



# Evaluating the causal impact of individual alcohol licensing decisions on local health and crime using natural experiments with synthetic controls

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## About the research

Given the costs of alcohol to society, it is important to evaluate whether local alcohol licensing decisions can mitigate the effects of alcohol misuse.

Robust evaluations of the impact of individual licensing decisions could potentially inform and improve local decision-making, but it is not feasible to conduct randomized experiments.

Natural experiments are a methodology to evaluate the impact of interventions such as decisions related to alcohol licensing using routine data.

Together with local practitioners we identified three case studies of local alcohol licensing decisions, and used a novel methodology to evaluate the impact of each of these decisions on local health and crime in the affected English local areas (1,000 – 15,000 people).

## Policy implications

- It is possible to quantitatively evaluate the small-area impact of local changes to the local alcohol environment down to the level of single premises and their immediate surroundings in a robust manner.
- This methodology has the potential to bridge the gap between the predominantly data-oriented approach by public health teams and the need for contextualised evidence in alcohol licensing hearings.
- However, the small effect sizes and complex modelling provide moderate evidence of effects at best.
- This general framework for evaluation of natural experiments is likely to be also applicable to the broader public health setting as well.

***“this methodology ... has the potential to bridge the gap between the predominantly data-oriented approach by public health teams and the need for contextualised evidence for presentation to councillors”***

***Policy collaborator***

## About the School

The NIHR School for Public Health Research is a partnership between the Universities of Sheffield; Bristol; Cambridge; Imperial; and University College London; The London School for Hygiene and Tropical Medicine (LSHTM); LiLaC – a collaboration between the Universities of Liverpool and Lancaster; and Fuse - The Centre for Translational Research in Public Health a collaboration between Newcastle, Durham, Northumbria, Sunderland and Teesside Universities.

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## Key findings

- **Closure of a nightclub in 2011** following a license review (Case Study 1).
  - strong evidence for an immediate, but relatively short-term, impact of closure of the venue on the incidence of reported anti-social behaviour (60 incidents averted over four months)
- **Closure of a co-located restaurant and cocktail bar in 2016** following a license review (Case Study 2).
  - little evidence that closure of the venues had resulted in measurable effects on reported incidents of crimes or antisocial behaviour in the area immediately surrounding the venues
- The **introduction and subsequent defunding of new Local Licensing Guidance** for designated area within an urban conurbation in 2013/14.
  - weak to moderate evidence of a small impact on the incidence of reported drunk and disorderly behaviour in the area (one to two averted incidents monthly)
  - moderate evidence that subsequent defunding had resulted in a small increase in incidents of domestic violence (two cases monthly)

## Further information

<https://sphr.nihr.ac.uk/research/improving-evaluation-public-health-interventions-alcohol/>

## Contact the researchers

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