

From May 2010 through August 2010 Mendocino County Public Health Services Prevention and Planning Unit conducted a health impact assessment of the effects of alcohol outlet density on the health of the community. This report summarizes the activities and findings of this health impact assessment (HIA).

HIA is a means of assessing the health impacts of policies, plans and projects in diverse sectors using quantitative, qualitative and participatory techniques. HIA helps decision makers make choices about alternatives and improvements to prevent disease or injury and to actively promote health.

SUMMARY The number of alcohol outlets per community (outlet density) is an indicator of readily available alcohol to the public and an indicator of overall alcohol consumption. While local governments may be inclined to grant approval to alcohol license applicants in attempts to bolster local business and the economy, a high density of outlets corresponds with a proportional increase in alcohol related violence, underage drinking, unprotected sex and driving after drinking. There are many steps communities can take to reduce the harm associated with high alcohol outlet density. Success stories from other communities can help lead the way to implement tools and policies at the local level.

# Published Literature on Effects of Alcohol Outlet Density

- Communities of color and individuals in lower income brackets are more likely to be surrounded by alcohol outlets. These are the communities at highest risk for crime and alcohol abuse.<sup>1</sup>
- Controlling for race and ethnicity, young people in zip codes with high numbers of alcohol outlets were still significantly more likely to access alcohol. Every additional outlet within a half mile of their residences corresponded with increased binge drinking among adolescents and driving after drinking.xi
- All outlet types displayed a consistent positive association with violence. Vi, Viii In a study of various California counties, a 10% increase in numbers of liquor stores and bars correlated with 1.67% and 2.06% increases in violence rates. Every six outlets accounted for one additional assault that resulted in at least one overnight hospital stay. Researchers estimated that, on average, eliminating one bar per zip code in California would reduce the number of assaults requiring overnight hospitalization by 290 per year in the state. Iv
- Alcohol outlet density was strongly associated with reduced indicators of social capital such as community participation and safety.ix

- Positive associations have been found between outlet density and sexually transmitted infections, liver problems, and experienced violence. Even when controlling for individual alcohol consumption, there was still a correlation with sexually transmitted infections and violence.\* This means that the harms of alcohol outlet density happen even to people that do not drink.
- The most frequently reported consequences of high outlet density are alcohol-related collisions. According to a study of 72 cities in California, for every one percent increase in outlet density there was a .54% increase in alcohol-related crashes. Thus, if a city of 50,000 had 100 alcohol outlets, the residents would experience 2.7 additional crashes for each new bar or liquor store. vii

#### **State Limits on Alcohol Outlet Densities**

Because of these multitudes of harms associated with high alcohol outlet densities, the California Department of Alcoholic Beverage Control (ABC) Act has set guidelines for maximum acceptable levels of outlets in communities.

The ABC Act Chapter 5, Article 2, sections 23815-23827 specify that the on-sale general ratio should not exceed one alcohol outlet for every 2,000 county residents. On-sale outlets are where the alcohol is consumed on the premises, such as night clubs, restaurants and bars. The off-sale ratio is limited to one alcohol license for every 2,500 inhabitants. Off-sale outlets are where the alcohol is taken off-site for consumption, such as liquor stores, convenience stores, grocery stores and gas stations.

Census tracts that exceed these limits are considered to have an "undue concentration" of outlets, and ABC is required to refuse all alcohol license applicants in those tracts unless special approval by local governing bodies is supplied.

The number of outlets in Mendocino County per capita is over twice that of the State. Mendocino County has 48 outlets per 10,000 residents versus 21 outlets per 10,000 residents in California as a whole. There are 168 off-sale alcohol outles in Mendocino County. To conform to the

