







# Limiting alcohol sales

Adjusting the hours or days in which alcohol can be sold to reduce alcohol sales and consumption.

First published

4 June 2015

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
 Mixed findings	 Moderate	 Low	 Low	 Low	 Low

## Focus of the intervention

Policies that change hours and days of alcohol sales can be implemented at a local, regional or national level.

These policies involve reducing or increasing the hours or days in which alcohol can be sold, either on-premises (such as hotels and bars), off-premises (such off-licences), or a combination of both.

Their aim is to reduce alcohol sales and consumption and therefore reduce the harms that excessive consumption can cause, both in terms of health and crime outcomes.

This narrative focuses on the effect of alcohol-related vehicle crashes and injuries, and interpersonal violence.

The narrative summary is based on four systematic reviews, Review one (49 studies), Review two (16 studies), Review three (14 studies) and Review four (15 studies).

## Effect – how effective is it?

There is some evidence that the intervention has either increased or reduced crime, but overall it has not had a statistically significant effect on crime, since no meta-analysis was conducted.

None of the reviews conducted a meta-analysis – instead they reported individual effect sizes for each study.

Review one reported that four studies examining the impact of length of trading hours on interpersonal violence in the UK showed an increase in violence when longer hours of sales were allowed.

Review two reported that increasing the hours of sale by more than two hours increased alcohol-related harms, including alcohol-impaired driving, alcohol-related crashes and violent crime.

Review three reports that lifting the ban on Sunday alcohol sales in Australia led to significant increases in motor vehicle crashes and casualties, as well as arrests for driving under the influence. Within the review, studies in the USA and Sweden reported that while drunk driving and alcohol-related crashes increased when weekend sales bans were lifted, there was a decrease in assaults against women. No explanation was provided in the review for why this might be the case.

Of the 14 studies with baseline and control measures in Review one, 11 reported at least one significant increase on rates of harm or hazardous consumption with longer hours, or significant decrease in harm with shorter hours. The other three studies showed no effect or a decrease in crime with longer hours.

Although no meta-analyses were conducted and it is therefore not possible to comment on an overall effect size, the majority of the individual studies reported a significant increase in violence and other incidents when access to alcohol was increased.

## How strong is the evidence?

While Reviews one and two took into account the impact of study design on the findings, the other two reviews did not, potentially making their results less reliable.

All four reviews mentioned numerous potential or actual biases within the primary studies included in the reviews. Few studies controlled for the effects of other regulatory, economic or policy

changes, or did not have a suitable comparison area or control group to isolate the effects of the intervention.

Such biases within the primary studies meant that there were few studies of high quality. Review one acknowledges that further well-controlled studies are required to confirm the conclusion that increased hours of alcohol sales lead to increased harms.

## **Mechanism – how does it work?**

Three of the reviews provide a general statement of the assumed theory of the possible mechanism through which decreased hours or days of sale might reduce crime.

Reviews two and three provide the most comprehensive attempt at describing the mechanism at work – that changes in hours and days of alcohol sale lead to:

- a change in purchase quantity
- rescheduling of consumption
- relocation of consumption.

This in turn affects levels of consumption, increasing or decreasing excessive consumption, and in turn affecting alcohol-related harms. However, none of the reviews collected or analysed data to test whether the mechanisms were operating in this way.

Reviews one and four reported the effect of lifting bans (or increasing hours of sale) on alcohol consumption, but did not find a direct link between consumption levels and crime.

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

Across the four reviews there was limited discussion of the contexts in which reduced days or hours of sale might be most effective.

Review two compared the effects of increasing hours of sale by less than two hours to more than two hours. It found that while an increase of more than two hours of sale led to increases in alcohol-related harms, an increase of less than two hours showed no significant effect.

Review three noted that factors such as the demand for alcoholic beverages, the number of adult tourists the area attracts, and the religious affiliation and involvement of residents, may affect restriction on alcohol sales policies.

It is worth noting that the reviews cover primary studies conducted in the UK and USA where alcohol laws are significantly different. Furthermore, Reviews two and three note that local regulation in various US jurisdictions and counties have an impact on specific alcohol control policies.

