

## The Effects of Minimum Pricing on Alcohol Consumption and Related Harms

Excessive alcohol use leads to approximately 88,000 deaths and 2.5 million years of potential life lost each year in the U. S. and cost \$249 billion in 2010 (\$8.2 billion in Michigan).<sup>1</sup> Additionally, excessive drinking is responsible for one in 10 deaths among working-age adults 20 to 64 years old, and is the third leading cause of preventable death in the U.S.<sup>1 2</sup> There are a number of effective strategies to reduce excessive drinking and prevent related harms including establishing minimum pricing policies for alcohol.

According to Sharma et. al., increasing the cost of alcohol is the most effective and least costly strategy for controlling alcohol consumption and reducing the associated harms.<sup>3</sup> Additionally, Canadian research on minimum price has shown the following:

- A 10% increase in minimum price reduced consumption of spirits and liqueurs by 6.8%, of wine by 8.9%, of beer by 1.5%, and of all alcoholic drinks by 3.4%.<sup>4</sup>
- A 10% increase in minimum alcohol prices was associated with an 18.8% reduction in alcohol-related traffic violations, a 9.1% reduction in crimes against persons, and a 9.3% reduction in total rates of crime outcomes examined.<sup>5</sup>
- A 10% increase in average minimum price for all alcoholic beverages was associated with a 31.7% reduction in wholly alcohol attributable deaths.<sup>6</sup>
- A 10% increase in the average minimum price of all alcoholic beverages was associated with an 8.9% decrease in acute alcohol-attributable hospital admissions and a 9.2% reduction in chronic alcohol-attributable hospital admissions two years later.<sup>7</sup>
- A 10% increase in minimum prices significantly reduced consumption of beer by 10.1%, spirits by 5.8%, wine by 4.5%, and all beverages combined by 8.4%. Consumption of

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<sup>1</sup> Centers for Disease Control and Prevention. 2019. Alcohol and Public Health. Alcohol use and your health. Retrieved from: <https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>.

<sup>2</sup> National Institute on Alcohol Abuse and Alcoholism. Alcohol Facts and Statistics. Retrieved from: <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/alcohol-facts-and-statistics>.

<sup>3</sup> Sharma, A., Sinha, K., & Vandenberg, B. 2017. Pricing as a means of controlling alcohol consumption. *British Medical Bulletin*, Volume 123, Issue 1, pages 149-158.

<sup>4</sup> Stockwell, T., Auld, M.C., Zhao, J., & Martin, G. 2012. Does minimum pricing reduce alcohol consumption? The experience of a Canadian province. *Addiction*, Volume 107, Issue 5, pages 912-920.

<sup>5</sup> Stockwell, T., Zhao, J., Marzell, M., Greunewald, P.J., Macdonald, S., Ponicki, W.R., & Martin, G. 2015. Relationships between minimum alcohol pricing and crime during the partial privatization of a Canadian Government alcohol monopoly. *Journal of the Studies on Alcohol and Drugs*, 76(4), 628-634.

<sup>6</sup> Zhao, J., Stockwell, T., Martin, G., Macdonald, S., Vallance, K., Treno, A., Ponicki, W.R., Tu, A., & Buxton, J. 2013. The relationship between minimum alcohol prices, outlet densities and alcohol-attributable deaths in British Columbia, 2002-09. *Addiction*, 108(6), 1059-69.

<sup>7</sup> Stockwell, T., Zhao, J., Martin, G., Macdonald, S., Vallance, K., Treno, A., Ponicki, W., Tu, A., & Buxton, J. 2013. Minimum alcohol prices and outlet densities in British Columbia, Canada: estimate impacts on alcohol-attributable hospital admissions. *American Journal of Public Health*, 103(11), 2014-20.

coolers decreased significantly by 13.2%, cocktails by 21.3%, and liqueurs by 5.3%. There were larger effects for purely off-premise sales than for primarily on-premise sales.<sup>8</sup>

Finally, a systematic review of 50 articles aggregated the effects of alcohol prices on alcohol-related morbidity and mortality to assess the public health impact.<sup>9</sup> More specifically, the review found that doubling the cost of alcohol was associated with decreases in:<sup>9</sup>

- Alcohol-related mortality (35%)
- Traffic crash deaths (11%)
- Sexually transmitted infections (6%)
- Violence including sexual assault and child abuse (2%)
- Crime (1.4%)

This summary demonstrates that increasing the price of alcohol can have significant effects on alcohol consumption and related harms. The research also suggests that minimum pricing can have significant public health benefits, specifically among younger and heavier drinkers.<sup>7</sup> When examining the public health impact of alcohol, utilizing strategies such as increasing the minimum price may be considered as part of a comprehensive approach.

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<sup>8</sup> Stockwell, T., Zhao, J., Giesbrecht, N., Macdonald, S., Thomas, G., & Wettlaufer, A. 2012. The raising of minimum alcohol prices in Saskatchewan, Canada: impacts on consumption and implications for public health. *American Journal of Public Health*, 102(12), 103-10.

<sup>9</sup> Wagenaar, A.C., Tobler, A.L., & Komro, K.A. 2010. Effects of alcohol tax and price policies on morbidity and mortality: a systematic review. *American Journal of Public Health*, 100(11), 2270-2278.