

# The Cost of Alcopops to Youth and California

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### **Executive Summary**

By a simple majority vote, the California Board of Equalization could correct its taxation of teen-oriented alcopops and prevent the deaths of 21 youth each year.

Alcopops are sweetened alcoholic beverages that are often bubbly and fruitflavored, resembling soda, other soft drinks or energy drinks. These products derive much of their alcohol from distilled spirits and are often branded with spirit names such as "Smirnoff Ice." The alcohol industry calls them "flavored malt beverages" because industry wants them taxed at the lower beer rate, but doesn't want them to taste like, look like, or be called beer.

Thanks to a government petition filed by California Friday Night Live Partnership and California Youth Council, the State is currently considering reclassifying alcopops as distilled spirits. Marin Institute undertook this original policy analysis to calculate the cost of alcopops in California, both in terms of lives and money.

# Our calculations show that underage drinkers consume 47% of all the alcopops in California.

Marin Institute estimates that underage drinking of alcopops costs California a total of \$1.25 billion annually. This figure reflects public and private underage drinking costs through incidents of harm, such as: traffic accidents, violent crime, high-risk sex, and fetal alcohol syndrome. But the dollar amount doesn't do justice to the human toll. We calculate that underage drinking of alcopops causes approximately 60 deaths every year in California and that the total incidents of harm caused by underage drinking of alcopops tops 50,000.

Looking at actual market data from European countries, we found that correcting the tax rate would greatly reduce consumption. We estimate that correctly taxing alcopops as distilled spirits instead of beer would result in a 35% decrease in youth alcopop consumption.

We conclude that California could save \$437 million annually through correctly taxing alcopops as distilled spirits. Most importantly, we could save the lives of 21 youth annually, and prevent more than 17,000 incidents of harm to our youth. (We calculated this by applying the 35% consumption drop-off to current annual costs of underage alcopop consumption.)

We urge the state of California to correctly classify alcopops as distilled spirits. The very future of our youth depends upon it.

#### Introduction

Alcopops are sweetened alcoholic beverages that are often bubbly and fruitflavored, and resemble soda or other soft drinks. While these products derive much of their alcohol from distilled spirits (and are often branded with spirit names such as "Smirnoff Ice"), industry calls them "flavored malt beverages," because that makes them sound like beer. In California, beer tax rates are significantly lower at \$.20 a gallon vs. \$3.30 a gallon for distilled spirits.

While alcopops may start out as beer, manufacturers remove all the beer-like characteristics, such as the color, taste, and even the alcohol, and then add flavorings and distilled alcohol for the final product.

Alcopops fuel the underage drinking epidemic by serving as a transition or bridge from soft drinks to alcohol, especially for youth. The alcohol flavor is masked by sweeteners and young people report drinking alcopops because they are easier to conceal and "go down easy."

Thanks to a government petition filed by California Friday Night Live Partnership and California Youth Council, two youth groups, the State is currently considering reclassifying alcopops as distilled spirits. Marin Institute undertook this original data analysis to calculate the true cost of alcopops in California, both in terms of lives and money. We emphasize the critical policy implications for taxing alcopops at the higher distilled spirits rate. We also estimate how much money industry generates from underage alcopop consumption. Finally, we describe how other countries are taxing alcopops significantly higher, with extremely positive results.

# **Lower Alcopops Taxes Keep Kids Hooked**

Because the alcohol industry calls alcopops "flavored malt beverages," California's Board of Equalization (BOE)—the state agency responsible for taxation—currently taxes alcopops as beer, at the relatively low rate of 20 cents per gallon. This is inconsistent with California law, which requires alcoholic beverages that contain distilled spirits to be taxed at the much higher rate of \$3.30 per gallon. In other words, alcohol companies save \$3.10 per gallon of alcopops in excise taxes, simply by claiming these products are "malt beverages."

The lower beer tax rate for alcopops, means companies can keep product prices down, which makes the products especially appealing to youth.

According to our estimates, young drinkers in California from age 12 through 20 consume an average of 8.8 gallons of alcopops per year, while those 21 and over consume an average of only 1.6 gallons per year. In other words, young drinkers consume on average five and a half times as many alcopops as their adult counterparts. Even if we narrowly define adult drinkers as those between

the ages of 21 and 30 (the demographic the alcohol industry claims is its intended audience), this group still drinks only one-half the quantity of alcopops as drinkers under the age of 21.

