# Disaggregating relationships between off-premise alcohol outlets and trauma

## Researchers

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## Summary

This study examines the associations between alcohol sold through off-premise outlets, such as liquor stores, in Australia and the incidence of traumatic injury in surrounding areas.

Prior studies suggest that areas with greater concentrations of liquor outlets have more trauma cases; however few have attempted to disaggregate these relationships by outlet characteristics.

Two independent observers assessed alcohol price (based on the price of the cheapest bottle of wine) and the volume of alcohol available for sale (paces of shelf space) in 295 liquor outlets in Melbourne, Victoria. These outlets were randomly selected using a geographic sample frame. We also differentiated between outlet types in this study, examining both liquor chains and independent stores.

## Outcomes

Consistent with economies of scale, we found that larger liquor outlets and chains sold cheaper alcohol than their independent counterparts. Cheaper outlets were also located in disadvantaged areas. Importantly, chains have cheaper alcohol available than independent outlets, and this relationship could not be explained by land and structure rents or other features of the alcohol market (for example, cheaper outlets are located in disadvantaged areas).

We then constructed spatial models assessing counts of ambulance attendances for intentional injuries (such as assault, stabbing and shooting) and unintentional injuries (fall, crush, and strike by an object).

Intentional and unintentional traumatic injuries occurred more commonly in areas with greater concentrations of off-premise alcohol outlets. These relationships extended to areas adjacent to where the outlets were located.

Chain outlets contributed most substantially to trauma risk, with each additional chain outlet associated with a 35.3 per cent increase in intentional injuries and a 22 per cent increase in unintentional injuries in the local SA1 area. Chains sold cheaper alcohol than independent stores, so this might partly explain their greater harmful effect.

Stores in disadvantaged areas have cheaper alcohol, so any harms related to cheap alcohol disproportionately affect disadvantaged people.

## Recommendations

These findings suggest that limiting the exposure of local populations to off-premise alcohol outlets, particularly chain outlets, may reduce the incidence of trauma in neighbourhoods.

[view the report](https://fare.org.au/wp-content/uploads/Disaggregating-relationships-between-off-premise-alcohol-outlets-and-trauma.pdf)

[associated paper](https://onlinelibrary.wiley.com/doi/10.1111/dar.12256/abstract)