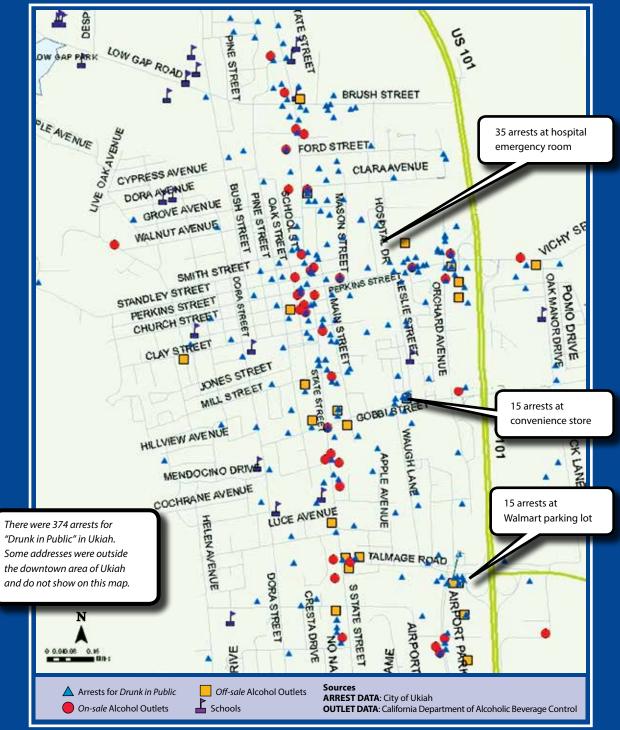
ABC standards, there would only be 35 off-sale outlets in the county. ABC has placed Mendocino County on its moratorium list for off-sale beer and wine licenses due to the degree to which the current number of licenses exceed one for each 2,500 inhabitants.

#### **Alcohol Outlets and Crime in Ukiah**

An examination of crime statistics from the California Department of Justice and the California Alcohol Beverage Control revealed that Mendocino County has a higher assault rate than the state for the years 2001 - 2010 and more than twice the state's alcohol outlet density. Prompted by this data, the Prevention and Planning Unit conducted an assessment with youth of all off-sale alcohol outlets in three incorporated Mendocino County cities: Ukiah, Willits and Fort Bragg. The outlets were mapped, and arrest data for being "drunk in public" for the year 2009 were also plotted on the maps.

On page 4 is a map of Ukiah with a population of 16,000. The map displays data for 2009 arrests for being "drunk in public" and locations of off- and on-sale alcohol outlets.

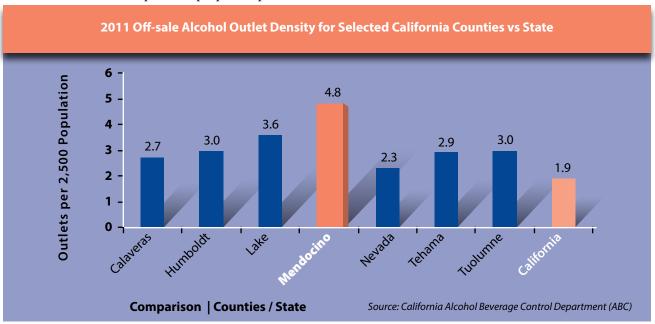
## Ukiah Alcohol Off-sale and On-sale Outlets Arrests for *Drunk in Public* in 2009



The blue triangles represent arrests for being drunk in public in Ukiah. Some addresses are outside central Ukiah and do not show up on this map. Drunk in public arrests were of individuals on foot and the blue triangles indicate where they were arrested. There are large clusters of arrests around areas with a high density of alcohol outlets, most of which are along the main artery in Ukiah (State Street). The 35 arrests at Ukiah Valley Medical Center hospital emergency room were due to the arresting officers transporting their arrestees to the emergency room for needed care and then arresting them at the hospital (see map above).

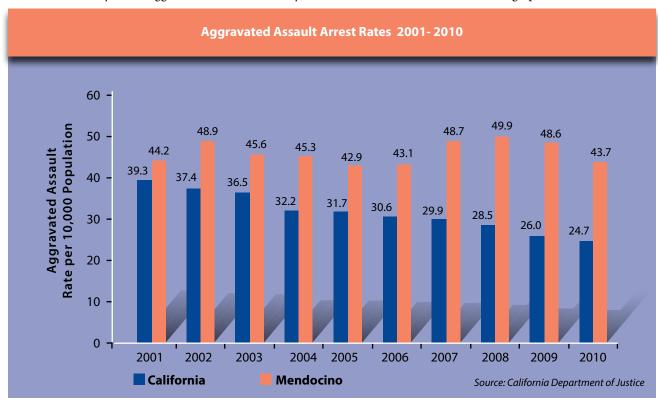
## Alcohol Outlet Density in Mendocino County, Other Counties and the State of California

Comparing Mendocino to the six similarly-sized counties in California of mostly rural demographics without major urban areas and to the state reveals that Mendocino County has the highest alcohol outlet density among these counties at 4.8 off-sale alcohol outlets per 2,500 people compared to the State at 1.9.



