



# **Responsible Takeaway Alcohol Hours Bill 2010**

A submission by the National Drug Research Institute

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## **Introduction**

The National Drug Research Institute's (NDRI) mission is to conduct and disseminate high quality research that contributes to the primary prevention of harmful alcohol and other drug (AOD) use and the reduction of AOD related harm. The Institute has an internationally-recognised reputation for providing evidence-based research to inform policy and practice, particularly in relation to alcohol policy.

There are many ways alcohol consumption patterns and associated harms can be restricted and regulated. Such measures include: changes to the price of alcohol through taxation and levies; limiting the number and type of liquor outlets; controlling the hours of sale; controlling who may purchase alcohol; modifying the drinking environment; restricting the types of beverages sold at outlets; administering responsible beverage service standards; and government control of liquor outlets. Many of these measures can be mandatory or voluntary. This submission presents research evidence outlining the effectiveness or otherwise of restrictions on takeaway alcohol trading hours as a strategy to help reduce alcohol-attributable harm in Australia.

Based on existing evidence, the NDRI supports the principle of restricted hours of trade for takeaway alcohol in all states and territories, in conjunction with the implementation of an appropriate evaluation and monitoring process to assess the effectiveness of this measure at reducing the harms associated with alcohol consumption.

## **Background and context**

There are two sides to the role of alcohol in Australian society. As a commodity, it generates employment, tax revenue, and income. Socially, its consumption is tied to important cultural rituals and traditions, and many Australians use alcohol to socialise, celebrate, relax and commemorate. On the other hand, alcohol plays a part in a range of harms such as road accidents, the onset of various cancers, suicide, public violence, deterioration in public amenity, domestic abuse and workplace absenteeism, highlighting that alcohol not only imparts harm to the individual consumer but to the wider community as well. Alcohol consumption generates considerable economic and social costs (Collins & Lapsley 2008), and in Australia is a significant contributor to injury, disease and disability. In the ten year period from 1996-2005 for example, the NDRI has estimated that 32,696 Australians aged over 15 years died from injury and disease attributable to risky and high risk drinking. A further 813,072 Australians aged over 15 years were hospitalised between 1995/96 and 2004/05 as a consequence of alcohol-caused injury and disease (Pascal *et al.* 2009). Harms related to alcohol consumption are attributable to both short term and long term consumption habits.

In recent years, there has been a growing trend toward longer trading hours for licensed premises and a de-regulation of the Australian retail liquor industry, based partly on arguments associated with reducing anti-competitive practices and treating alcohol as an 'ordinary commodity' (c.f. Babor *et al.* 2010; Chikritzhs 2009). These changes make alcohol more available both economically and physically. Restricting hours of sale is largely a 'physical availability' control measure that is available to policy makers and legislators who aim to influence the ease with which individuals

can obtain alcohol. There is a strong scientific evidentiary basis for the use of restrictions on trading hours for licensed premises to influence aggregate levels of alcohol consumption and related harms in a community (e.g. NDRI 2007; Babor *et al.* 2010). This evidentiary basis is also firmly underpinned by ‘availability theory’ for which there are several decades of supporting evidence (e.g. Edwards *et al.* 1994). The following summarises availability theory as proposed by Stockwell and Gruenewald (2004, p. 217):

1. Greater availability of alcohol in a society will increase the average consumption of its population when such changes reduce the ‘full price’ of alcohol, i.e. the real price of beverages at retail markets plus the convenience cost of obtaining them.
2. Greater availability of alcohol in a society will directly affect alcohol-related harm when such changes affect the distribution of ‘routine drinking activities’, behaviours drinkers engage in when consuming alcohol (e.g. drinking at bars vs. at home; drinking socially vs. alone).
3. Greater average consumption in a population will be related to increases in drinking among some segments of the population along one or more of the several basic dimensions of drinking – rates of abstention, frequencies of use, quantities consumed and variances in drinking levels.
4. Greater adverse health and social problems stemming from alcohol use will appear across the drinking population, focused in those subpopulations most exposed to risk. These risks will be distributed differently across population subgroups, depending upon differences in routine drinking activities (2, above) and drinking patterns (3, above).

There are a range of venues that are permitted to sell ‘takeaway’ alcohol in Australia. Takeaway sales of alcohol relate to purchases that are for ‘off-premise’ consumption; that is, takeaway beverages cannot be consumed at their point of sale. The primary venue licensed to sell takeaway alcohol in Australia is the ‘liquor store’ or ‘packaged liquor’ outlet; however, hotels and ‘members-’ or ‘community-’ clubs (which are generally licensed for both on- and off-premise consumption) may be additional sources of takeaway alcohol. The emergence of alcohol home delivery services through online retail outlets is another avenue for takeaway purchases. Liquor stores are responsible for a significant proportion of all alcohol sold and consumed in Australia. Using Western Australia as an example, Chikritzhs and colleagues (2007) found that while liquor stores comprised only 20% of all licensed outlets, they were responsible for more than 45% of the state’s alcohol sales.

