

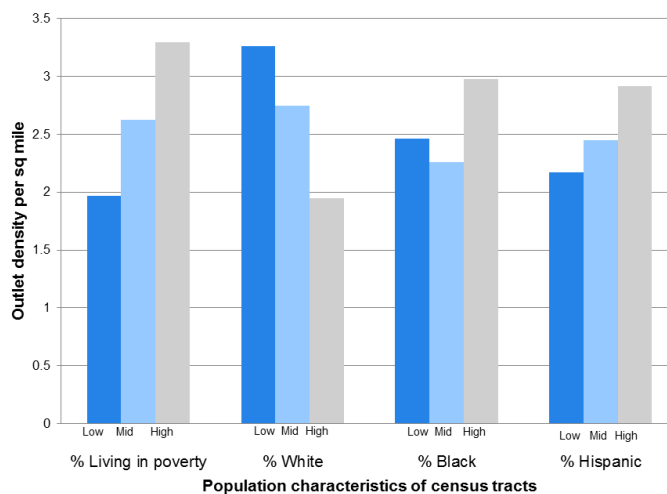
Alcohol Sales and Violence in Philadelphia

Until recently in Pennsylvania, only state stores could sell wine and liquor. A new Pennsylvania law allows grocery stores to sell wine and also expands places that can sell beer, such as gas stations.

Studies in other cities have shown that neighborhoods that have more stores selling alcohol have higher rates of violence, alcohol-related traffic crashes, and other public health and social problems.^{1,2} For example, in Washington State, recent relaxation of restrictions on alcohol sales, and resulting increases in alcohol outlets was followed by a 5-8% increase in aggravated assaults and a 5-6% increase in non-aggregated assaults for each new outlet within a neighborhood.³

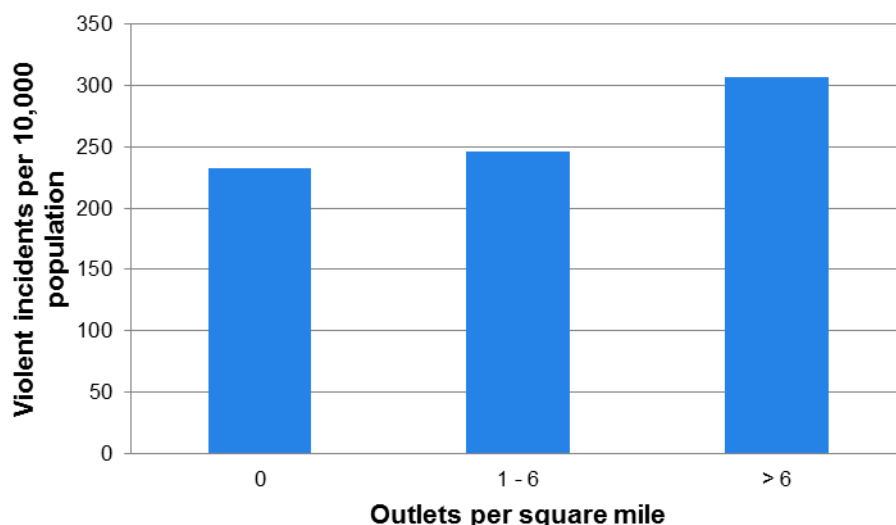
This issue of CHART describes the relationships among neighborhood characteristics, alcohol sales outlets, and violent crime in Philadelphia, prior to changes in state alcohol sales laws. These data can be used to anticipate possible effects of expanded alcohol sales in Philadelphia. The graphs focus on stores that are licensed to sell alcohol for consumption elsewhere (off-premise sales) because the public health impact of these outlets is greater than that of bars and restaurants (on-premise sales).⁴ The data include eating establishments and distributors allowed to sell beer for off-premise use and state run stores that sell wine and liquor for off-premise use.

