

Trust

Alaska Mental Health Trust Authority

Does an Increase in Alcohol Tax Reduce Alcohol Misuse?

This whitepaper will examine some of the known impacts of alcohol misuse, and how one “policy lever” – increasing taxation of alcohol – has been shown to reduce alcohol consumption and have positive impacts on other social, public health, and economic indicators.

One of the key public health approaches to reducing consumption, and by doing so reducing alcohol misuse, is using alcohol taxes. Specifically, evidence demonstrates increases in alcohol taxes are associated with decreases in the purchase and consumption of alcohol.¹ In Alaska, when statewide alcohol taxes were increased in 1983 and 2002, it led to a reduction in alcohol consumption.² Alcohol tax increases have the greatest impact on people who misuse alcohol, including youth³ and heavy drinkers.⁴

Alaskans experiencing substance use disorders, including alcohol misuse, are beneficiaries of the Trust. Alcohol misuse describes alcohol consumption that puts individuals at increased risk for adverse health and social consequences. While we know that excessive alcohol use can impact the physical and mental health of individual Alaskans, we also know that the long-term negative effects of alcohol misuse are linked to a number of negative social, public health, and economic consequences.

In 2018, according to the *Economic Costs of Alcohol Misuse in Alaska* report, the estimated direct cost of alcohol misuse was approximately \$2.4 billion. As you can see in the chart below, the costs associated with alcohol are borne by individuals, businesses, and local and state government in Alaska. You can read more about these costs in the [full report](#) on the Trust webpage.

Estimated Annual Alcohol-related Economic Costs to Alaska, 2018

Cost Category	Costs
Productivity loss	\$709 million
Traffic collisions	\$206 million
Criminal justice & protective services	\$217 million
Health care	\$1,223 million
Public assistance and social services	\$39 million
Total	\$2,394 million

What the Data Indicates

The table below examines various alcohol misuse related harms, and how they are impacted by an increase in alcohol tax.

Alcohol Misuse Related Harm	Impact of an Increase in Alcohol Tax
<p style="text-align: center;"><i>Binge Drinking</i></p> <p>An estimated 23 percent of Alaskans binge drink.⁵ Binge drinking is associated with increased risk of unintentional injuries, domestic violence, suicide, chronic disease and other negative health impacts.</p>	<p style="text-align: center;"><i>Binge Drinking</i></p> <p>National research links increases in alcohol tax to reductions in alcohol consumption. Specifically, an increase in alcohol tax has also been found to reduce binge drinking.⁶</p>

<p><i>Youth Drinking and Dependence on Alcohol</i></p> <p>Underage alcohol misuse in Alaska can lead to mental distress related to physical and emotional injuries, suicide, violence, and traffic accidents. An estimated 10% of Alaskans age 12-17 drink alcohol, and 5% binge drink.⁷</p> <p>National research indicates that people who start drinking before the age of 15 are 4 times more likely to have a dependence on alcohol in adulthood.⁸</p>	<p><i>Youth Drinking and Dependence on Alcohol</i></p> <p>Increased alcohol taxes significantly reduce youth alcohol consumption.⁹</p> <p>Higher taxes on beer in particular have also been associated with fewer suicides among males ages 10-24.¹⁰</p> <p>In 2012, the CDC indicated that increasing alcohol excise taxes was an effective way of reducing underage drinking.¹¹</p>
<p><i>Alcohol Misuse Related Disease & Mortality</i></p> <p>In 2018, there were over 23,000 alcohol misuse related hospital admissions in Alaska.¹² Alcohol misuse contributes to liver disease, heart and digestive problems, diabetes, increased risk of cancer, and other serious health problems.</p> <p>From 2014 to 2018, 1,862 deaths in Alaska were linked to alcohol misuse.¹³ Alcohol misuse related deaths are a result of both direct and indirect impacts of alcohol including: alcohol poisoning, cirrhosis of the liver, motor vehicle collisions, diabetes, or homicide.</p>	<p><i>Alcohol Misuse Related Disease & Mortality</i></p> <p>In Alaska, when statewide alcohol taxes were increased in 1983 and 2002, it led to a reduction in alcohol consumption, and a reduction of alcohol related disease mortality of 29% in 1983 and 11% in 2002.¹⁴</p> <p>Increased taxes have also been associated with reductions in sexually transmitted disease rates.¹⁵</p>
<p><i>Increased instances of Domestic Violence and Sexual Assault</i></p> <p>Alcohol misuse contributes to increased rates of sexual assault and domestic or intimate partner violence.</p> <p>The Alaska Victimization Survey (2010-2015) examined intimate partner and sexual violence between 2010 and 2015. It found that an estimated 59,700 Alaskan adult women experienced a drug or alcohol related sexual assault in their lifetime.¹⁶</p> <p>The World Health Organization estimates that in the U.S., over 50% of victims of intimate partner violence believed their partners were drinking prior to the assault.¹⁷</p>	<p><i>Increased instances of Domestic Violence and Sexual Assault</i></p> <p>Alcohol tax increases have been shown to be related to a decrease in the prevalence of domestic violence and sexual assaults.¹⁸</p> <p>In one study, a 10 cent per drink tax increase was predicted to decrease the number of rapes and assaults by almost five percent.¹⁹</p> <p>Further, there has been a demonstrated relationship between increases in beer taxes and the probability of child abuse, and the frequency and severity of child abuse.²⁰</p>
<p><i>DUI and Motor Vehicle Fatalities</i></p> <p>Alcohol misuse is the leading cause of DUI arrests in Alaska.</p> <p>The Alaska Highway Safety Office reported in 2016 there were over 3,000 arrests for impaired driving in Alaska.²¹ Also in 2016, there were 639 traffic collisions for which alcohol use was suspected. Of</p>	<p><i>DUI and Motor Vehicle Fatalities</i></p> <p>A retrospective national study estimated that if the federal alcohol excise tax on beer had kept rate with inflation, from 1951 to 1981, alcohol related motor vehicle fatalities among 18-20 year olds would have been reduced by 15 percent, saving approximately 1,000 lives per year.²³</p>

