Alcohol at the POS: Places, Promotions, and Problems

Counter Tools’ Healthy POS Webinar Series

June 17, 2021

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**Moderator:** Jackie Boards, Project Director, Counter Tools
Webinar Housekeeping: Zoom Webinar Orientation

- You are muted by default. The host can unmute participants.
- Send a general message/comment.
- Raise your hand to be unmuted or to answer a question.
- Ask a question.
About Counter Tools

Counter Tools is a non-profit organization. Our vision is a nation where healthy living is equitable across communities and every person has access to healthful choices.
What We Do

We work with our partners to advance place-based public health and health equity through policy, systems and environmental changes.

- Consulting
- Training
- Storytelling
- Providing Tech Tools
- Supporting Advocacy Efforts
- Disseminating Science and Best Practices

www.countertools.org  www.countertobacco.org
Who We Are

Our Team

National Partners/ Clients (past and present)
Equity, Diversity, and Inclusion

Counter Tools recognizes that not every individual or community has equal access to healthy spaces and opportunities. Structural elements, including institutional racism, along with industry targeting impact exposure, availability, and access to both healthy and harmful products.

We define health equity to mean that everyone has a fair and just opportunity to be as healthy as they can be, which means reducing and removing structural barriers and obstacles that apply to and extend beyond the retail environment.

We commit to working alongside our partners towards a more equitable world by addressing equity, diversity, and inclusion in our trainings, providing resources and consultation, sharing relevant data, and supporting advocacy efforts.

Read our full stance on equity, diversity, and inclusion on our website.
Stay in touch!

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Alcohol at the point of sale: Places, promotions, & problems

Pamela Trangenstein
July 17, 2021
ALCOHOL IS NOT AN ORDINARY COMMODITY.
ALCOHOL OUTLETs ARE NOT ORDINARY BUSINESSES.
Your thoughts on alcohol outlets...
Roadmap

**Prologue:** Overview & differences between alcohol & other drugs

**Places:** Environmental justice issues in alcohol outlet density

**Promotions:** Ads & violence

**Problems:** Harms associated with alcohol outlets

**Policies:** Solutions that mitigate these problems
Alcohol outlet density is the number of stores in an area that sell alcohol and the distances between them.
"When the density of alcohol outlets is high or increases, the level of alcohol use is correspondingly high or increases, and excessive consumption and its diverse related harms occur."

- Task Force on Community Preventive Services

Cities with studies linking alcohol outlets to harms

Map showing cities such as Los Angeles, Houston, and Boston.
How are alcohol outlets different from other businesses that sell commercial determinants of health?
Like tobacco, food, & cannabis: Harms from consumption

Unlike tobacco & food: Acute intoxication & related harms

**Harms to self**
- Violence
- Traffic crashes
- Suicide
- Gonorrhea
- Pedestrian injuries
- Crime

**Harms to others**
- Public intoxication
- Public urination
- Property damage
- Litter

Unlike tobacco & cannabis*: Harms from bringing patrons together

Crime occurs in times and locales where motivated offenders are in close proximity to susceptible targets and supervision is low.

Bars release a stream of intoxicated patrons at closing time. Alcohol outlets bring together people who may not otherwise interact.
Common thread: Environmental injustices

Alcohol outlets tend to cluster in historically disinvested neighborhoods....

....even though populations drink less than their more advantaged counterparts.

A quick aside
A larger percent of White people drink (vs. other racial groups)

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>56.1</td>
</tr>
<tr>
<td>African American</td>
<td>42.8</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>32.1</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>41.5</td>
</tr>
<tr>
<td>Asian</td>
<td>37.6</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>49.5</td>
</tr>
<tr>
<td>Latinx</td>
<td>42.7</td>
</tr>
</tbody>
</table>

Binge drinking prevalence increases as income increases.

Binge drinking intensity increases as income decreases.

A case study in Baltimore, MD
Too Many Outlets in Too Little Space, Baltimore 2016

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol Outlets</td>
<td>1,218</td>
</tr>
<tr>
<td>McDonald's</td>
<td>184</td>
</tr>
<tr>
<td>Libraries</td>
<td>131</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>43</td>
</tr>
</tbody>
</table>
In 2016, 91% of homicide victims were Black even though Black people only comprised 67% of the population.