More Alcohol Outlets in Poor and Minority Census Tracts



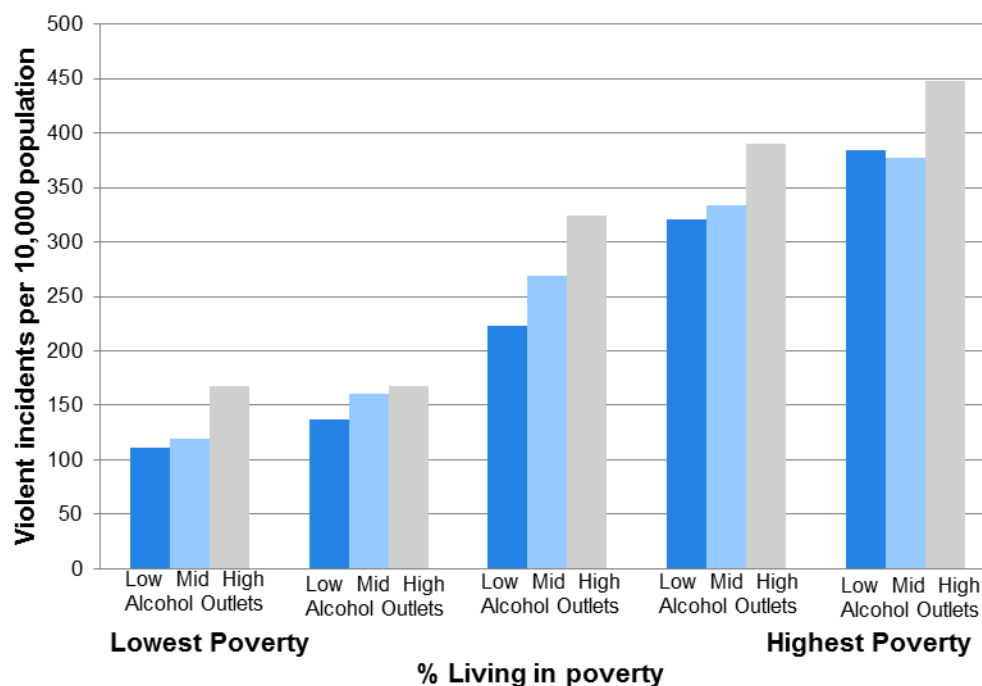
- In 2015, there were 296 off-premise alcohol outlets in Philadelphia, or 2.2 outlets per square mile. This compares with more than 10 such outlets per square mile in Baltimore, Los Angeles, and New Orleans.⁵
- The number of alcohol outlets per square mile was highest in census tracts where the highest percentage of residents had incomes below the Federal poverty level and where the highest percentage of residents was Hispanic or black. It was lowest in census tracts with the highest percentage of white residents.

Violence is More Common in Areas With More Stores Selling Alcohol



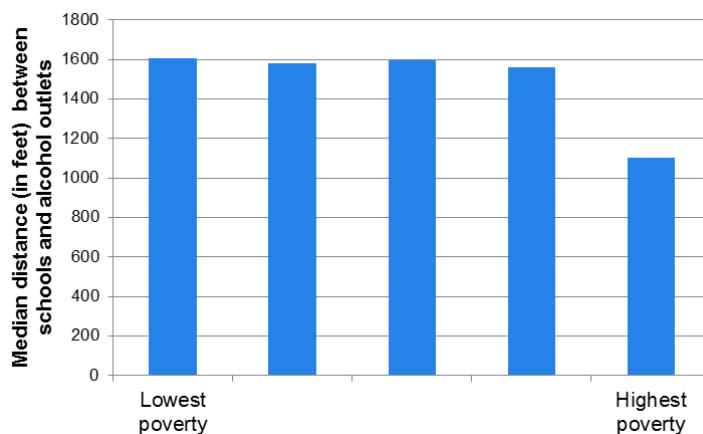
- In 2015, there were 256 violent incidents per 10,000 people, of which 14% were firearm-related. Census tracts with higher densities of alcohol outlets had higher rates of violent crime.

Regardless of Poverty Level, Neighborhoods with More Alcohol Outlets Have More Violent Incidents



- Neighborhood poverty was strongly associated with violent incidents. However, at all levels of neighborhood poverty, rates of violent incidents were highest in those census tracts with higher densities of off-premise alcohol outlets.