those, 235 involved an injury, and 30 involved a fatality (with 38 total deaths). ²²	More recently, increases in alcohol taxes and less alcohol impaired driving have been reported. ²⁴
<p style="text-align: center;"><i>Incidences of FASD</i></p> <p>In Alaska, approximately 47,860 people have Fetal Alcohol Spectrum Disorders (FASD).²⁵ People affected by FASD experience lifetime effects, and their needs can range from neonatal care for low birth weight to special speech therapy, behavioral management, or residential care for adults with FASD.</p>	<p style="text-align: center;"><i>Incidences of FASD</i></p> <p>There has been a relationship found between increased alcohol taxes and a decrease in binge drinking during pregnancy.²⁶ In one state, a dime a drink increase in taxes was predicted to decrease the incidence of FAS by approximately 5%.²⁷</p> <p>In Alaska, a 5% reduction in the number of individuals diagnosed with an FAS would be a significant public health improvement.</p>

Conclusion

As the evidence above shows, increasing alcohol taxes can have a significant impact on the harmful consequences of alcohol misuse. Studies that have led to this conclusion are becoming more numerous, and, like smoking cessation and the use of seat belts, indicate a shift in our nation’s perception of alcohol misuse and its relation to public health and safety.

Impacts of an increase in alcohol tax range from decreases in underage drinking and heavy consumption to alcohol related disease and mortality, and violence and traffic accidents.

-
- ¹ Chaloupka, Grossman, & Saffer, 2002 The effects of price on alcohol consumption and alcohol-related problems. *Alcohol Research and Health*; and Elder et al., 2010 The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *American Journal of Preventative Medicine*
- ² Wagenaar, Maldonado-Molina & Wagenaar, 2009 Effects of alcohol tax increases on alcohol-related disease mortality in Alaska. *American Journal of Public Health*
- ³ Elder et al., 2010
- ⁴ Jernigan & Waters, 2009 The potential benefits of alcohol excise tax increases in Maryland. Johns Hopkins Bloomberg School of Public Health
- ⁵ The Economic Costs of Alcohol Misuse in Alaska, 2019 Update, prepared for the Alaska Mental Health Trust Authority by the McDowell Group
- ⁶ Zhang, 2010 Alcohol taxes and birth outcomes. *International Journal of Environmental Research and Public Health*
- ⁷ The Economic Costs of Alcohol Misuse in Alaska, 2019 Update
- ⁸ National Institute on Alcohol Abuse and Alcoholism, 2015 https://www.niaaa.nih.gov/sites/default/files/publications/Underage_Fact.pdf
- ⁹ Durrance, Golden, Perreira & Cook., 2011 Taxing sin and saving lives: Can alcohol taxation reduce female homicides? *Social Science & Medicine*
- ¹⁰ Markowitz, Chatterji & Kaestner (2004) Estimating the impact of alcohol policies on youth suicides. *Journal of Mental Health Policy and Economics*.
- ¹¹ <https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>
- ¹² The Economic Costs of Alcohol Misuse in Alaska, 2019 Update
- ¹³ The Economic Costs of Alcohol Misuse in Alaska, 2019 Update
- ¹⁴ Wagenaar, Maldonado-Molina & Wagenaar, 2009
- ¹⁵ Chesson, Harrison, & Kessler, 2000 Sex under the influence: The effect of alcohol policy on sexually transmitted disease rates in the United States *Journal of Law Economics*
- ¹⁶ 2015 Alaska Victimization Survey, UAA, Alaska CDVSA <https://www.uaa.alaska.edu/academics/college-of-health/departments/justice-center/research/alaska-victimization-survey/alaska.cshtml>
- ¹⁷ World Health Organization, Intimate partner violence and alcohol, 2006 https://www.who.int/violence_injury_prevention/violence/world_report/factsheets/fs_intimate.pdf
- ¹⁸ Durrance, Golden, Perreira & Cook, 2011
- ¹⁹ Jernigan & Waters, 2009
- ²⁰ Chaloupka, Grossman, & Saffer, 2002
- ²¹ AK Highway Safety Office, Impaired Driving Statistics, 2007-2016 http://www.dot.state.ak.us/stwdplng/hwysafety/assets/pdf/DUI_Arrest_Data_07_16.pdf
- ²² The Economic Costs of Alcohol Misuse in Alaska, 2019 Update
- ²³ Grossman, 1989 Health benefits of increases in alcohol and cigarette taxes. *British Journal of Addiction*
- ²⁴ Elder et al., 2010
- ²⁵ The Economic Costs of Alcohol Misuse in Alaska, 2019 Update
- ²⁶ Zhang, 2010
- ²⁷ Jernigan & Waters, 2009