In total, underage drinkers consume 47% of all the alcopops in California.

### **Costs of Underage Consumption of Alcopops**

When researchers examine the costs of underage drinking, they rarely break down the results by beverage category. Therefore, we decided to examine the specific costs associated with underage drinking of alcopops in California. Whether calculated in dollars, in lives, or harm caused, the costs related to underage drinking of alcopops are astronomical.

Marin Institute estimates that underage drinking of alcopops costs California a total of \$1.25 billion annually.<sup>2</sup> This figure reflects the costs (both public and private) of the numerous risks of underage drinking, which include everything from traffic accidents to violent crime, high-risk sex, to fetal alcohol syndrome. But the dollar amount doesn't do justice to the human toll.

We calculate that underage drinking of alcopops causes approximately 60 deaths every year in California and that the total incidents of harm caused by underage drinking of alcopops tops 50,000.

#### ANNUAL HARM DUE TO UNDERAGE ALCOPOP CONSUMPTION\*

Type of Harm	Current Incidents (taxed as beer)	Preventable Incidents (taxed as spirits)
Theft, Burglary	24,577	8,601
Violent Crime	9,282	3,248
High-Risk Sex	7,606	2,662
Traffic Crashes	5,875	2,056
Alcohol Treatment	1,226	429
Other <sup>3</sup>	1,539	538
TOTAL	50,105	17,537

<sup>\*</sup> in California

These figures are actually rather conservative estimates. While surveys show children as young as 12 drink alcopops, health and cost data is only available for youth over 14, so the real costs may be far higher. In addition, these figures do not factor in long-term effects of underage drinking, such as an increased likelihood of alcoholism later in life. More costs would also be expected from calculating harm from consumption of alcopops by those over 21, which represent about 53 percent of the total.

#### **Higher Alcopops Taxes in Europe Help Predict California Impact**

Marin Institute has estimated the potential impact in California of properly taxing alcopops as distilled spirits instead of beer. In doing so, we have drawn upon the experiences of several other countries that are far ahead of the United States on this issue.

First, to calculate the impact of a tax reclassification on rates of consumption in California, we reviewed the academic literature on consumer sensitivity to price (known as "elasticity") in several European countries. Our research shows that people respond to price very similarly in the US as they do in Europe. In other words, when alcohol prices rise, consumers in the US and Europe tend to adjust their purchasing habits at very similar rates. Therefore, we were able to estimate the impact of an increased tax on consumption rates in California by applying European data. (See Addendum for more details on Europe.)

Five European countries have increased their tax on alcopops in recent years: Germany, Switzerland, Denmark, France and the United Kingdom. (The Netherlands and Finland are currently considering proposals to do so.) Because data is thus far only available on the effect of alcopop taxes in Germany, Switzerland and the United Kingdom, we used an average of alcopop price sensitivity for these three nations to provide a range within which we believe the US figure is likely to fall.

The effect of the increased alcopop taxes in these three countries has been dramatic and we anticipate the same effect in California. In other words, we expect consumption of alcopops to drop at similar rates as have been experienced in other countries.

European data also suggests that youth in California would be unlikely to substitute their alcopop purchases with other alcoholic beverages.<sup>5</sup> Instead, we speculate that alcopops are more likely to be replaced by soda and other sweetened non-alcoholic beverages.

# **Correct Alcopops Taxation Would Save Lives and Money**

As mentioned earlier, alcohol companies are able to keep the price of alcopops low (and therefore appealing to youth) mainly due to the lower beer tax. Our calculations show that correctly classifying alcopops as distilled spirits would increase the price of these beverages by 25%.

Based on the European experience, we estimate that for every 1% increase in price, underage consumption of alcopops would fall by between 1.24% and 1.60%. This translates to a reduction in overall consumption (for all age groups) in the range of 31% to 40%.

