

## ALCOHOL PURCHASE STUDY*

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[^0]UNDERAGE ALCOHOL PURCHASE STUDY ${ }^{1}$

## Executive Summary

This is the second of three scheduled alcohol purchase studies to determine how easy it is to purchase alcohol without providing legitimate identification. The first was conducted in April, 2006. The impetus for these projects was the finding from the Substance Abuse Prevention Services' Youth Drug Survey (YDS) in 2004 that 35\% of all students in grades 6 through 12 and $53 \%$ of high school students admitted using alcohol. $24 \%$ of high school students admitted drinking within 30 days of the survey. $55 \%$ of the $24 \%$ said they engaged in "binge-drinking" 5 or more drinks in one sitting.

The April 2006 survey focused on seven zip codes where students who drank in the last 30 days lived and said that alcohol was "easy" to get. This survey focused on the six zip codes where students lived who said it was "fairly hard" or "can't get." We wanted to see what the differences would be in how frequently establishments actually sold to persons without checking for age identification in those areas.

A $25 \%$ random sample of the establishments with ABC permits for off-premise sales from the six zip codes was selected. Those zip codes were: 28105, 28210, 28214, 28215, 28262, and 28277. Each establishment, with the exception of one, was approached twice on two different days and different times by different "buyers" in an attempt to purchase a six-pack of domestic beer. 101 attempts were made at 51 establishments.

- 42 buys ( $42 \%$ ) were made in 101 attempts; in April 40 buys ( $39.1 \%$ were made in 102 attempts.
- $58 \%$ (29 of 50 ) of the stores approached twice sold at least once; ( $63 \%$ sold in April)
o $26 \%$ (13) sold both times
o $32 \%$ (16) sold one of the two times
- $42 \%$ (22 of 50 ) did not sell either time. No sale was made at the one establishment approached only once.

The study was done on Thursdays and Fridays between October 19 and November 2. In all, thirteen zip codes were surveyed in the two studies. There is no statistically significant difference by zip code. Thus, while it may be relatively easier to get alcohol in

[^1]some areas than others, city-wide sales are made without ID 40 percent of the time. Going back to the same store increases the chances to $60 \%$

- The zip code with the highest proportion of sales is 28262 ( $66.7 \%$ ) and the lowest proportion of sales is in 28277 (8.3\%).
- In this study convenience stores not selling gas were proportionately more likely (83\%) to sell without an ID; this was also true in April. After both studies this type of establishment sold $63.2 \%$ of the time.


## Conclusion

The original sampling of establishments in April was based on student perception of ease to buy alcohol. This was supported in the zip codes where the students lived. This survey looked at zip codes where students lived who said it was more difficult to buy. However, what was found was that while there was a slight difference in the proportion of buys made, purchases can be made around $40 \%$ of the time; if establishments are approached twice a purchase is made $60 \%$ of the time.

These data were collected in different parts of the city six months apart. The findings are so similar that we can conclude that the checking of identification for the sale of alcohol is lax at least. The law is not being followed by a sufficient number of establishments. The community needs to develop a strategy to increase the monitoring of sales without ID checks, increase enforcement, and hold establishments accountable.

Our conclusion from April still holds: Short-term we need to reinforce the need for businesses to adequately train and monitor their clerks. Long-term we need to better highlight the reasons and rationale for the law and also increase the public's awareness of the problems and dangers of underage drinking so that the social norms can change just as they have about the use of seat belts and smoking.

## Introduction

Underage drinking is considered to be a major problem in this community. There have been a number of auto accident deaths caused by underage drinkers and some deaths of youths from excessive blood alcohol levels. The Charlotte-Mecklenburg Drug Free Coalition (CMDFC) has, as one of its primary goals, a focus on reducing underage drinking.

The Coalition received a grant from the North Carolina Office of Juvenile Justice and Delinquency Prevention as part of the coalition's underage drinking initiative. Part of the grant is designed to conduct underage "buys" to monitor the extent to which local establishments adhere to the law requiring age verification through ID before selling.

This project is the second of three studies to ascertain the extent to which underage youth can successfully purchase alcohol themselves without showing identification in establishments that sell, but do not serve, alcohol on the premises.

## Methodology

The 2004 Youth Drug Survey of students in grades 6 through 12 in the Charlotte Mecklenburg Schools asked students if they had consumed alcohol in the last 30 days. It also asked them if they purchased it themselves or had others do it for them and how easy it was to get alcohol. In the first study, using these three questions as a screen, the zip code residences of the students answering that they had consumed, had purchased and that it was easy were rankordered. The seven zip codes with the highest proportion of students answering these questions affirmatively were then selected. This survey looked at the zip codes where students answered that getting alcohol was "fairly hard" or they couldn't get it. Six zip codes could be identified where the highest proportion of students answered in this fashion.

The website for the NC ABC Board was consulted to identify all of the establishments with offpremise licenses in each of the zip codes. For the six zip codes there were 129 permits issued. We took a $40 \%$ proportionate representative sample of the zip codes which gave a listing of 51 establishments. This compares with 52 establishments selected in April.

