

# Alcohol pricing

Making pricing and tax adjustments to reduce drink-driving and violence.

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Effect scale	Quality of evidence				
	Effect Impact on crime	Mechanism How it works	Moderator Where it works	Implementation How to do it	Economic cost What it costs
 Overall reduction	 Strong	 Low	 Moderate	No information	No information

## Focus of the intervention

The level of tax on alcohol – and alcohol pricing more generally – has been varied in the past several decades to assess the effect upon alcohol consumption and related health and/or crime outcomes. The focus of this narrative is upon the effect of alcohol taxes and prices on drunk driving and violence.

This narrative summarises the findings of a systematic review based on 50 studies, 31 of which had crime outcomes.

## Effect – how effective is it?

Overall, the evidence suggests that the intervention has reduced crime.

Reductions in alcohol-related crime (such as drink-driving) were associated with an increase in alcohol tax or price. Of the 50 studies in the review, 31 had crime-related outcomes, of which 21

included alcohol-related traffic accidents, injuries or fatalities. The authors of the review estimate that a doubling of alcohol tax would reduce traffic crash deaths by 11%. An analysis of the seven studies with violence as an outcome found a significant decrease when higher levels of alcohol tax and pricing were introduced.

## How strong is the evidence?

The review was sufficiently systematic that many forms of bias that could influence the study conclusions can be ruled out. The authors grouped studies by outcome and conducted separate analyses on these groups, allowing a comparison between crime and health outcomes, for example. The review produces effect sizes for each outcome grouping, and uses appropriate statistical analyses. However, the review did not search for unpublished literature, which could bias the results of these analyses if literature were missed.

## Mechanism – how does it work?

A general statement of the mechanisms through which alcohol tax and prices are believed to effect crime is made in the review.

Sales and excise taxes affect alcohol pricing, and alcohol pricing affects sales and drinking patterns – whether this is consumption rates or times. These changes in drinking patterns can then affect rates of crime, such as assault or traffic crash fatalities where the driver was under the influence of alcohol. However, the review does not empirically test these mechanisms.

## Moderators – in which contexts does it work best?

The review analysed variation in effect by study outcome, grouping together different types of crime or health indicator. An analysis of the seven studies with violence as an outcome found a significant decrease with higher levels of tax and pricing. An analysis of the 19 studies that considered traffic offences and the five studies that looked at other crime and misbehaviour outcomes also saw significant decreases when the prices and taxes of alcohol were raised.

Significant decreases were found in alcohol-related morbidity and mortality, the prevalence of STDs and risky behaviour, and drug use. However, there was no significant decrease in rates of suicide.

The meta-analyses conducted in the review do not reflect effects in different settings – some locations may experience larger effects than others. No analysis by type of setting or type of population was attempted by the authors.

## Implementation – what can be said about implementing this initiative?

The review gave no account of how the intervention was implemented or any implementation challenges that the primary studies encountered.

## Economic considerations – how much might it cost?

There is no mention of costs or benefits of the intervention in the review, and no formal economic analysis was provided.

## General considerations

- The review was conducted for a public health audience. It was not focused upon crime outcomes, although traffic accidents and violence formed two of the subgroups that were analysed.

## Summary

Overall, the evidence suggests that an increase in alcohol tax or pricing reduces crime. Significant reductions were seen in alcohol-related traffic crashes, injuries and fatalities, as well as in violence. However, no attempt was made by the reviewers to assess whether different contexts affected these results.

## Reviews

### Review one

#### Reference

- Wagenaar, A. C., Tobler, A. L. and 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

## Summary prepared by

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