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

Two reviews provide some information on implementation.

Review two provides some details on the hours and days of restriction in the primary studies, as well as the need for permits in certain cases.

Review three mentions potential barriers to implementation, including opposition from the alcohol industry. It also notes that implementation in the USA would be affected if state regulations prevented enforcement and implementation of more restrictive sale conditions.

## Economic considerations – how much might it cost?

There is no economic analysis in three of the reviews.

Review three presented one study that estimated the cost of limiting weekend days of sale as \$175,616 per one million people per year. These costs included passing the legislation and administering and enforcing the laws once they had been passed.

However, the intervention was estimated to prevent the loss of 250 disability-adjusted life years (DALYs), yielding an average cost-effectiveness ratio of approximately \$700 per DALY averted. The World Health Organisation equates one DALY to be one lost year of healthy life.

- [Read World Health Organisation information about DALYs](#)

## General considerations

- Since restrictions on days of sale may affect overall alcohol sales, firms involved in manufacturing, distributing, or selling alcoholic beverages may oppose these policies. Evidence suggests that the alcohol industry has supported policies removing restrictions on days of sale.
- State pre-emption laws can undermine the efforts by local governments to regulate days of sale.
- Evidence relating to changes in UK licensing laws was of poor quality, making it difficult to come to definite conclusions about the effectiveness of these types of policy intervention.

## Summary

There is some evidence that the intervention has either increased or reduced crime, but overall it has not had a statistically significant effect on crime (or this was not tested).

However, this evidence is weak with many potential biases undermining the reliability of the findings. More high quality evidence is needed in order to be certain of the impact that this intervention may have upon crime.

## Reviews

### Review one

Quality of evidence			
Mechanism How it works	Moderator Where it works	Implementation How to do it	Economic cost What it costs
No information	No information	No information	No information

## Reference

- Stockwell, T. and Chikritzhs, T. (2009) '[Do relaxed trading hours for bars and clubs mean more relaxed drinking? A review of international research on the impacts of changes to permitted hours of drinking](#)', Crime Prevention and Community Safety, 11:3, 153-170.

## Review two

Quality of evidence			
Mechanism How it works	Moderator Where it works	Implementation How to do it	Economic cost What it costs
<p>Low</p>	<p>Low</p>	<p>Low</p>	No information

## Reference

- Hahn, R. A., Kuzara, J. L., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., Naimi, T. S., Toomey, T., Middleton, J. C. and Lawrence, B. (2010) 'Effectiveness of Policies Restricting Hours of Alcohol Sales in Preventing Excessive Alcohol Consumption and Related Harms', American Journal of Preventative Medicine, 39:6, 590-604.

## Review three


Quality of evidence			
Mechanism How it works	Moderator Where it works	Implementation How to do it	Economic cost What it costs
<p>Low</p>	<p>Low</p>	<p>Low</p>	<p>Low</p>

## Reference

- <https://www.college.police.uk/research/crime-reduction-toolkit/limiting-alcohol-sales>

Middleton, J. C., Hahn, R., Kuzara, J. L., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., Naimi, T. S., Toomey, T., and Lawrence, B. (2010) 'Effectiveness of Policies Maintaining or Restricting Days of Alcohol Sales on Excessive Alcohol Consumption and Related Harms', American Journal of Preventative Medicine, 39:6, 575-589.

## Review four

Quality of evidence			
Mechanism How it works	Moderator Where it works	Implementation How to do it	Economic cost What it costs
 Low	No information	No information	No information

## Reference

- Popova, S., Giesbrecht, N., Bekmuradov, D. and Patra, J. (2009) 'Hours and Days of Sale and Density of Alcohol Outlets: Impacts on Alcohol Consumption and Damage: A Systematic Review', Alcohol & Alcoholism, 44:5, 500-516.

## Summary prepared by

This narrative was prepared by UCL Jill Dando Institute and was co-funded by the College of Policing and the Economic and Social Research Council (ESRC). ESRC grant title: 'University Consortium for Evidence-Based Crime Reduction'. Grant reference: ES/L007223/1.

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