# Minimum legal drinking age laws

To lower alcohol use amongst young people and reduce alcohol-related harm.

First published
20 May 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 | ■☐☐☐ Low | No information | ■■☐☐ Moderate | ■☐☐☐ Low | No information |

# Focus of the intervention

The intention of the minimum legal drinking age (MLDA) policy is to lower alcohol use among young people and the associated harms alcohol consumption causes. Fluctuations over time in the legal drinking age across the USA, Canada and Australia have been studied in relation to their effect on several public health outcomes.

This narrative is based on one systematic review covering 132 studies, 62 of which had crime outcomes. It focuses on the effects on drunk driving and other crime (including vandalism, disorderly conduct and homicide).

# 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.

Some individual studies suggested that higher minimum legal drinking age (MLDA) laws significantly reduce alcohol related crashes, homicide, disorderly conduct and vandalism, some found no relationships, and a small number of studies suggested an increase.

57 studies looked at the impact on alcohol related crashes. Just over half of these (34 studies) found higher minimum legal drinking age laws were associated with reductions in alcohol-related crashes.

Just over a third (21 studies) found no relationship between MLDA and alcohol-related crashes. A minority (two studies) observed an increase in alcohol-related crashes when the MLDA was increased, although statistical significance was not reported for one of these studies.

Overall, higher quality methods studies (using longitudinal study designs, comparison groups and/or a probability or census sample) were more likely to find an association of higher MLDA with reduced alcohol-related crashes (in 58% of analyses - 46 studies).
Three in ten studies found higher MDLA were associated with reductions in other crime (vandalism, homicide, disorderly conduct).

This review also looked at alcohol consumption (48 studies), which could be considered an intervening variable (i.e. potentially leading to increases in crime). Here, there was some evidence that higher MDLA reduced alcohol consumption – 27 studies (over a third of the total) found a statistically significant association in this direction.

## How strong is the evidence?

Although the review was systematic, many forms of bias that could influence the study conclusions remain.

The overall evidence is taken from a systematic review covering 132 studies, 62 of which had a crime outcome and were used to develop this narrative.

The review did not demonstrate high statistical validity, sufficiently assess the risk of bias, pay attention to the validity of the different outcomes (i.e. grouping crime outcomes with other social harms), or assess the influence of unanticipated outcomes such as displacement caused by the intervention. It did explore the influence of study design and outcome on the effect.

Many of the primary studies reviewed were considered of weak methodological design. Studies examining the outcome of drink-driving did not limit their data to the age groups to which the law would apply.

Altogether this means that the evidence is weak.

# Mechanism – how does it work?

The mechanism by which this intervention works was not mentioned or tested in this review.

# Moderators – in which contexts does it work best?

There is some evidence that the effectiveness of this policy varies depending on the population and crime type being studied.

For population, a smaller proportion of analyses (two of six studies) found an association between higher MLDA and reduced alcohol-related crashes in college students than in the wider population (where this proportion was 34 of 57 studies). It should however be noted that the outcome category included self-reported drink-driving, along with traffic crash data.

For crime type, an increase in MLDA was more likely to be associated with reductions in drink-driving offences (34 of 57 studies) than other crime (vandalism, disorderly conduct and homicide in three of ten studies).

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

No details on implementation of this policy were provided. However the review did discuss issues that were considered to be barriers to the MLDA law's effectiveness. These centred on the extent to which the policy was enforced, which was described as being very low in one study.

The review states that increased rates of enforcement are believed to reduce the sale of alcohol to minors. Efforts to reduce use of false age identification and tighter restrictions on the home delivery of alcohol (in the U.S.) may also help enhance effectiveness of the law.

# Economic considerations – how much might it cost?

The benefits that might be realised by this intervention are

- savings in health care costs
- legal fees
- lost wages
- higher insurance premiums
- higher costs for goods and services

None of these benefits were calculated in monetary terms and no formal economic analysis was provided in the review.

# Summary

Overall, evidence suggests no impact on crime (but some studies suggest either an increase or a decrease). This evidence is however, weak.

For crime type, increased MLDA was more likely to be associated with reductions in drink-driving offences than other crime (vandalism, disorderly conduct and homicide). The effectiveness of this law might be increased if it is enforced more rigorously and alternative access to alcohol by young people is restricted.

# Reviews

## Review one

### Reference

- Wagenaar, A. C. and Toomey, T. L. (2002). Effects of Minimum Drinking Age Laws: Review and Analyses of the Literature from 1960 to 2000. Journal of Studies on Alcohol. 63, pp. 206-225.

# Summary prepared by

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