



**RESEARCH SUMMARY**  
Date Compiled: January 2019

**Key Takeaways from Included Research**

- A study used both a driver survey and expert workshop to identify systemic factors which contribute to the “fatal five” crash-related behaviors: alcohol and other drug impairment, distraction and inattention, speeding, fatigue, and failure to wear a seat belt. The researchers concluded that the fatal five behaviours have a web of interacting contributory factors underpinning them and are **systems problems rather than driver-centric problems**. Efforts to build community awareness about the systemic nature of these behaviors – with a focus on policy change - may lead to more effective solutions to these problems. [emphasis added]
- Governments are increasingly using taxes on alcohol and other harmful commodities to discourage unhealthy consumption, in addition to raising revenue. These taxes have a high potential to significantly reduce consumption and save lives.
- Liquor store density is associated with higher levels of community disadvantage and higher rates of violence, both of which are associated with lower life expectancies. Decreasing the saturation of liquor stores in these communities may help to mitigate the public health consequences caused by their associated violence.
- A multi-country study found statistically significant associations between alcohol sales and cancer mortality, leading the authors to suggest that curtailing overall alcohol consumption has potential benefits in reducing a number of harms from alcohol, including cancer mortality.
- Effective alcohol policy measures conflict with the interests of the alcohol industry. Alcohol industry actors use a variety of strategies and methods to counter research which advances evidence-based policies. Public health and safety advocates should be aware of these in order to advance effective policies.

## **BAD BEHAVIOUR OR SOCIETAL FAILURE? PERCEPTIONS OF THE FACTORS CONTRIBUTING TO DRIVERS' ENGAGEMENT IN THE FATAL FIVE DRIVING BEHAVIOURS**

January 2019

### **Highlights**

- The 'fatal five' behaviours are known to be the major behavioural contributory factors to road crashes.
- A systems ergonomics approach enables identification of the factors influencing engagement in these behaviours.
- We used a driver survey and road safety expert workshop to identify these influencing factors.
- The factors identified included issues relating to policy, system design, rules and regulations, and societal issues.
- The findings show the need to consider wider systemic factors when attempting to prevent road trauma.

### **Abstract**

The so-called 'fatal five' behaviours (drink and drug driving, distraction and inattention, speeding, fatigue, and failure to wear a seat belt) are known to be the major behavioural contributory factors to road trauma. However, little is known about the factors that lead to drivers engaging in each behaviour. This article presents the findings from a study which collected and analysed data on the factors that lead to drivers engaging in each behaviour. The study involved a survey of drivers' perceptions of the causes of each behaviour and a subject matter expert workshop to gain the views of road safety experts. The results were mapped onto a systems ergonomics model of the road transport system in Queensland, Australia, to show where in the system the factors reside. In addition to well-known factors relating to drivers' knowledge, experience and personality, additional factors at the higher levels of the road transport system related to road safety policy, transport system design, road rules and regulations, and societal issues were identified. It is concluded that the fatal five behaviours have a web of interacting contributory factors underpinning them and are systems problems rather than driver-centric problems. The implications for road safety interventions are discussed.

### **Source:**

Salmon, P. M., Read, G. J., Beanland, V., Thompson, J., Filtness, A. J., Hulme, A., et al. (2019). Bad behaviour or societal failure? Perceptions of the factors contributing to drivers' engagement in the fatal five driving behaviours. *Applied Ergonomics*, 74, 162-171.

**Free full text:** <https://www.sciencedirect.com/science/article/pii/S0003687018302813>

## **THE USE OF EXCISE TAXES TO REDUCE TOBACCO, ALCOHOL, AND SUGARY BEVERAGE CONSUMPTION**

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In countries around the world, tobacco use, excessive alcohol consumption, and consumption of sugar-sweetened beverages (SSBs) are significant contributors to the global epidemic of noncommunicable diseases. As a consequence, they contribute, as well, to excess health care costs and productivity losses. A large and growing body of research documents that taxes specific to such products, known as excise taxes, reduce consumption of these products and thereby diminish their adverse health consequences. Although such taxation has historically been motivated primarily by revenue generation, governments are increasingly using these taxes to discourage unhealthy consumption. We review the global evidence on the impact of taxes and prices on the consumption of these products and the health and social consequences. We then evaluate arguments commonly raised against these taxes, identify best practices in excise tax policy, and conclude with a summary of the current status of tobacco, alcohol, and SSB excise taxes globally.

### **Source:**

Chaloupka, F. J., Powell, L. M., & Warner, K. E. (2019). The use of excise taxes to reduce tobacco, alcohol, and sugary beverage consumption. *Annual Review of Public Health*.