### **Crime in Mendocino County and California**

Compared to California, Mendocino County has had alarmingly higher rates of aggravated assault. In 2009 and 2010 the Mendocino County rate of aggravated assault was nearly twice the State rate as can be seen in the graph below.



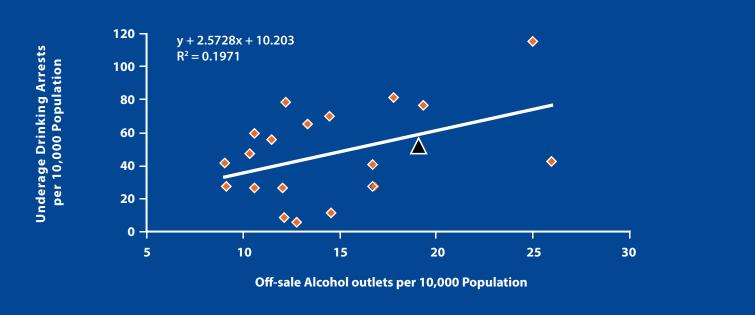
# The Relationship between Off-sale Alcohol Outlet Density and Crime

The 20 California counties with populations less than 135,000 and greater than 10,000 were compared with Mendocino County, examining the relationship between offsale alcohol outlet density and crime, focusing on rates of underage drinking arrests and driving under the influence (DUI) arrests. The 20 counties are: Amador, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Nevada, Plumas, San Benito, Siskiyou, Sutter, Tehama, Trinity, Tuolumne and Yuba.

Scatter plots can be used to display these relationships. They use horizontal and vertical axes to plot data points to show how much one variable is affected by another. The relationship between two variables is called their correlation.

Below is a scatter plot of the 20 counties comparing rates of off-sale alcohol outlets (on the bottom) with rates of underage drinking arrests (on the left). Underage drinking arrests include juvenile arrests for DUI, public drunkenness, and violation of liquor laws. Mendocino County is denoted by the triangle. Using linear regression analysis on this data and applying the resulting equation, a practical finding is that each additional off-sale alcohol outlet is associated with almost 3 more arrests for underage drinking. The number of outlets accounted for 20% of the variation in underage drinking arrests.

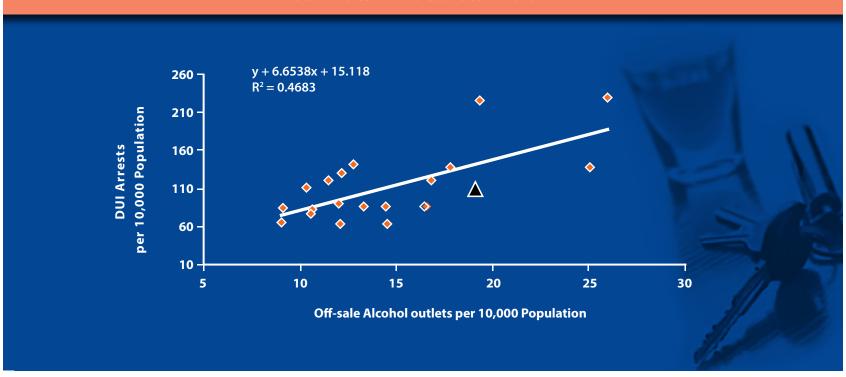
# Underage Drinking Arrest Rate vs. Off-sale Alcohol Outlets Rate in 20 California Counties in 2010



Below-right is a scatter plot of the 20 counties comparing rates of off-sale alcohol outlets (on the bottom) with rates of DUI arrests (on the left). Mendocino County is denoted by the triangle. Using linear regression analysis on this data and applying the resulting equation, a practical finding is that each additional off-sale alcohol outlet is associated with almost 7 more DUI arrests. The number of outlets accounted for 47% of the variation in DUI arrests.

