventions to scale at the state and local level. Fortunately, there are some very successful examples of public health programs that are addressing other leading preventable causes of death and disability in the U.S. and globally (e.g., smoking) using similar public health strategies, and the lessons learned from these efforts are being used to guide the Alcohol Program's work on excessive drinking.

Tobacco prevention as a model for the prevention of excessive drinking

There are a number of lessons learned from public health initiatives to reduce tobacco use in the U.S. that apply to the prevention of excessive drinking, including the following:

- Use rigorous scientific methods to study the health effects of tobacco use and the effectiveness of public health strategies to address it
- Assess the policy environment in states and communities, and evaluate the impact of changing these policies on tobacco use by adults and youth
- Invest in tobacco control programs in state and local public health agencies to bring effective intervention strategies to scale.

Today, every state public health agency in the U.S. has a tobacco control program. These programs all receive funding from the tobacco control program at CDC, and some receive additional funding through other sources, including private foundations.

As with tobacco prevention, there is strong scientific evidence documenting the nature of the problem of excessive alcohol use, particularly binge drinking, and effective public health strategies to prevent it. However, few states have a public

health program that's focused on reducing excessive alcohol consumption with dedicated staff, such as a program coordinator and alcohol epidemiologists. As a result, there are relatively few examples of states and communities that have successfully implemented effective policy strategies for reducing excessive alcohol use, such as those included in the Community Guide.

Building state public health capacity to address excessive drinking

State health departments are in a unique position to coordinate and convene various groups – such as community coalitions, state branches of the American Cancer Society, and health professionals – to support the prevention of excessive drinking at the state and local levels.

State health departments can also provide training and technical assistance to state and local public health professionals, community groups, and other partner organizations who are working on the prevention of excessive alcohol use, so that effective policy strategies for reducing excessive alcohol use can be effectively implemented and evaluated. Public health departments can further facilitate partnerships with law enforcement to prevent illegal alcohol sales, which may be particularly important given the limited capacity to enforce liquor laws in many states.

Challenges to Implementing an Effective Public Health Response to Excessive Alcohol Use

The Alcohol Program's emphasis on policy and environmental strategies for preventing excessive drinking across the lifespan is not the dominant approach to addressing excessive alcohol use in the U.S. Many current efforts are focused on the clinical treatment of alcohol dependence, or prevention of underage drinking through education and awareness. In addition, many people mistakenly equate excessive drinking with addiction, despite scientific evidence showing that 9 in 10 excessive drinkers are *not* alcohol dependent or alcoholics.

The Alcohol Program's focus on public health prevention strategies for excessive drinking complements that of other federal agencies who emphasize the prevention and treatment of alcohol use disorders. For example, the Substance Abuse and Mental Health Services Administration (SAMHSA) focuses on behavioral health prevention, treatment, and recovery support services for persons with substance use disorders, as well as those who are at risk of developing these disorders. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) – part of the US National Institutes of Health (NIH) – conducts and supports research on the causes, consequences, prevention, and treatment of alcohol abuse, alcoholism, and alcohol problems. Both of these agencies also address underage drinking, but with a particular focus on the relationship between early initiation of alcohol use and the later development of alcohol use disorders.

Role for Foundations and Philanthropy

Previous foundation funding to the CDC Alcohol Program

- In 2002, the Robert Wood Johnson Foundation (RWJF) provided an initial grant to the CDC Foundation to update the Alcohol-Related Disease Impact (ARDI) software and convert it to a Web-based application. The ARDI tool was specifically designed to provide state and national estimates of deaths and years of potential life lost (YPLLs) due to excessive alcohol consumption. The ARDI application currently receives over 20,000 visitors a year, and is widely used by federal, state, and local health officials; members of community coalitions; alcohol researchers; and policymakers, among others. ARDI findings are, in turn, used to inform the development of prevention strategies and support research on alcohol-attributable health outcomes. Furthermore, the ARDI application was selected as the data source for monitoring national progress toward achieving a Healthy People 2020 objective to “Reduce the number of deaths attributable to alcohol” (SA 20) (<https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse/objectives>).
- Because the Alcohol Program was able to complete the development of the ARDI web site for approximately half of the original cost estimate, the Alcohol Program, with RWJF’s concurrence, used the remaining funds to retain the Lewin Group and Sue Binder Consulting of Atlanta to produce a national report on the economic costs of excessive alcohol consumption. The findings in this report were subsequently published in the *American Journal of Preventive Medicine (AJPM)* in 2011, and provides a picture of the healthcare, productivity, and other costs resulting from excessive alcohol use; the allocation of these costs by drinking pattern (e.g., binge drinking), risk group, outcome, and payer (e.g., government or the individual drinker). This publication was one of the most cited articles in *AJPM* in 2011, and its release generated nearly \$1 million in earned media coverage. The report was also used as the basis for a separate analysis assessing state costs for excessive drinking, which was published in *AJPM* in 2013; and has generated numerous requests for technical assistance from states and localities interested in quantifying excessive alcohol use’s negative economic impact.
- In 2006, RWJF provided CDC with a follow-up grant to fund 14 state public health agencies to implement a module of questions to obtain more specific information on binge drinking among U.S. adults through the CDC’s Behavioral Risk Factor Surveillance System. The Alcohol Program was subsequently able to obtain federal funds to support the implementation of the binge drinking module by several state public health agencies, and with RWJF’s approval, was able to use the balance of this RWJF grant to fund an Alcohol Epidemiology Fellow in the Georgia Department of Public Health to test the effectiveness of this approach for building state public health capacity in alcohol epidemiology. Over two years, the fellow monitored

patterns and trends in alcohol consumption and analyzed the impact of various prevention strategies for reducing excessive drinking in the state of Georgia, including the impact of a reduction in alcohol outlet density in the Buckhead neighborhood of Atlanta on violent crime. The success of this fellow also led to the funding of another fellow in Michigan and alcohol epidemiologists in other states as well.

Opportunities for future philanthropic funding

- Donors looking to get involved in efforts to reduce excessive alcohol use, the fourth leading preventable cause of death in the US, might consider funding demonstration projects focused on informing the implementation of effective strategies for reducing excessive drinking, such as those included in the Community Guide (www.thecommunityguide.org/alcohol), and evaluating their impact. Lessons learned from these demonstration projects will help guide future investments in the prevention of excessive alcohol use in states and communities.
- Donors could also support the development of public health translation tools and capacity to provide technical assistance to states and communities who are implementing evidence-based strategies to reduce excessive drinking. Funding for technical assistance would complement funding for state and local demonstration projects, and help assure their success.

*All Open Philanthropy Project conversations are available at
<http://www.givewell.org/conversations>*