For the first study a research instrument protocol was developed and "buyers" were selected. The buyers were selected from volunteer students at UNCCharlotte. A panel of five age verifiers was used to make the selection. Each verifier had experience with this age group and also personally felt comfortable guessing ages. Each volunteer student was given a number and went into a room with the panel. The panel looked at them and also asked questions to ascertain demeanor. The result was the selection of a pool of potential buyers who had at least four of the five panelists indicating that they looked under 21. All buyers were actually over 21 . The same pool of buyers was used for the second set of purchases.

All buy attempts were made between 7 and 10 pm on either a Thursday or Friday evening over a three week period from October 18 to November 2. Attempts were made to approach each establishment twice on different nights and with different buyers. The buyers received training and role-play in how to make the attempt in a natural manner and were informed, if asked, to say they did not have their ID. All were asked to buy a 6 -pack of a domestic beer. Efforts were made to match buyers with the dominant racial and ethnic characteristics of the neighborhoods. The sale was either consummated by the clerk or not. If a sale was made, the alcohol was marked with the name of the establishment and the date and time of the purchase.

## Findings

## Purchases

Buys were made 42 times ( $41.5 \%$ in 101 attempts at 51 establishments

## Percent Total Buys - April/October*


*Based on 102 attempts in April and 101 attempts in October
The percentage of sales is not significantly different from April to October. In both waives of purchase attempts sales were made without ID in about $40 \%$ of the time.

There was no significant difference in sales by day of the week but slightly more buys were made on Thursday than on Friday evenings. A purchase was made $48 \%$ of the time on Thursday and $35 \%$ of the time on Friday.

Two attempts were made at 50 of the 51 stores. This means that:

- $58.0 \%$ (29 of 50 ) sold at least once
o $26 \%$ (13) sold both times
o $32 \%$ (16) sold one of the two times
- $42 \%(21$ of 50$)$ did not sell either time; the store with one attempt did not sell.
- In comparison:
o $63.3 \%$ (31 of 49) of the stores approached twice in April sold at least once
- $16.3 \%(8)$ sold both times
- $46.9 \%(23)$ sold one of the two times

The difference in the proportion selling at least once in April and October is not statistically significant but there is an increase in the number of establishments that sold twice.

Therefore, a single attempt to purchase alcohol without an ID has a $40 \%$ chance of success; if the same store is approached twice, the chances increase to about 60\%

## Number of Sales- April/October*


*Based on 49 stores in April and 50 stores in October where purchase attempts were made twice

There were three possible sale outcomes: ID requested - no sale; ID requested, none shown but sale made, and no ID requested at all.

| Attempt Outcome | April | October |
| :--- | :---: | :---: |
| A sale was made without ID | $29(28.4 \%)$ | $36(35.6 \%)$ |
| ID was asked for, none provided, sale anyway | $11(10.8 \%)$ | $6(5.9 \%)$ |
| ID asked for, no sale | $62(60.8 \%)$ | $59(58.4 \%)$ |
| Number of Attempts | 102 | 101 |

There is no statistically significant difference in successful purchases by zip code but zip code 28262 sold $2 / 3$ of the time and sales were made $50 \%$ of the time in zip code 28210. Only one sale out of 12 attempts ( $8.3 \%$ ) in zip code 28277 was successful.

Table 1 Attempted and Completed Purchases by Zip Code - October

|  |  |  |  |  | zip | code |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 28105 | 28210 | 28214 | 28215 | 28262 | 28277 | Total |
| Purchase <br> Made | No | Number | 12 | 14 | 7 | 11 | 4 | 11 | 59 |
|  |  | Percent | 60.0\% | 63.6\% | 46.7\% | 55.0\% | 33.3\% | 91.7\% | 58.4\% |
|  | Yes | Number | 8 | 8 | 8 | 9 | 8 | 1 | 42 |
|  |  | Percent | 40.0\% | 36.4\% | 53.3\% | 45.0\% | 66.7\% | 8.3\% | 41.6\% |
| Total |  | Number | 20 | 22 | 15 | 20 | 12 | 12 | 101 |
|  |  | Percent | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

In all, thirteen zip codes were surveyed. The rank order of successful purchases without ID is shown in Table 2. There is no statistically significant difference by zip code. Thus, while it may be relatively easier to get alcohol in some areas than others, city-wide sales are made without ID 40 percent of the time.

Table 2 Sales without ID by Zip Code (April and October)

| Zip Code | No Sale | Sale | Total |
| :---: | :---: | :---: | :---: |
| 28262 | $4(33.3 \%)$ | $8(66.7 \%)$ | 12 |
| 28216 | $9(45.0 \%)$ | $11(55.0 \%)$ | 20 |
| 28214 | $7(46.7 \%)$ | $8(53.3 \%$ | 15 |
| 28215 | $11(55.0 \%)$ | $9(45.0 \%)$ | 20 |
| 28269 | $7(58.3 \%)$ | $5(41.7 \%)$ | 12 |
| 28205 | $16(59.3 \%)$ | $11(40.7 \%)$ | 27 |
| 28105 | $12(60.0 \%)$ | $8(40.0 \%)$ | 20 |
| 28208 | $14(63.6 \%)$ | $8(36.4 \%)$ | 22 |
| 28210 | $14(63.6 \%)$ | $8(36.4 \%)$ | 22 |
| 28270 | $2(66.7 \%)$ | $1(33.3 \%)$ | 3 |
| 28227 | $9(75.0 \%)$ | $3(25.0 \%)$ | 12 |
| 28226 | $5(83.3 \%)$ | $1(16.7 \%)$ | 6 |
| 27277 | $11(91.7 \%)$ | $1(8.3 \%)$ | 12 |
| Total | $121(59.6 \%)$ | $82(40.4 \%)$ | 203 |

