

Dear Committee for Communities,

This document has been prepared by the Institute of Public Health as a follow up to the oral evidence regarding the Licensing and Registration of Clubs (Amendment) Bill presented to the Committee for Communities on the 4<sup>th</sup> of March 2021.

The document contains a summary and critical commentary of the systematic review level evidence available on the impact of changing alcohol trading hours on public health (Table 1).

Systematic reviews provide the best way of guiding decision making on the evidence available. These reviews select the best designed research studies and pool their findings, meaning they provide the best possible assessment of the evidence available.

The body of review level evidence presented in this document concludes that although there are some methodological issues within the individual studies included, extending trading hours can increase alcohol related harms, while restricting trading hours can lead to reductions in alcohol related harms. The harms include:

- Alcohol consumption,
- Unintentional injury,
- Alcohol-related hospitalisations/emergency department visits,
- Homicides,
- Crime, violence and assault,
- Drink-driving offenses/crashes.

As mentioned, the individual studies that have assessed the impact of increasing alcohol trading hours elsewhere have methodological limitations. It is worthwhile considering these limitations and aim to address these in any planning for a Northern Ireland evaluation. These considerations are listed below:

1. Confounding: Due to baseline differences between intervention and control areas (i.e., inner city vs suburban).
2. Confounding: Due to other changes (policies, population changes) coinciding with intervention. These should be noted and adjusted for in analysis.
3. Contamination: Due to control site(s) being exposed to some aspect of the intervention.
4. Seasonality: whether seasonal variation in the outcome was accounted for analytically.
5. Displacement: whether the intervention caused the outcome to shift geographically (in the case of NI, some alcohol related harms may be accounted for south of the border), or temporally—from one time period to another—that is, from earlier in the night to later, or vice-versa.
6. Implementation: Some studies do not consider that some establishments may not adopt extended licensing, although it is available, which may dilute the results (i.e., make harms appear less in that area). On the other hand, if hours are restricted this may not affect some establishments that never utilised their right to late night opening and including these in the evaluation analysis may also dilute the results (i.e., make the benefits appear less in that area).