Source: California Department of Alcohol Beverage Control; California Department of Justice, Crime Data

# Driving Under the Influence vs. Off-sale Alcohol Outlets Rate in 20 California Counties in 2010



#### **Youth Focus Groups**

In June, 2010, two focus groups were conducted with 16-25 year olds, in the City of Ukiah. The setting was a casual, round robin that elicited discussion on alcohol availability to youth, usage and recommendations to limit youth access to alcohol. Both groups noted the following:

- Hard liquor was much preferred, primarily as a means to get drunk fast.
- The main goal of drinking was intoxication so the youth engaged in binge drinking, consuming more than 3 drinks per drinking occasion.
- Parents were considered very influential in determining drinking habits for their children, primarily through education and attitude towards alcohol.
- Common methods of acquiring alcohol were through an of-age friend or sibling, or alternatively, asking a stranger to buy it for them.
- Stealing from larger stores was also fairly common.
- People living in low-income apartments and young children were considered most susceptible to the harms of alcohol outlets and their effects such as alcohol abuse.
- Alcohol outlets were seen to increase drinking, thus leading to increased sexual violence and unprotected sex among youth.
- To limit the harms of alcohol outlets and drinking, the youths suggested moving alcohol away from other popular items such as candy, soda and cigarettes, more security through locking alcohol away or keeping it behind the counter, better education regarding legal or criminal consequences of both underage drinking and serving alcohol to a minor, possibly requiring placards at counters of all alcohol outlets with information on laws and consequences, and limiting alcohol outlets near schools and parks.

#### **Statewide Tools to Limit Alcohol Outlets**

In 1994 the California Legislature passed the Caldera Bill to give more local control over alcohol licenses. Under the Caldera Bill, if an alcohol license application either: a) is in an area that is already oversaturated (>1 per 2500 residents for off-sale beer and wine licenses); or b) in an area that has high crime (exceeds the city's or county's average by 20%), then ABC must deny the license application unless there is sufficient demonstration of "Public Convenience or Necessity", primarily determined by local governing bodies, often law enforcement. Under this criterion, if a local authority does not indicate a need, the ABC is required to deny the alcohol license. All of Mendocino County is oversaturated with off-sale alcohol licenses, resulting in a moratorium on new licenses unless an applicant receives a letter of Public Convenience or Necessity from the local jurisdiction.

Before writing a letter of Public Convenience or Necessity to allow the new alcohol license, local officials are presumed to weigh benefits versus risks of a new outlet. The letter of Public Convenience or Necessity is a statement indicating that the public will benefit in some manner or receive a hitherto unavailable product or service after the license is granted. However, busy government officials do not always take the time to weigh risks and benefits before agreeing to write a letter of Public Convenience or Necessity for the applicant to receive an alcohol license.

In Mendocino County, there are few known cases in which a law enforcement agency refused to provide the applicant with a letter of Public Convenience or Necessity. Local governing bodies wanting local control over alcohol licensing can provide their own regulations and ordinances in addition to ABC's guidelines. Such ordinances can set standards for when a license will not be granted, establish criteria for writing letters of Public Convenience or Necessity, set conditions for granting Conditional Use Permits, or provide performance standards to address nuisances associated with existing outlets.

## **Local Land Use Tools to Limit Alcohol Outlets**

Local governments have fairly broad authority under their police powers to regulate alcohol sales establishments, provided a) the regulations don't violate Constitutional rights; b) that a nexus is demonstrated between the proscribed beverages (such as high-strength malt liquors) and elevated public health and safety problems in the surrounding area; and c) the zoning ordinance permits retail alcohol outlets in some areas of the jurisdiction (that is, a city cannot vote itself dry).

# Guidelines for Writing Letters of Public Convenience or Necessity to Grant a New Alcohol License<sup>ii</sup>

Mandatory guidelines are criteria adopted by ordinance under which no finding of Public Convenience or Necessity will be made. The local government can decide that no new licenses will be allowed in certain areas. Examples of mandatory guidelines include:

- Restricting liquor store proximity (e.g. not less that 1,000 feet between outlets)
- Prohibiting outlets within a certain distance to sensitive community areas such as churches, schools, hospitals, youth centers, etc.
- Enforcing a maximum allowable density of alcohol outlets per capita
- Moratorium in blocks/districts that have high rates of crime compared to other areas in the county/city

If the local government is not willing to enact mandatory guidelines, then discretionary guidelines can be adopted, which guide the decision of whether or not to grant a letter of Public Convenience or Necessity to allow a new alcohol license.