In the April study, while there was no significant statistical difference in the probability of sales by the type of establishment, small grocery stores ( $100 \%$ ) and convenience stores not selling gas ( $71 \%$ ) were proportionately more likely to sell. In the October study in the zip codes included, the highest proportion of buys was significantly made in convenience stores not selling gas (83\%).

Combining the two studies, successful purchases without ID by establishment type is as follows:

$$
\begin{array}{ll}
\text { Convenience Store (no gas) } & 63.2 \%(n=19) \\
\text { Small grocery/ deli } & 57.1 \%(n=7) \\
\text { Convenience Store (with gas) } & 41.1 \% \quad(n=129) \\
\text { Supermarket } & 29.4 \% \quad(n=34) \\
\text { Drug Store } & 21.4 \%(n=14)
\end{array}
$$

## Buyer Characteristics

The buyer's gender was not a factor in whether a sale was made or not.
The buyer's race was not a factor in whether a sale was made or not.

## Clerk Characteristics

There were no statistically significant differences by gender or race of the clerks and whether they sold or did not sell. In the October study the lowest proportion of sales by race/ gender was by Female Latinos (18.2\%) while the largest proportion of sales by race/ gender was "other" females ( $66.7 \%$ ) and "other" males ( $63.2 \%$ ). The differences are not statistically significant. Combining the two samples, the proportion of sales by race/ gender is shown in Table 3.

Table 3 Sale by Clerk Characteristics

| Clerk Characteristic | Sold | Did Not Sell |
| :--- | :---: | :---: |
| African American Male | 17 | 16 |
|  | $51.5 \%$ | $48.5 \%$ |
| African American female | 14 | 21 |
|  | $40.0 \%$ | $60.0 \%$ |
| Latino male | 5 | 7 |
|  | $41.7 \%$ | $58.3 \%$ |
| Latino female | 4 | 13 |
|  | $23.5 \%$ | $75.5 \%$ |
| While male | 2 | 9 |
|  | $18.2 \%$ | $81.8 \%$ |
| White female | 10 | 15 |
|  | $40.0 \%$ | $60.0 \%$ |
| Other male* | 17 | 20 |
|  | $45.9 \%$ | $54.1 \%$ |
| Other female* | 5 | 5 |
|  | $50.0 \%$ | $50.0 \%$ |

*Other included Asian, Indian and Middle-Eastern
Looking at the combined samples, there is no relationship between the race/ gender of the seller and the race/ gender of the buyer.

## Time of the sale

While there was a statistically significant relationship between the time of the attempted buy and the sale in April - the earlier the attempt, the higher the likelihood that the sale would be made ( $r=-.269, p<006$ ) the correlation is not significant in October ( $r=061$ ). Combining the samples, the time/ buy relationship still suggests that success is more likely the earlier the attempt ( $r=.126, p<08$ ), but it is not statistically significant.

## Location of buys

The map that follows shows the location of the stores where attempts to buy were made. A second map of all attempts is also provided Red dots show stores that sold twice, yellow dots for stores that sold once and green dots show stores that did not sell.

## Conclusion

The original sampling of establishments in April was based on student perception of ease to buy alcohol. This was supported in the zip codes where the students lived. This survey looked at zip codes where students lived who said it was more difficult to buy. However, what was found was that while there was a slight difference around $40 \%$ of the time a purchase can be made and if establishments are approached twice a purchase is made $60 \%$ of the time.

These data were collected in different parts of the city six months apart. The findings are so similar that we can conclude that the checking of identification for the sale of alcohol is lax at least. The law is not being followed by a sufficient number of establishments. The community needs to develop a strategy to increase the monitoring of sales without ID checks, increase enforcement, and hold establishments accountable.

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MAP OF PURCHASES APRIL

## Charlotte-Mecklenburg Drug-Free Coalition Alcohol Purchase Study in Selected Zip Codes

Prepared by Research and Training Specialists, inc., June 2006


## Charlotte-Mecklenburg Drug-Free Coalition

Alcohol Purchase Study (October 2006) in Selected Zip Codes



## MAP OF PURCHASES - BOTH STUDIES

Charlotte-Mecklenburg Drug-Free Coalition Alcohol Purchase Study in Selected Zip Codes




[^0]:    *This project was funded by the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services/ N.C.
    Department of Health and Human Services through an award from the Office of J uvenile J ustice and Delinquency Prevention. It is administered by Innovation Research and Training, Inc. based in Durham, NC. Award \# 2003-AH-FX-0056.

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