Existing restrictions on the operating times of licensed takeaway trading differ by jurisdiction. In all jurisdictions, current regulations relating to licensed premises ensure that takeaway trading during the hours nominated for restriction in this Bill does not generally occur (except where a special permit is granted), with the exception of New South Wales, Tasmania and South Australia which allow trade from 5am. This Bill then will primarily impact on licensees authorised to sell takeaway alcohol under extended trading permits. Due to prohibitions on the consumption of takeaway alcohol in on-premise locations and public spaces, a significant proportion of this alcohol is likely to be consumed in domestic settings.

Unfortunately there is no central source of information which could be accessed to identify the distribution of trading hours for takeaway outlets throughout Australia and, specifically, how many premises currently trade between midnight and 7am (e.g. some jurisdictions' legislation may allow liquor stores to open at 5am but many may not actually open until several hours later). It is also not possible to reliably gauge the proportion of all alcohol consumed which is purchased during the hours proposed to be restricted by the Bill. Moreover, given the selective nature of special permits for trading outside of regular hours, it is highly likely that the number of takeaway outlets currently allowed to trade after midnight and the proportion of alcohol sold during such hours will vary substantially by region.

### **Effectiveness of restrictions**

Numerous studies have examined the impact of changes to trading hours on consumption levels and rates of related harms. However, few of these studies are specific to takeaway alcohol. As such, the evidence reported below is a general commentary on the association between trading hours, consumption patterns and alcohol-attributable harms, on which many studies have been carried out.

While early reviews of studies on trading hours were somewhat ambivalent in their conclusions, recent reviews have found evidence of the 'strong and reasonably consistent' (Babor *et al.* 2010, p. 136) association between trading hours, consumption rates and alcohol-related harm (see also Loxley *et al.* 2004; NDRI 2007; Stockwell and Chikritzhs 2009; Chikritzhs 2009). A large percentage of this research has been conducted in the Australian context, which primarily focuses on the impact of increased trading hours for on-premises licences (e.g. Smith 1986, 1988, 1990; Briscoe & Donnelly 2001; Chikritzhs & Stockwell 2002; 2006, 2007; Kypri *et al.* 2010).

#### *Australian evidence*

One such study, conducted in New South Wales by Kypri and colleagues (2010) found that a three hour restriction on trading (involving a two hour modification to closing time and the implementation of a 1am 'lockout' policy) in late trading venues in Newcastle's Central Business District reduced the incidence of recorded assaults in the area by 37%. These trading hour changes were accompanied by a number of service practice amendments. The control area in this evaluation, wherein restrictions had not been implemented and service practice amendments were voluntary, showed an increase (albeit non-significant) in assault rates during the study period. An earlier study undertaken in New South Wales by Briscoe and Donnelly (2001) found that 24-hour and 'late' trading establishments in inner Sydney accounted for the greatest proportion of reported assault incidents of all licensed premises in this area and that these assaults concentrated between the hours of midnight and 6am (56%). In a number of studies, Chikritzhs and Stockwell (2002, 2006 and 2007) have found a positive relation between increased trading hours in on-premise licences and assault as well as the incidence of vehicle accidents involving an alcohol-impaired driver.

It is important to note in regard to the evidence stated above that violence in on-premise locations is affected by a number of factors including (but not limited to) venue size, crowding, and service practices, all of which may be less relevant to off-

premise locations, particularly liquor stores. Nevertheless, Chikritzhs *et al.* (2002, 2006) did find that both violence and drink-driver road crashes were primarily influenced by the amount of alcohol sold by hotels with longer trading hours.

Evaluations of changes to takeaway sale practices in remote and rural communities, such as those evident in the Tennant Creek (in the Northern Territory) and Halls Creek (in Western Australia) restrictions, are also of interest (Douglas 1998; Gray *et al.* 1998). While generally involving a range of restrictions, such as prohibiting the takeaway sale of particular beverage types, limits on third party sales, and often extending to both off- and on-premise outlets, evaluations of Indigenous community interventions have presented evidence of a decrease in alcohol consumption and related reductions in alcohol-attributable harm, particularly injuries.