Discretionary guidelines involve a risk-benefit analysis by the local decision making body and the burden of proof falls to the applicant to provide a reasonable case for allowing another alcohol outlet by demonstrating how their products are different than other nearby alcohol retailers, providing supporting crime data in surrounding areas, or other evidence of benefit. Considerations a local government can adopt to consider when deciding on a new alcohol outlet may include:

- Percentage of youth in the surrounding area
- Alcohol retail hours
- Proportion of profits from alcohol sales (i.e. a corner store that sells primarily alcohol shall be scrutinized differently from a large grocery store)
- Ratio of alcohol related crime to other crimes in the neighborhood (number of arrests for being drunk in public, underage drinking, DUIs compared to the number of other crimes in the area)

- Duplication of services
- Staff under 21 years of age working in liquor stores
- Homelessness and alcoholism increase

Conditional Use Permits (CUPs) are land use zoning classifications adopted by local governments that allow restrictions or conditions to be placed upon approval of a new alcohol license. The operating conditions can limit outlet location, sale hours, types of alcohol sold, etc. for the purposes of minimizing the harmful effects of alcohol outlets on the community.<sup>iii</sup>

Examples of conditions that can be placed on alcohol outlets include:

- The sales of beer or malt beverages in quantities of quarts, 22 oz., 32 oz., 40 oz., or similar size containers is prohibited. No beer or malt beverages shall be sold, regardless of container size, in quantities of less than six.
- No 'happy hour' type of reduced price alcoholic beverage promotion shall be allowed
- The possession of alcoholic beverages in open containers and the consumption of alcoholic beverages is prohibited on or around these premises
- The gross sales of alcoholic beverages shall not exceed the gross sales of any other item during the same period

There are virtually unlimited conditions that can be applied by the local jurisdiction regarding location or density of outlets, types of outlets, security, lighting, music or noise restrictions, signage, hours, storage, parking, litter, etc. Conditions can also require that servers complete responsible beverage training so that they don't serve to minors or intoxicated customers. Conditional use permits can be revoked with due process if the establishment does not comply with the conditions imposed.

## **Public Nuisance Ordinances (Deemed Approved Ordinances)**

The following is from the Community Anti-Drug Coalitions of America (CADCA) and the Center on Alcohol Marketing and Youth (CAMY) at Johns Hopkins Bloomberg School of Public Health:

Communities often have concerns about the nuisance problems created by existing on- and off-premise alcohol outlets. Public Nuisance Ordinances (referred to here as Deemed Approved Ordinances or DAOs) are another tool used by many local governments to limit the risks associated with alcohol outlet density by imposing conditions of operation on existing alcohol retail outlets (those not subject to CUP requirements). DAOs change the legal status of existing alcohol outlets, granting them "Deemed Approved" status, permitting them to operate as usual, under specific "performance standards." The standards focus on preventing and abating public nuisances (e.g., loitering, increased police calls, noise, graffiti, drug sales, etc.), adhering to state or local laws, and avoiding any adverse effects to the health and safety of those residing and working in the surrounding area. Violations of the ordinance are handled at the city or county level. Law enforcement and administrative costs associated with the DAO are sometimes funded by an annual fee collected from alcohol outlet businesses.

The use of CUPs and DAOs to regulate alcohol outlet density and other operational characteristics is growing nationally. Examples of model CUP and DAO policies are provided at www.camy.org/action/outlet\_density.

#### **Potential to Reduce Harms in Mendocino County**

Currently, there are 168 off-sale outlets or one off-sale alcohol outlet for every 532 residents. To conform to the ABC standards, Mendocino would have only 35 outlets, rather than 168; 133 of the current 168 off-sale outlets in Mendocino County would have to close.

In 2010 there were 793 DUI arrests in Mendocino County. From the trends derived from data from the 20 similarly-sized California counties, presented on page 7, it can be seen that every off-sale outlet per 10,000 residents was associated

with almost 7 DUI arrests per 10,000 residents. These data suggest that decreasing the number of off-sale outlets will correspond with significant decreases in DUIs. In 2010 there were 46 arrests for underage drinking in Mendocino County. The analysis of these data found that every off-sale outlet per 10,000 residents was associated with almost 3 arrests for underage drinking per 10,000 underage residents (see p.6). These data suggest that decreasing the number of off-sale outlets will correspond with significant decreases in arrests for underage drinking.

