

Alcohol and Malt Liquor Availability and Promotion and Homicide

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Background

- **The majority of homicides involve alcohol.**
- **Homicide rates in the U.S. are the highest among African Americans and Hispanics.**



Homicide is the leading cause of death for African American males, aged 15-20

Homicides per 100,000 Males 15-20 Years	
African American	70
Hispanic	31
Asian	9
White	4

Source: Centers for Disease Control, 2000



Background

The alcohol environment may contribute to racial/ethnic disparities in homicide rates in inner cities.





Alcohol Outlets are Over Concentrated in Inner Cities

- Increased alcohol availability
- Hot spots for crime



Malt Liquor is Readily Available in Inner Cities

- Malt liquor is an expensive lager beer with higher alcohol content than regular beer (6-8 vs. 4-5%)
- Sold in large containers, most notably 40-ounce bottles
- Sold chilled for immediate consumption





Malt Liquor is Heavily Promoted in Inner Cities

Much of the advertising is targeted to African American and Hispanic youth.



Malt Liquor Advertising







Communities Have Formed Coalitions to Restrict Alcohol and Malt Liquor Availability and Promotion

- **Community concerns are well-founded.**
 - Alcohol availability is associated with increased crime.
 - Malt liquor consumption is associated with heavier drinking, more aggressive behavior, and a spectrum of neighborhood problems including public intoxication, destruction of property, and crime.
 - Alcohol advertising, in general, is associated with more positive attitudes toward drinking, drinking onset, and alcohol consumption.



Malt Liquor Consumption is of Special Concern in African Communities

- Malt liquor consumption is more common among African Americans, a group at increased risk for certain alcohol-related problems, e.g., esophageal cancer.



Who Drinks Malt Liquor?

	MALT LIQUOR	BEER
RACE/ETHNICITY		
African American	67%	9%
Caucasian	21	77
Latino	11	2
INCOME		
Less than \$30,000	63%	31%
\$30,000 - \$49,000	19	30
\$50,000+	18	39

Source: Miller Brewing Company Behavioral Tracking Study 2000



Purpose of Study

To investigate the role of the alcohol environment in explaining disparities in homicide rates among minority groups in inner-city neighborhoods in 10 U.S. cities



Hypotheses

- Higher neighborhood concentrations of African Americans will be associated with higher homicide rates, as well as higher alcohol and malt availability and promotion.
- The relationship between racial/ethnic concentration and homicide will be attenuated after adjusting for the greater alcohol and malt liquor availability and promotion in African American inner city neighborhoods.



Study Neighborhoods

➤ EC/EZ/EEC Communities in 10 Cities

- 30% or more in poverty
- Many minorities & youth
- Regional representation



Study Cities



Data Collection

- Data come from the Malt Liquor and Homicide Study (MLH)
- Unit of analysis: Census block group
- Time period: 2003



Measures

Homicide: Counts of homicides

Alcohol Availability: # off-sale alcohol outlets

Alcohol Promotion: # outdoor alcohol ads on billboards, transit shelters, and bus benches on main arterial roads in EZ/EC's



Measures

Malt Liquor Availability: # 40-ounce bottles of malt liquor; lowest price 40-ounce bottle malt liquor

Malt Liquor Promotion: any malt liquor ad on storefront windows.



Measures

Neighborhood Characteristics: % African American,
% female head of household, percent unemployed,
land area (km)



Fieldwork

- Observations of malt liquor availability and promotion were conducted by Battelle's, Center for Public Health Research and Evaluation
- Field staff included a trained lead and an assistant observer.
- Observations were collected during an approximately 15-minute long visit to each off-premise alcohol outlet and driving through EZ/EC neighborhoods.



Data Analysis

- Hypotheses were examined using Poisson regression models.
- Each model incorporated block group population as a fixed effect; therefore, rates of each outcome variable per person are being modeled.
- All analyses adjusted for spatial autocorrelation, i.e., the tendency of data from nearby spatial units to be correlated one with the other.



Results: Descriptive

- EZ/EC block groups had higher mean percentages of African Americans (51%), female head of households (46%), and unemployment rates
- The average price of a 40-ounce bottle of malt liquor in EZ/EC census block groups was \$1.87, or less than a gallon of milk.
- Malt liquor ads accounted for about one-third of all exterior storefront alcohol advertisements



Results: Poisson Regression Models

- Higher concentrations of African Americans in EZ/EC neighborhoods were associated with higher homicide rates as well as greater alcohol availability, especially malt liquor availability.
- The promotion of malt liquor on the exterior of storefronts was also significantly greater in African American than in other neighborhoods.
- However, none of the measures representing alcohol or malt liquor availability and promotion variables changed the effect of neighborhood racial/ethnic concentration on homicide.



Limitations

- **Results are based on**
 - **cross-sectional data**
 - **cities with less than 1 million persons**
 - **models that do not include variables such as gang violence and alcohol policies that restrict off-premise outlets**

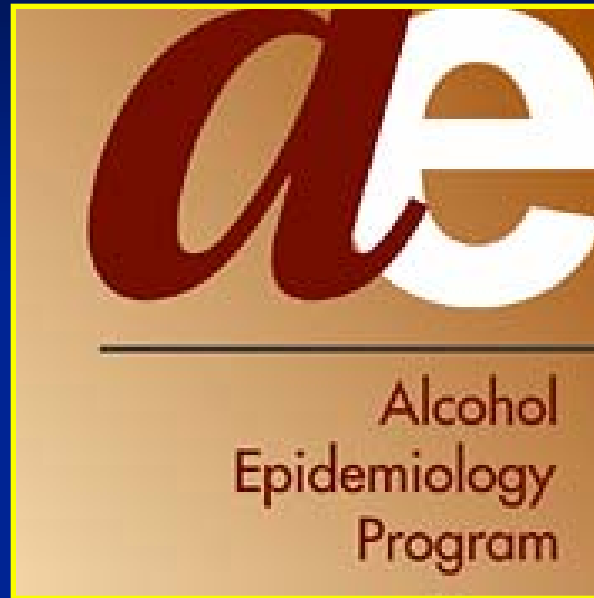


Conclusion

Geography does, indeed, matter. Living in an impoverished neighborhood with high concentrations of African Americans increases the likelihood of being a homicide victim, increases access to malt liquor, and other alcoholic beverages, and increases exposure to messages promoting malt liquor.







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