We take the median of this range, rounded down to 35%, as the decrease in youth consumption. This is actually a conservative estimate because other studies suggest that youth consumption may drop more significantly then overall consumption following a price increase because youth are especially sensitive to price.<sup>9</sup>

With a 35% decrease in youth alcopop consumption, we anticipate the costs and mortality related to that consumption to fall by a similar percentage. <sup>10</sup> Applying the 35% figure to current annual costs of underage alcopop consumption, we estimate that California could save \$437 million by correctly taxing alcopops. More importantly, we would save 21 lives, and prevent more than 17,000 incidents of harm.

# SAVINGS OF YOUNG LIVES & MONEY THROUGH CORRECT TAXATION OF ALCOPOPS\*

	MONEY	LIVES	INCIDENTS OF HARM
CURRENT COSTS POTENTIAL SAVINGS	\$1.25 billion	60	50,000
	\$437 million	21	17,000

<sup>\*</sup> in California

# **Industry Gains While California Loses**

Based on available data on consumption rates of alcopops among California's youth, Marin Institute estimates that the alcohol industry generates \$210 million a year in sales to California's underage youth. 11 Clearly, industry has a lot of underage drinking income to lose from the correct classification of alcopops as distilled spirits rather than beer. But that shouldn't stop the state of California from doing the right thing.

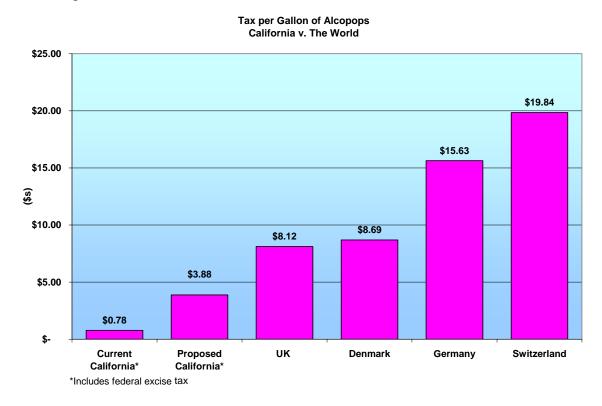
The current low tax on alcopops keeps industry profits high, but the cost to our youth is even higher. California prides itself on being a policy leader both in the United States and internationally and this issue should be no different. We urge the state of California to correctly classify alcopops as distilled spirits. The very future of our youth depends upon it.

# Addendum: California and United States Lagging Behind Europe

Several European countries - Germany, Switzerland, Denmark, France, and the UK are far ahead of California and the rest of the US when it comes to addressing the problem of underage consumption of alcopops. In each of these countries, the alcopops taxes are embarrassingly higher than ours. (See chart.)

In the UK and Denmark, the tax on alcopops is eight times higher than the current combined federal and California taxes; in Germany the tax is 16 times higher and in Switzerland, 20 times higher.

Even if California were to properly classify alcopops as distilled spirits, these countries would still have much higher tax rates: the UK and Danish taxes would still be twice as high, the German tax four times higher, and the Swiss tax five times higher.



Most importantly, the higher taxes in Europe result in higher prices. In the US, a bottle of alcopops costs on average \$1.09, 12 while the same bottle costs about \$3.05 in the UK, 13 \$3.31 in Germany, 14 and \$3.65 in Switzerland. 15

In other words, for every bottle a young person can buy in Germany, they can afford three in California. (This trend is not limited to alcopops; the US currently has the second lowest alcohol prices in the world behind only Luxembourg. 16)

### **Success of Alcopop Taxes in Europe – Lower Consumption**

Because of the increased prices, the success experienced by the UK, Switzerland and Germany on lowering alcopop drinking has been astounding.

In the United Kingdom, alcopops were properly classified as distilled spirits in 2002 and consumption dropped by 30% in the following year. <sup>17</sup>

In 2004, the Swiss government created a new alcohol category to address youth consumption of alcopops, increasing the tax to four times that of spirits. Following this increase, imports of alcopops dropped by almost 70 percent.<sup>18</sup>

In 2004, the German government also created a new alcohol classification and increased alcopop taxes over spirits. The following year, alcopop sales dropped 75 percent and alcopop consumption went down by half among teenagers because, according to one survey, "alcopops became too expensive." <sup>19</sup>

In addition, the German Spirits Association found that the fall in sales of spirit-based alcopops in their country was "the direct result of a new tax on the products." Moreover, the German fall in alcopops consumption occurred without an increase in the consumption of other drinks.<sup>21</sup>

Interestingly, in Denmark, since 2005 officials there have assessed a new alcopops tax over and above the previous tax placed on each of the three alcohol categories. This new tax is adjusted, depending on the base of the alcopop, (whether beer, wine or spirits) such that in the end, all products are subject to the same taxation rate. This regulatory approach levels the playing field among all three categories and in the process counters the alcohol industry's attempt to circumvent the higher spirits tax.