**Table 1.** Review level evidence of the relationship between alcohol licensing and alcohol harms.

No of papers Included/Search dates	Eligibility/inclusion criteria	Main results	Comments
<b>Popova et al. 2009: Hours and Days of Sale and Density of Alcohol Outlets: Impacts on Alcohol Consumption and Damage.</b>			
<b>58 studies</b> <ul style="list-style-type: none"> <li>44 on density of alcohol outlets</li> <li>15 on hours and days of sale</li> </ul>	<p>Studies were excluded if: There was no assessment of the impact of an intervention or dependent variable. There was not sufficient information on the key variables, such as density of outlets or hours or days of sale. It was a meta-analysis or systematic review. The studies that were published in iteration. If the articles were available in abstract form only. The available literature was searched from January 2000 to December 2008, in reference to the publication date.</p>	<p>The majority of studies reviewed found that:</p> <ul style="list-style-type: none"> <li>Alcohol outlet density and hours and days of sale had an impact on one or more of the three main outcome variables: overall alcohol consumption, drinking patterns and damage from alcohol.</li> </ul> <p>Conclusions:</p> <ul style="list-style-type: none"> <li>Extended late night trading hours for certain licensed premises leads to increased consumption and alcohol-related harms</li> <li>Restricting availability of alcohol is an effective measure to prevent alcohol-attributable harm.</li> </ul>	<p>Did not assess any aspect of quality in the studies. Large and comprehensive but the studies summarized in this paper reflect a range of methods and data resources, including archival data on alcohol sales and AOD, mortality and morbidity statistics, and survey data. In some studies, a cross-sectional design is evident, while others employ a longitudinal design. There are some that involve a quasi-experimental design, such as data collected before and after an intervention, or use a comparison site or population. Each of these types of studies carry their own limitations and causal linkage or causal direction cannot be inferred. Many of the studies included did not account for other changes happening at the same time as licensing changes.</p>
<b>Stockwell and Chikritzhs 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.</b>			
<b>14 studies</b>	<p>The review specifically focused on studies that investigated the effects of changes to hours and days of sale affecting on-premise drinking (that is, pubs, clubs, restaurants, and nightclubs).</p>	<ul style="list-style-type: none"> <li>Only 14 of the 49 studies identified included both baseline and control measures.</li> <li>Eleven of the 14 studies reported at least one significant outcome indicating adverse effects of increased hours or benefits from reduced hours.</li> </ul> <p>The type and quality of measures used varied, the most common including road traffic crashes/impaired driver offences; emergency department (ED) attendances; interpersonal violence and disorderly conduct. Other less frequently used measures included self-reported alcohol consumption; alcohol sales data; blood alcohol concentrations (BACs); liver cirrhosis; alcohol dependence; alcohol psychosis and dependence; pancreatitis; self-poisoning; admissions to sobering-up shelters and women's refuges.</p>	<p>Not strictly a systematic review. Studies by the alcohol industry were not included. There was huge heterogeneity in study design, outcome measure and statistical treatment of the data with few studies of high quality. However, the studies included did have strong and consistent alcohol-specific measures that reliably reflect local alcohol consumption (for example, objective alcohol sales data, assaults in and around licensed premises, BAC-positive road traffic crashes); careful consideration of potential confounders (for example, other concurrent policy changes/interventions, such as responsible beverage service, enhanced police activity, potential redistribution/mobility of drinkers between regions and drinking locations) with solid attempts to control for these in statistical analyses.</p>
<b>Wilkinson et al. 2016: Impacts of changes to trading hours of liquor licences on alcohol-related harm: a systematic review 2005–2015.*</b>			
<b>21 studies</b>	<p>Systematic review of the literature that considered the impact of policies that extended or restricted trading hours. Databases were searched from January 2005 to December 2015. Articles were summarised descriptively, focusing on studies conducted in Australia and published since the previous reviews.</p>	<ul style="list-style-type: none"> <li>Australian studies demonstrate that reducing the hours during which on-premise alcohol outlets can sell alcohol late at night can substantially reduce rates of violence.</li> <li>The Australian studies are supported by a growing body of international research.</li> </ul>	<p>Did not assess risk of bias in studies. In several cases, studies that used a before and after design did not collect information on how widespread the actual implementation of permitted extensions in closing times was. There may have been little change in the availability and consumption of alcohol. Many studies did not include control sites or measures, meaning impacts could be related to factors other than the change in trading hours.</p>
<b>Sanchez-Ramirez and Voaklander 2017: The impact of policies regulating alcohol trading hours and days on specific alcohol-related harms: a systematic review.</b>			
<b>26 studies</b>	<p>Studies that investigated the impact of policies regulation alcohol trading times in alcohol-related harm published between January 2000 and</p>	<p>Results support the premise that policies restricting times of alcohol trading and consumption can contribute to reduce injuries, alcohol-related hospitalisations/emergency department visits, homicides, and crime. Although the impact of alcohol trading policies in assault/violence and motor vehicle crashes/fatalities is</p>	<p>Main issues – no control groups and confounding present in studies as well as a lack of generalisability of studies included. Did not assess the risk of bias in studies. Included studies that did not control for changes other than policy/licensing changes that occurred at the same time. Generalisability of some studies included is lacking.</p>

	October 2016 in English language were included.	also positive, these associations seem to be more complex and require further study.	
<b>Nepal et al. 2020: Effects of Extensions and Restrictions in Alcohol Trading Hours on the Incidence of Assault and Unintentional Injury: Systematic Review</b>			
<b>22 studies</b> <ul style="list-style-type: none"> <li>• <b>15 evaluated extensions,</b></li> <li>• <b>6 evaluated restrictions,</b></li> <li>• <b>1 evaluated both</b></li> </ul>	Studies were eligible if (a) the design was randomized, or nonrandomized with at least one control site/series; (b) the intervention evaluated extensions or restrictions in trading hours at on- or off-license premises; and (c) the outcome measures were assault, unintentional injury, traffic crash, drink-driving offenses, or hospitalization. Considered publications up to December 31, 2018.	Extending trading hours at on-license premises was typically followed by increases in the incidence of assault, unintentional injury, or drink-driving offenses. Conversely, restricting trading hours at on- and off-license premises was typically followed by decreases in the incidence of assault and hospitalization. Conclusion: This review augments existing evidence that harm typically increases after extensions in on-license alcohol trading hours. It provides new evidence that alcohol-related harm decreases when on- and off-license trading hours are restricted.	Very good review that takes into account the risk of bias in individual studies unlike the other systematic reviews available on this topic. It used the Cochrane Effective Practice and Organization of Care (EPOC) framework. No restriction on language. Effect-size estimates were provided. One of the most comprehensive and robust reviews available.
No conflicts of interests declare in four out of the five reviews. *One of the authors declared that he is an unpaid board member of the Australian Rechabite Foundation, a charitable trust that supports research and community projects that aim to reduce alcohol-related harm. Cannot find any links to industry.			

**For further information contact:**

Dr Helen McAvoy  
Director of Policy  
Institute of Public Health