Aside from examples of the positive impact of restrictions in largely Indigenous Australian communities, there is limited direct evidence available regarding the impact of trading hours on particular groups of drinkers, or drinking patterns. A study of changes to trading hours that occurred in Perth, Western Australia, in the 1980s showed that the groups most likely to take advantage of longer trading hours included heavy drinkers and young men (Smith 1986), which suggests that longer trading hours can have specific impacts on high risk groups. In another Western Australian study Chikritzhs *et al.* (2007) showed that male drink-drivers aged between 18 and 25 apprehended by police between the hours of midnight and 2am after drinking at a late trading hotel had higher breath alcohol levels than their counterparts who had been drinking at a hotel that closed at or before midnight.

In terms of drinking practices, it is possible that the timeframe of restriction proposed in this Bill, midnight to 7am, may have an impact on the practice of ‘back-loading’ - the continued consumption of alcohol, generally in domestic settings, after a planned outing (Forsyth 2010) and have a greater effect on alcohol-dependent drinkers. Off-premise supply of alcohol is also linked to the phenomenon of ‘pre-loading’ (more accurately described as pre-nightlife drinking) (Hughes *et al.* 2008; Wells 2009), involving the consumption of alcohol to intoxication before an outing at a nightlife or entertainment district destination. Given the nature of pre-loading and the hours proscribed, this Bill is less likely to have an impact on pre-loading. However, we note that we are not aware of any research evidence which would directly confirm the impact of changes to takeaway hours on these drinking behaviours.

The NDRI’s 2007 review of evidence related to restrictions on the sale and supply of alcohol identified trading hour restrictions as providing beneficial outcomes and effectiveness, particularly in Australia. A similarly comprehensive, but more recent, review of Australian and international studies conducted over the last forty years that investigated changes to trading hours, found reliable evidence of the positive relation between trading hours, consumption and alcohol-related harms (Stockwell and Chikritzhs 2009).

#### *International evidence*

In a recent comprehensive review, Stockwell and Chikritzhs (2009) concluded, on the basis of 49 international studies, that ‘the balance of the present evidence suggests that under most circumstances, increasing trading into the early hours for on-premise

liquor consumption licences will result in increased alcohol use and related harms such as violence' (p. 164). Others, including Babor *et al.* (2010), NDRI (2007), and Loxley *et al.* (2004) have drawn similar conclusions. Overall, international studies on trading hours and alcohol-related harm have produced similar results to those outlined for the Australian context. It is interesting to also note that Australian studies dominate the published international literature on trading hours for licensed premises.

The following highlights some relatively recent examples of studies from the international literature. A Brazilian based study which examined the effects of changing on-premise trading hours from 24-hour trading to an 11pm close, concluded that this restriction was associated with approximately nine fewer murders per month in a city which before the restrictions averaged approximately 22 murders a month (Duailibi *et al.* 2007).<sup>1</sup> An evaluation of off-premise Sunday sales, which had previously been prohibited in New Mexico, USA, reported substantial increases in alcohol-related traffic accidents and fatalities (McMilland and Lapham 2006) which later declined in locations that re-implemented restrictions on Sunday trading. Research conducted in California by Gruenewald and colleagues (2006) found a strong relation between violence and takeaway trade which was independent of place and population characteristics. A recent study in the United States by Collins and colleagues (2010) found that in states where takeaway services were available in grocery stores and drug stores, HIV positive drinkers consumed more alcohol, at a higher frequency, and in a riskier manner compared to HIV positive drinkers living in states where such trade was restricted. They also found that longer liquor retailing hours were related to an increased prevalence of risky sexual activity amongst HIV positive individuals. Two Canadian studies (Vingilis *et al.* 2005, 2006) highlighted increasing assault rates but little significant change to road traffic fatalities involving an impaired driver stemming from 1-2 hour closing time extensions. Studies of the liberalisation of trading hours in the United Kingdom, particularly the most recent change (which in 2005 saw the advent of 24-hour trading), have displayed varied findings. For a fulsome international review see Stockwell and Chikritzhs (2009).

### *Outlet density evidence*

Results from studies which have examined the impact of densities of licensed premises on alcohol consumption and harms may provide indirect evidence of the relation between trading hours, drinking and associated harms. While restrictions on takeaway trading hours are not directly related to evidence associated with outlet density studies, to some extent changes to trading hours impact on the temporal density of takeaway outlets. Studies evaluating falling numbers of off-premise outlets have found evidence that rates of particular sexually transmitted diseases (Cohen *et al.* 2006) and assault (Yu *et al.* 2008) decline. Similarly, greater outlet density has been found to be associated with increased rates of child maltreatment (e.g. Freisthler *et al.* 2008), assaultive violence (e.g. Scribner *et al.* 1995), vehicle accidents (Scribner *et al.* 1994), pedestrian injuries (e.g. LaScala *et al.* 2001) and injuries amongst young adults (e.g. Gruenewald *et al.* 2010). Recent reviews that examine the relation between outlet density (including both on- and off-premise licences) and associated

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<sup>1</sup> As the authors note, this research was conducted in a city with a 'high baseline rate' (Duailibi *et al.* 2007, p. 2279) of violence. However, their findings are consistent with other literature that links alcohol availability to consumption harms.

harms have consistently found a positive association; namely, that increased density results in a greater incidence of harm (Stockwell and Gruenewald 2004; Livingston *et al.* 2007). However, whether this increased incidence of harm is associated with a higher level of consumption is inconclusive.