While the state of California is struggling to figure out how to classify alcopops, other countries are moving forward with creative solutions to the excessive underage consumption of alcopops.

#### **NOTES**

<sup>1</sup>To estimate consumption of alcopops we first calculated the proportion of the underage and adult populations who could be classified as current alcohol consumers. We assumed current drinkers were those who had drunk one or more alcoholic beverages within the last 30 days. This figure was calculated from the Youth Risk Behavioral Survey 2005 (YRBS) for underage drinkers and from the Behavioral Risk Factors Surveillance System 2005 (BRFSS) for adults.

We then calculated average consumption of alcopops for different age groups from two reputable national surveys. For people aged 18 and over we used the National Epidemiological Survey on Alcohol and Related Conditions 2001 (NESARC). In the survey the average consumption of alcopops per year was calculated for different age groups. For those under 18 we used a combination of the National Survey on Drug Use and Health 2001 (NSDUH) and NESARC surveys. We calculated the average number of alcoholic drinks people 12 to 17 drink per year from the NSDUH and multiplied this by the percentage of total alcoholic drinks that are alcopops for people aged 18 from NESARC. So that: No. of Alcoholic drinks 12-17 year olds consume \* % of drinks that are alcopops for 18 yr olds = 12-17 year olds consumption of alcopops.

This is likely an underestimate as 12-17 year olds are likely to have a higher proportion of their alcoholic drink consumption be alcopops than 18 year olds, survey data shows the younger an individual, the greater their proportion of drinks that are alcopops.

<sup>2</sup> To calculate the cost of underage alcopop drinking in California we utilized estimates for the total cost of underage drinking from a recent substantive paper (Societal Costs of Underage Drinking, Miller et al, 2006, Journal of Alcohol Studies.) Miller et al's costs calculate the direct, indirect and intangible costs related to underage drinking. An example of direct costs are medical costs, indirect costs are the work loss from an individual's inability to work and intangible costs measure the pain and suffering and lost quality of life.

We calculated the portion of these total costs which could be attributed to alcopops consumption. From the NESARC survey we estimate that 17% of the alcohol consumed by underage drinkers is in alcopops.

For this study we assume that since 17% of underage alcohol consumption is derived from alcopops, 17% of the costs related to alcohol consumption can be attributed to them. The costs related to alcohol consumption stem from a myriad of factors such as drinking patterns, dosage, and several other environmental and social factors. However research in the past has emphasized overall consumption's use as a proxy for heavy and harmful consumption: "In general, per capita consumption is regarded as a reliable proxy, not only for the overall drinking level but also for alcohol abuse" (Norström, Effects on criminal violence of several beverage types and private and public drinking, 1988, Addiction.)

<sup>&</sup>lt;sup>3</sup> Includes poisonings, psychoses, fetal alcohol syndrome, and non-traffic injuries.

<sup>&</sup>lt;sup>4</sup> European Studies include: Alcohol in Europe: A Public Health Perspective, Baumberg & Anderson, 2006. Effects of Economic Factors on Alcohol Consumption in 14 European Countries. Leppänen, K., Sullström, R., and Suoniemi, I, 2001, Nordisk Alkoholtidskrift (Nordic Studies on Alcohol and Drugs). US studies include: The Effects of Price on Alcohol Consumption and Alcohol Related Problems, Chaloupka, Grossman and Saffer, 2003, Alcohol Research and Health. Price Sensitivity of alcoholic beverages in the United States, Grossman, Coate and Arluck, 1987, Control Issues in Alcohol Abuse Prevention: Strategies for States and Communities.