### **Conclusions and Next Steps**

This health impact assessment confirmed that there are harms associated with high alcohol outlet density in Mendocino County and revealed the potential to reduce harm, crime and injury by utilizing the land use and regulatory tools at hand to limit alcohol outlet density and associated nuisances.

A presentation of preliminary results of this study along with advocacy by community members resulted in the City of Ukiah's Planning Commission deciding to prohibit new off-sale alcohol outlets in the downtown area. In September 2012 the Ukiah City Council upheld the prohibition of new off-sale alcohol outlets in its adoption of the Downtown Zoning Code as an amendment to the city code.

A presentation of these findings was made to the chiefs of police of all incorporated cities and the county sheriff, with a request that they consider denying requests for letters of Public Convenience or Necessity for new alcohol outlets, or at least establish criteria for consideration of letters of Public Convenience or Necessity. Updated presentations of these findings are planned for all incorporated cities' planning commissions or city councils in 2012-2013.

This Health Impact Assessment report was originally funded in 2010 through The Local Public Health and The Built Environment (LPHBE) Network, a joint project of The California Active Communities Unit and the Safe and Active Communities Branch within the California Department of Public Health. This project and report were supported by the Preventive Health and Health Services Block Grant. Its contents are solely the responsibility of the grantee and do not necessarily represent the official views of Center for Disease Control and Prevention.

The authors wish to thank Jessica Van Arsdale, M.D., MPH at the California Center for Rural Policy of Humboldt State University for peer review and technical assistance.

For more information, contact:

Meredyth Reinhard HHSA, Public Health, Prevention and Planning Unit reinharm@co.mendocino.ca.us

#### **References:**

<sup>i</sup>Alaniz ML. Alcohol availability and targeted advertising in racial/ethnic minority communities. *Alcohol Health and Research World*. 1998; 22(4):286-289.

<sup>ii</sup>Colman V, Sparks M. Public Convenience or Necessity: A Guide for Local Government and Interested Citizens. Community Prevention Initiative. 2006. Available at www. ca-cpi.org/publications/CARS\_PCorN.pdf

<sup>iii</sup>Community Anti-Drug Coalitions of America (CAD-CA), Center on Alcohol Marketing and Youth (CAMY) at the Johns Hopkins Bloomberg School of Public Health. Strategizer 55. Regulating alcohol outlet density: An action guide. 2011

ivGruenewald PJ, Remer L. Changes in outlet densities affect violence rates. *Alcohol Clin Exp Res.* 2006; 30(7):1184 –93.

<sup>v</sup>Institute for Public Strategies. Public Convenience or Necessity: The power of local municipalities to control alcohol outlet density. June 2004.

viLivingston M. A longitudinal analysis of alcohol outlet density and assault. *Alcoholism, clinical and experimental research.* 2008; 32(6):1074-1079.

viiScribner RA, MacKinnon DP, Dwyer JH. Alcohol outlet density and motor vehicle crashes in Los Angeles County cities. *J Stud Alcohol*. 1994; 55(4):447-53.

viii Scribner RA, MacKinnon DP, Dwyer JH. The risk of assaultive violence and alcohol availability in Los Angeles County. *American Journal of Public Health*. 1995; 85(3):335-340.

ixTheall KP, Scribner R, Cohen D. et al. Social Capital and Neighborhood Alcohol Environment. *Health & Place*. 2009; 15(1):323-332.

<sup>x</sup>Theall KP, Scribner R, Cohen D, et al. The neighborhood alcohol environment and alcohol-related morbidity. *Alcohol and Alcoholism*. 2009; 44(5):491-499.

xiTruong KD, Sturm R. Alcohol environments and disparities in exposure associated with adolescent drinking in California. *American Journal of Public Health*. 2009; 99(2):264-270









Alcohol Outlets and Our Community: A Health Impact Assessment of the Harms of High Alcohol Outlet Density in Mendocino County, California

January 2013