Caffeinated Alcoholic Beverages and Public Health

Caffeinated Alcoholic Beverages (CABs), pre-packaged beverages that combine alcohol, caffeine, and/or other stimulants, have become a source of controversy. There are media reports of young adults binge drinking CABs and requiring hospitalization, and some research suggests that the use of CABs leads to an increase in high-risk behaviors. This has led to calls to prohibit the sale of CABs. On November 17, 2010, the FDA sent warning letters to four companies, expressing that there is evidence that their beverages present a public health concern and are being marketed in violation of the Federal Food, Drug, and Cosmetic Act.

CABs are made of malt- or distilled spirits, and usually have a higher alcohol content than beer (i.e., 5%–12% on average for CABs and 4%–5% for beer). The caffeine content in these beverages is usually not reported. It is the addition of caffeine to the alcoholic drink that is of concern—caffeine can mask the depressant effects of alcohol. Caffeine has no effect on the metabolism of alcohol by the liver, and thus does not reduce blood alcohol concentrations or reduce the risk of alcohol-attributable harms. In other words, a person’s subjective perception of alcohol intoxication may be reduced through the ingestion of caffeine, but their actual level of impairment due to the alcohol has not diminished.

CABs have become increasingly popular since first being introduced into the marketplace in 2002. Currently, more than 25 brands of CABs are sold in the U.S., with 22,905,000 gallons sold in 2008. CABs are heavily marketed to youth, and according to the CDC, are very popular among youth and regularly consumed by 31% of 12- to 17-year-olds and 34% of 18- to 24-year-olds.

Research has shown that the combination of alcohol and caffeine can lead to particularly high-risk activity:

- Drinkers who consume alcohol mixed with energy drinks are 3 times more likely to binge drink (based on blood alcohol levels) than drinkers who do not report mixing alcohol with energy drinks.
- Drinkers who consume alcohol with energy drinks are about twice as likely as drinkers who do not report mixing alcohol with energy drinks to report being taken advantage of sexually and to report taking advantage of someone else sexually.
- These drinkers are also more likely to report riding with a driver who was under the influence of alcohol than those who drink alcohol without caffeine or other energy inducers mixed in.
- Drinkers of CABs are also more likely to risk physical injury than other alcohol drinkers.

CABs, Policy, and Legislation

Due to recent media reports of binge drinking of CABs on college campuses and resultant hospitalizations, there have been calls to prohibit the sale of such pre-mixed, packaged beverages. Several colleges have prohibited the use on campuses. A handful of states, including Oregon, Pennsylvania, Oklahoma, and Michigan, have either placed a moratorium or banned outright the sale of CABs. Regulations in the public sphere have primarily been a state activity, since local government is generally pre-empted by state law to in any way have authority over the sale or distribution of alcohol. However, a local ordinance was recently introduced in Chicago City Council to ban the sale of CABs in Chicago.

In November 2009, the FDA sent a letter to CAB manufacturers asking them to provide information documenting that adding caffeine to alcoholic beverages is safe; according to

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In response to the FDA 2009 letter, at least two alcoholic beverage manufacturers, Anheuser-Busch and Miller, stopped producing CABs. On November 16, 2010, Phusion Projects, Inc. announced that they are removing caffeine and two other stimulants from their products in the U.S.

On November 17, 2010, following scientific review, the FDA issued warning letters to four companies, stating that the caffeine added to their malt alcoholic beverages is an “unsafe food additive”. The companies—Charge Beverages Corp., New Century Brewing Co., Phusion Projects, LLC, and United Brands Company, Inc.—must inform the FDA in writing within 15 days of the specific steps that will be taken to remedy the violation and prevent its recurrence. If the violation continues to exist, the FDA could pursue an enforcement action, such as seizure of the products or an injunction to prevent product production.

On the same day, Senator Ira Silverstein introduced legislation in the Illinois General Assembly to ban all types of alcohol energy drinks in Illinois. The Alcohol Energy Drink Ban proposes that “no product that combines beer or any other alcoholic liquor with caffeine, guarana, taurine, or other similar substances that are commonly referred to as ‘alcohol energy drinks’ be imported into the State or produced, manufactured, distributed, sold, or offered for sale” in Illinois.

CABs and Public Health

From a public health perspective, it is important to keep in mind that alcoholism is a serious problem in this country among many age groups, and is not limited to binge drinking among college students or CABs. According to the U.S. Centers for Disease Control and Prevention (CDC), excessive alcohol consumption is responsible for over 79,000 deaths and 2.3 million years of potential life lost (YPLL) in the United States each year.

CDC also reports that binge drinking (consuming 4 or more drinks per occasion for women; 5 or more drinks per occasion for men) is responsible for over half of the deaths and two-thirds of the YPLL due to excessive drinking, impaired driving, interpersonal violence, risky sexual activity, and unintended pregnancy.

Alternative interventions aside from prohibiting the sale of a product are an important public health focus. Some interventions that are currently taking place include:

- Voluntary efforts to cease production of CABs. Several states and one municipality (San Francisco) negotiated an agreement with two CAB producers to remove caffeine and other stimulants from their products.
- Voluntary efforts to stop shipments and/or sale of CABs. In November of 2010, prior to announcing the plan to remove caffeine from their beverages, Phusion Projects agreed to stop shipping Four Loko to New York State, and some New York State Beer Wholesalers Association members have agreed to stop selling CABs.
- Educational strategies to alert the public about the particular risks of mixing alcohol with energy drinks or other alcoholic beverages that contain stimulants. This is being done throughout the country. For example, one community requires retailers to post a sign to warn customers of the effects of CABs.
- Public health interventions that prevent excessive alcohol consumption and related harms. These include increasing alcohol excise taxes, limiting alcohol outlet density, and maintaining existing restrictions on days of sale.
- Other policy interventions, such as tightening the requirements on alcohol advertising.