**Free full text:** <https://www.annualreviews.org/doi/pdf/10.1146/annurev-publhealth-040218-043816>

## **UNDERSTANDING THE RELATIONSHIP BETWEEN ALCOHOL OUTLET DENSITY AND LIFE EXPECTANCY IN BALTIMORE CITY: THE ROLE OF COMMUNITY VIOLENCE AND COMMUNITY DISADVANTAGE**

January 2019

### **Abstract**

This research investigated the relationship between alcohol outlet density (AOD) and life expectancy, as mediated by community violence and community disadvantage. We used linear regression models to assess bivariate and multivariate relationships. There was a negative bivariate association between liquor store density and average life expectancy ( $\beta = -7.3370$ ,  $p < 0.001$ ). This relationship was partially attenuated when controlling for community disadvantage and fully attenuated when controlling for community violence. Bars/taverns (i.e., on-premise) were not associated with average life expectancy ( $\beta = -0.589$ ,  $p = 0.220$ ). Liquor store density is associated with higher levels of community disadvantage and higher rates of violence, both of which are associated with lower life expectancies. Future research, potential intervention, and current related policies are discussed.

### **Source:**

Furr-Holden, C. D. M., Nesoff, E. D., Nelson, V., Milam, A. J., Smart, M., Lacey, K., et al. (2019). Understanding the relationship between alcohol outlet density and life expectancy in Baltimore City: The role of community violence and community disadvantage. *Journal of Community Psychology*, 47(1), 63-75.

**Free full text:** [https://stacks.cdc.gov/view/cdc/61243/cdc\\_61243\\_DS1.pdf](https://stacks.cdc.gov/view/cdc/61243/cdc_61243_DS1.pdf)

## **IS THERE AN ASSOCIATION BETWEEN TRENDS IN ALCOHOL CONSUMPTION AND CANCER MORTALITY? FINDINGS FROM A MULTICOUNTRY ANALYSIS**

January 2019

### **Abstract**

The aim of this analysis is to examine long-term trends in alcohol consumption and associations with lagged data on specific types of cancer mortality and indicate policy implications. Data on per capita annual sales of pure alcohol; mortality for three alcohol-related cancers – larynx, esophageal, and lip, oral cavity, and pharynx; and per capita consumption of tobacco products were extracted at the country level. The Unobservable Components Model was used for this time-series analysis to examine the temporal association between alcohol consumption and cancer mortality, using lagged data, from 17 countries. Statistically significant associations were observed between alcohol sales and cancer mortality, in the majority of countries examined, which remained after controlling for tobacco use ( $P < 0.05$ ). Significant associations were observed in countries with increasing, decreasing, or stable trends in alcohol consumption and corresponding lagged trends in alcohol-related cancer mortality. Curtailing overall consumption has potential benefits in reducing a number of harms from alcohol, including cancer mortality. Future research and surveillance are needed to investigate, monitor, and quantify the impact of alcohol control policies on trends in cancer mortality.

### **Source:**

Schwartz, N., Nishri, D., Chin Cheong, S., Giesbrecht, N., & Klein-Geltink, J. (2019). Is there an association between trends in alcohol consumption and cancer mortality? Findings from a multicountry analysis. *European Journal of Cancer Prevention*, 28(1), 45-53.

## **THE HANDLING OF EVIDENCE IN NATIONAL AND LOCAL POLICY MAKING: A CASE STUDY OF ALCOHOL INDUSTRY ACTOR STRATEGIES REGARDING DATA ON ON-PREMISE TRADING HOURS AND VIOLENCE IN NORWAY**

January 2019

### **Abstract**

**Background:** Effective alcohol policy measures conflict with the interests of the alcohol industry. In this study we addressed how various alcohol industry actors in Norway have responded to research findings and police data relating to the possible impacts of changes in on-premise trading hours on violent offending.

**Methods:** A content analysis of documents was undertaken. The documents comprised i) hearing statements from policy processes on on-premise trading hours at the national level, and in 15 Norwegian cities, and ii) newspaper articles and other media coverage of this topic in Norway.

**Results:** Alcohol industry actors employed a range of strategies to shape the use of evidence regarding on-premise trading hours and violence. Nationally, the relevance of the international research literature was questioned before the publication of an unfavourable national study which was criticized directly. This led to commissioned attacks on the findings, constructing what were claimed to be disagreements between experts, emphasis on the complexity of violence and the role of confounding variables, and deflecting attention to alternative interventions. The handling of evidence at the local level was importantly different, where different industry actors and forms of evidence, notably police data, were involved in debates.

**Conclusion:** Alcohol industry actors employed various strategies to shape perceptions and use of evidence to advance their interests. The particular strategies and arguments changed over time as

new data and research became available, and also varied between the national and the local levels, and by categories of industry actors.

**Source:**

Rossow, I., & McCambridge, J. (2019). The handling of evidence in national and local policy making: A case study of alcohol industry actor strategies regarding data on on-premise trading hours and violence in Norway. *BMC Public Health*, 19(1), 44.

**Free full text:** <https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186/s12889-018-6348-y>