<sup>&</sup>lt;sup>5</sup> In Germany, the government's survey of young people's consumption of alcohol (Entwicklung des Alkoholkonsums bei Jugendlichen - [BZgA] 2005) showed that not only did consumption of alcopops decrease dramatically after the tax rise but so did their consumption of beer, wine and spirits. Overall consumption of alcohol by people under 17 was found to have fallen by 23% leading the German government to conclude that the reduction in youth alcopops consumption had occurred without substitution to other alcoholic beverages. In addition to the German data, we find no evidence of substitution in the UK. There is no increase in the sale of beer, wine or

spirits in the UK after the alcopop tax rise. Sales of each type of drink fell below trend in the year after the tax increase. Although alcopops make up a small proportion of the alcohol market, we would still expect to see some increase in sales of other alcoholic beverages considering the UK alcopop market fell by a considerable amount in 2002/03. Consumption data is not currently available for Switzerland.

- <sup>6</sup> Price data is from Mintel USA FAB Report 2005 and updated for 2006 by FAB Price Index in Adams Beer Handbook 2006. We estimate that the current CA price of a gallon of alcopops is \$12.49. This will increase by \$3.10 after the tax reclassification to \$15.59, an increase of 25%.
- <sup>7</sup> Estimates for the effect on consumption of a price change in alcopops is based on Marin Institute's estimates of the price elasticity of demand for alcopops in Germany, Switzerland and the UK. In each of these countries we estimate the effect tax increases and subsequent price rises had on consumption of alcopops by utilizing Government price and consumption data. The estimates suggest that alcopops are an elastic good: any increase in price will result in a greater decrease in consumption. Additionally the price elasticities of demand for these three countries all fall within a close range suggesting that consumers attitudes to the price of alcopops are consistent between different countries and structural environments. We see no reason as to why the US elasticity should not also fall within this range. Studies on the overall elasticity of alcohol and of beer, wine and spirits in the US and Europe suggest that the price elasticity of demand for alcohol is within a similar range for the US, UK, Germany and Switzerland. In addition, the US shares a very similar alcopops market to its European counterparts, particularly regarding the distribution of consumption among age and demographic groups.
- 8 Increase in Price \* Price Elasticity of Demand = 25% \* -1.24 = -31%
- <sup>9</sup> The Extent and Nature of adolescent Alcohol Abuse: The 1974 and 1978 national sample surveys, Rachal et al, 1980, Research Triangle Institute. Rational Addiction and the effect of price on consumption, Becker Grossman and Murphy, 1991, The American Economic Review. The Effect of Alcohol Price Policy on Youth: A summary of Economic Research, Chaloupka, Grossman, Saffer, Laixuthai, 1994, Journal of Research on Adolescence.
- <sup>10</sup> "In general, per capita consumption is regarded as a reliable proxy, not only for the overall drinking level but also for alcohol abuse," Norstrom, Effects on criminal violence of several beverage types and private and public drinking, 1998, Addiction.
- <sup>11</sup> Underage alcopop consumption is calculated from the two surveys: NESARC 2001 & NSDUH 2005; CA Population data is from US census bureau 2006; and price of alcopops from Flavored Alcoholic Beverages 2005 USA, Mintel Reports.
- <sup>12</sup> Flavored Alcoholic Beverages US May 2005 Mintel Reports
- <sup>13</sup> Flavored Alcoholic Beverages UK May 2005 Mintel Reports
- <sup>14</sup> Calculated from the UK pre-tax price.
- <sup>15</sup> Sales of Alcopops fall as tax hike kicks in, Swissinfo, January 28, 2005. http://www.swissinfo.org/eng/swissinfo.html?siteSect=881&sid=5500365
- <sup>16</sup> Global Status Report: Alcohol Policy, World Health Organization, 2004.
- <sup>17</sup> Her Majesty's Revenue and Customs Alcohol Factsheets, January 2007. <a href="www.uktradenfo.com">www.uktradenfo.com</a>
- <sup>18</sup> Swiss Alcohol Board Imports of Alcopops, http://www.eav.admin.ch/dokumentation/fakten/00445/index.html?lang=en
- <sup>19</sup> Entwicklung des Alkoholkonsums bei Jugendlichen [BZgA] 2005
- <sup>20</sup> Alcohol in Europe: A Public Health Perspective, Baumberg & Anderson, 2006.
- <sup>21</sup> Entwicklung des Alkoholkonsums bei Jugendlichen [BZgA] 2005