Challenge
Understand the role of unjust historical housing policies in the distribution of alcohol outlets

Exposures
Redlining (see next slide), gentrification, and neighborhood White flight

Location
Baltimore, MD
Home Owner’s Loan Corporation and redlining

During the 1930’s, HOLC sent raters across the country to classify neighborhoods according to perceived lending risk. They systematically rated areas where people of color lived as hazardous, which was colored red, hence “redlining.”
Alcohol outlet clustering and redlining in Baltimore, MD

Take-away alcohol stores

Bars and restaurants

Key messages

• Redlining was the most robust predictor of where alcohol outlets clustered eight decades later.

• There has been a tendency to blame neighborhoods and people who live in those neighborhoods for the high prevalence of harms that they face, ignoring the historical disinvestment and root causes of those harms.

• As jurisdictions consider how to mitigate these injustices, they should avoid repeating mistakes.
Why does this matter?

In short: the outlets’ promotions & problems
Advertising is designed to sell products.
Ads with price discounting may increase consumption and/or violence.


Ads that sexualize women may normalize gender power imbalances and contribute to violence against women.
Previous research

**Challenge**
Understand the role of the density of alcohol ads featuring Latinas, controlling for outlet density

**Location**
San Jose, CA

**Findings**
“Results of these analyses are supportive of the notion that advertising content plays a detectable role in sexual violence.”

Methods

1. Kernel densities

2. Random effects models
   - Robust standard errors
   - Benjamini-Hochberg multiple testing correction

3. Regression diagnostics
   - Collinearity
   - Constant multiplicative assumption
   - Moran’s index
   - Leverage, influence
Kernel density explained

1. Divide the area into a fine grid
2. Move a cone over the grid
3. In each cell, calculate the number of points, weighting points closer to the center of the cone more heavily than those toward the edge
Alcohol outlets with ads visible from the street

- All violent crimes: 1.15
- Homicide: 1.28
- Aggr. assault: 1.16
- Forcible rape: 1.16
- Robbery: 1.15
Well, what about…

1. Was it just the context?
2. Are outlets with ads just in “bad” neighborhoods?
3. Would we see these associations with any kinds of ads? What’s so special about alcohol, anyways?
What about the outlets themselves? Do different types of outlets pose different risks to communities?
Previous Research – 2014 Study using 2010 Data

Each additional alcohol outlet in a census tract in Baltimore is associated with increased violent crime.

Challenge
Assess whether specific types of alcohol outlets are associated with specific types of violent crime

Exposure
Alcohol outlet density by type

What’s new?
The measurement methods allowed us to pinpoint spatial associations (see paper)
Outlet Types

On-Premise Outlets
Bars, Restaurants
519
7 days
6 AM – 2 AM

Off-Premise Outlets
Liquor Stores
264
6 days
6 AM – 12 AM

LBD-7 Outlets
Bar/Taverns
Both on and off premise
421
7 days
6 AM – 2 AM
Alcohol Outlet Access Variables

**IDW Counts**
10 closest outlets

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

**Prologue Policies**

- Promotions
- Places

**Problems**

- Total
- On-Premise
- Off-Premise
- LBD-7
Percent Increase in Exposure to Violence with 10% Increase in Outlet Density

<table>
<thead>
<tr>
<th>Category</th>
<th>On-Premise Outlets</th>
<th>Off-Premise Outlets</th>
<th>LBD-7 Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Violent Crime</td>
<td>2.7%</td>
<td>3.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Homicide</td>
<td></td>
<td>3.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>2.9%</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>1.4%</td>
<td>1.9%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Robbery</td>
<td>2.2%</td>
<td></td>
<td>3.1%</td>
</tr>
</tbody>
</table>
Alcohol outlet clusters and percent of pop. who is Black


Prologue Policies Promotions Problems

Places
Reproducing inequities

Unjust policies
E.g., redlining

Alcohol outlet density
Higher concentrations in disinvested areas

Related harms
Violence, loitering, drug sales, crimes

Barriers to redevelopment

This process deters pro-social businesses from moving in and revitalizing neighborhoods.
Should we give up hope?

