

## **Title**

A City-Wide Analysis of Driving While Intoxicated Events Associated with Bar and Restaurant Capacity Changes

## **Introduction**

During the COVID-19 pandemic, many bars closed, but stay-at-home orders were associated with an increase in alcohol use. The net impact of these restrictions on the incidence of driving while intoxicated (DWI) events is unclear. Then, in October of 2020, Texas Governor Abbott issued an executive order allowing restaurants to expand to 75 percent capacity and allowing bars to re-open to 50 percent capacity. This executive order may have influenced behavioral changes regarding alcohol use.

## **Purpose**

In this study, we assess the effects of the statewide order authorizing bars to re-open and restaurants to expand indoor dining capacity on the incidence of DWI events.

## **Methods**

We conducted a retrospective observational analysis using publicly-reported data regarding police traffic encounters. We analyzed changes in DWI encounters in the San Antonio metropolitan area before (October 1st-14th 2020) versus after (October 15th-28th 2020) an executive order increased restaurant capacity and allowed bars to re-open during the COVID-19 pandemic. We made these comparisons by comparing medians and through regression modeling to control for potential confounders.

## **Results**

During the study period, 16,609 police traffic encounters met inclusion criteria. Of these, 353 were DWI encounters, 594 were officer traffic stop encounters, 14,565 were traffic-related encounters, 113 were wrong way driver encounters, and 984 were other traffic violations. In the before and after analysis, there was no difference in the daily median numbers of DWI encounters (12 versus 10,  $p=0.461$ ), wrong-way driver incidents (3 versus 2,  $p=0.328$ ), or other traffic violations (34 versus 35,  $p=0.854$ ). The multivariable regression model similarly identified no change in the daily incidence of DWI encounters ( $p=0.281$ ).

## **Conclusion**

After executive order GA-32 permitted restaurant and bar capacity expansion in Texas during the COVID-19 pandemic, we did not detect any significant increase in DWI police encounters in one large metropolitan area. Further studies are necessary to assess changes in behavior associated with the reopening actions in Texas.

The other authors and their affiliations are included below, and I would be the presenting author if accepted. Thank you very much for your consideration.

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