A NDRI study on outlet density in Western Australia outlined a connection between off-premise sales and the incidence of domestic violence. Specifically, Liang and Chikritzhs (2010) found that while there was no significant association between the number of off-premise outlets and violence there was a strong association between sales volumes per outlet and a number of measures of assault, in particular assault in domestic premises. In other words, the more alcohol sold by off-premise outlets in a particular region, the higher the levels of reported violence occurring in domestic settings in that region. The study also found a strong significant association between off-premise sales volumes and on-premise assault rates.

### **Summary and Discussion**

Restricting the hours at which alcohol is available to consumers has the potential to reduce demand by limiting convenience, but is primarily a control mechanism aimed at limiting supply. The evidence provided in this submission suggests that measures aimed at reducing trading hours may be effective where they significantly influence the routine activities of drinkers, potentially leading to: a reduction in per capita consumption; reductions in violence in domestic settings as well as on licensed premises and surrounding areas; and a reduction in acute alcohol-attributable harms, such as traffic accidents and interpersonal violence.

Two recent comprehensive reviews of the evidence (Babor *et al.* 2010; Stockwell and Chikritzhs 2009) are supportive of the argument that trading hours and alcohol-attributable harm are positively related. The review provided by Stockwell and Chikritzhs (2009) also points to the need for more rigorous methodology in the analysis of this association and the utility of certain evaluation measures, particularly alcohol sales data. Alcohol sales data enable the reliable tracking of trends in alcohol consumption by region and are a 'gold standard' measure of alcohol consumption and a primary indicator of levels of associated harm (Stockwell *et al.* 2008, p. 922; Hall *et al.* 2009). Alcohol sales data have been recommended by the World Health Organisation as a core indicator in the evaluation of changes to alcohol policy and regulation (WHO 2000).

Findings from studies examining the relation between the physical availability of alcohol and harm have regularly shown a consistent association between alcohol sales and violence, especially amongst at risk groups. Further, recent evidence, particularly that presented by Liang and Chikritzhs (2010), suggests that studies of on- and off-site outlets have underestimated the association between liquor store sales and alcohol-related harm, particularly in regard to violence.

Alcohol consumption in domestic settings is common in Australia (AIHW 2008). Takeaway alcohol, sold at off-premise locations is a major source of domestically consumed alcohol. There is emerging evidence that off-premise alcohol sales are a particular risk factor for violence in domestic settings. It is worth considering that alcohol consumption in domestic environments is significantly less regulated than

drinking that occurs in on-premise venues and public spaces. In particular, in on-premise settings there are a range of provisions that shape consumption levels, including the size of drink pours and service to intoxicated or underage people.

While the evidence for the impact of changes to trading hours for off-premise outlets is limited, there is substantial Australian evidence that illustrates the relation between trading hours, consumption and harm for on-premise outlets. There is also a large and robust international body of evidence for ‘availability theory’ which would predict that where changes to takeaway trading hours significantly influences the routine drinking activities of drinkers then consumption and related harms are also likely to be influenced. A key factor underpinning the potential impact of the proposed Bill therefore is the degree to which it will change actual current practice by licensees. Yet, it is not clear how many premises will be directly affected by this Bill and what proportion of trade occurs after midnight for premises which do open beyond this time. If a substantial proportion of alcohol-related harm is directly associated with alcohol purchases made after midnight from late trading takeaway outlets then the potential for this Bill to influence the purchasing and consumption patterns of drinkers may also be substantial.

## **Conclusion**

Based on existing evidence, the NDRI supports the principle of controlling the availability of alcohol via restrictions on hours of trade for licensed premises. To gauge whether the restriction proposed for this Bill is effective in reducing alcohol related harms, an appropriate evaluation and monitoring process should be implemented before the proposed restrictions are in place (including documentation of the number of premises directly affected by the changes to trading hours). In particular, Australian states and territories not currently collecting alcohol sales data should be encouraged to do so, and those already collecting data should continue to be supported. Restricting the sale of takeaway alcohol at specific times is only one means to reduce the economic, social and public health costs that are attributable to alcohol consumption in Australia. Ultimately, the most effective strategies aimed at minimising harm are those that address supply control, demand reduction, and harm reduction simultaneously.

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