Alcohol Outlets Are Closer to Schools in Neighborhoods with the Most Poverty



- For the 20% of census tracts with the highest levels of poverty, the median distance between schools and alcohol outlets (approximately 1,100 feet) was less than in areas with lower levels of poverty (>1,500 feet).
- Pennsylvania regulations require that alcohol outlets be located at least 100 yards (300 feet) from schools. Among 536 schools in the city, alcohol outlets were located within 300 feet of 14 schools (2.6%), and this proportion did not vary by neighborhood poverty level.

Conclusions

The connection between alcohol sales and violence has been demonstrated in multiple studies. Although the reasons are complex, in general, where alcohol is more available people drink more, and in some people alcohol intoxication causes violent behaviors. Research has also shown that this connection varies among communities, making it difficult to predict how new state regulations allowing more stores to sell alcohol will affect levels of violence in Philadelphia. Regardless, the current concentration of alcohol outlets in low-income neighborhoods in Philadelphia suggests that the adverse effects are likely to be felt most by those who already suffer from social disadvantage. Community organizations, healthcare providers, and others who serve the most vulnerable should be prepared to address the potential health and social effects of greater alcohol use.

What Can Be Done

City agencies are:

- Arranging for evidence-based addiction prevention curricula in schools and community centers.
- Working with contract providers to offer treatment for people dependent on alcohol and other drugs.

Health care providers can:

- Screen patients for alcohol use, offer brief counseling for those with risky drinking patterns, and refer alcohol-dependent people for treatment.⁶

Policy-makers can:

- Enact evidence-based policies recommended by the U.S. Preventive Services Taskforce⁷, including:
 - Enhanced enforcement of laws prohibiting sales of alcohol to minors,
 - Increasing the price of alcohol through taxes,
 - Reducing alcohol outlet density, and
 - Maintaining or restricting the days or hours of sales of alcohol.

Endnotes

- 1) Cunradi CB, Mair C, Todd M. Alcohol outlet density, drinking contexts and intimate partner violence: A review of environmental risk factors. *Journal of drug education*. 2014;44:19-33.
- 2) Gmel G, Holmes J, Studer J. Are alcohol outlet densities strongly associated with alcohol-related outcomes? A critical review of recent evidence. *Drug and Alcohol Review*. 2016;35:40-54
- 3) Tabb LP, Ballester L, Grubestic TH. The spatio-temporal relationship between alcohol outlets and violence before and after privatization: a natural experiment, Seattle, WA 2010-2013. *Spatial Spatio-temporal Epidemiol*. 2016, <http://dx.doi.org/10.1016/j.sste.2016.08.003>.
- 4) Grubestic TG, Murray AT, Alex W, et al. Alcohol beverage control, privatization and the geographic distribution of alcohol outlets. *BMC Public Health*. 2012;12:1015, DOI: 10.1186/1471-2458-12-1015. URL: <http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-1015>.
- 5) Scribner RA, Mason KE, Simonsen NR, et al. An ecological analysis of alcohol-outlet density and campus -reported violence at 32 U.S. colleges. *J Studies Alcohol Drugs*. 2010, 71(2):184–191.
- 6) Substance Abuse and Mental Health Services Administration. Screening, brief intervention, and referral to treatment (SBIRT), available at <http://www.samhsa.gov/sbirt>
- 7) Community Preventive Services Task Force, established by the U.S. Department of Health and Human Services. The Community Guide: Excessive Alcohol Consumption, available at <https://www.thecommunityguide.org/topic/excessive-alcohol-consumption>.

Alcohol outlet data were obtained from the Pennsylvania Liquor Control Board and represent all alcohol licenses as of May 2016. City of Philadelphia Police Department crime data for 2015 and school location data for public (School District of Philadelphia), charter, private and archdiocesan schools in the City of Philadelphia were obtained from Open Data Philly (<https://www.opendataphilly.org>). Census data for 2010-2014 were obtained from the American Community Survey, U.S. Bureau of the Census.

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