No!

...we still have one more “P”
Alcohol policies

- The laws, regulations, and practices designed to reduce excessive alcohol consumption and its related harms
- Alcohol policies are modifiable; some are inexpensive to implement, require no regular maintenance, and can save or raise money
- A number of policies have strong and consistent evidence base demonstrating effectiveness at reducing adult excessive drinking, youth drinking, or both

### Most Effective Alcohol Policies

1. Taxes
2. State Control (Monopoly)
3. Outlet Density Restrictions
4. Wholesale Price Restrictions
5. Retail Price Restrictions
6. Alcohol Beverage Control Agencies
7. Dram Shop Liability
8. Hours of Sales Restrictions
9. Sales or Service to Intoxicated Patrons Prohibited
10. Social Host Laws

Baltimore City can not issue any new liquor licenses so long as there is more than 1 license per every 1,000 residents.

Baltimore City zoning rewrite to prohibit liquor stores from opening in residential neighborhoods. The current stores stayed.

From 1970 to 1980, Baltimore's population declined from 906,000 to 787,000 people.

Transform Baltimore is the first comprehensive zoning code rewrite in 40 years.
This study compared four policy options to reduce alcohol outlet density.

<table>
<thead>
<tr>
<th>Policy Code</th>
<th>Description</th>
<th>Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reduce alcohol outlet access to the city median</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Close liquor stores in residential zones</td>
<td>80 outlets</td>
</tr>
<tr>
<td>3</td>
<td>Close “sham” bars/taverns</td>
<td>117 outlets</td>
</tr>
<tr>
<td>4</td>
<td>Close both the non-conforming liquor stores and the “sham” bars/taverns</td>
<td>197 outlets</td>
</tr>
</tbody>
</table>
“Sham” bar/taverns

TransForm Baltimore definition of “sham” bar/tavern:

• Less than 50% of floor space devoted to on-site consumption
• On-premise sales comprise less than 50% of daily sales

“Sham” bar/taverns are essentially extended hours liquor stores.
Non-conforming liquor stores

Non-conforming liquor stores are off-premise stores located in an area that is zoned as residential.
<table>
<thead>
<tr>
<th></th>
<th>Policy 1: Median</th>
<th>Policy 2: Residential Liquor Stores</th>
<th>Policy 3: Sham Bars/Taverns</th>
<th>Policy 4: Combination of Policies 2 and 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>$66.1</td>
<td>$25.9</td>
<td>$11.9</td>
<td>$20.4</td>
<td>$115.5</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>$40.4</td>
<td>$20.4</td>
<td>$5.1</td>
<td>$3.3</td>
<td>$73.0</td>
</tr>
<tr>
<td>Rape</td>
<td></td>
<td>$8.9</td>
<td>$0.5</td>
<td>$0.3</td>
<td>$19.7</td>
</tr>
<tr>
<td>Robbery</td>
<td></td>
<td></td>
<td>$0.3</td>
<td>$0.8</td>
<td>$12.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$178.2</td>
</tr>
</tbody>
</table>

Quality-adjusted life years saved by policy

Alcohol outlet zoning has the potential to reduce violent crime.

Cost-effectiveness analysis is a research tool that can be used to inform policy debates.

Reducing alcohol outlet density can decrease excessive alcohol consumption & related harms.

Limited approaches to regulating outlet density may not have sufficient impact to address disparities.

Key messages
A few concluding thoughts…
Who has a seat at the table during policy discussions matters.
Liquor licensing and zoning can become highly technical

This can lead regulators to become captive and community members to become excluded.

Community-led solutions

The population affected by the harms from these outlets needs to be part of the decision-making around alcohol outlets.

Best practice is to write community members into the process.
What can we do?

- All of us - researchers, practitioners, policy makers, and students – should be mindful about how we generate, use, and report data on inequitable issues like alcohol outlet density.

- This thoughtfulness can help avoid false conclusions and stigmatizing neighborhoods or sub-populations.
thank you

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