I. DIRECTORS CORRESPONDENCE
   PLANNING
   1. Administrative Approvals from July 9, 2019 through July 15, 2019

II. CONSTITUENT CORRESPONDENCE
   1. Proposed Go Brands Liquor License - Katy Kitrell
   2. Proposed Go Brands Liquor License Application Amendment - Trish Bell
Date: July 16, 2019

To: City Clerk

From: Teresa McKinstry, Planning Dept.

Re: Administrative Approvals

cc: Geri Rorabaugh, Planning Dept.

This is a list of City administrative approvals by the Planning Director from July 9, 2019 through July 15, 2019:

Administrative Amendment 19040 to Use Permit 133, West Van Dorn Plaza, approved by the Planning Director on July 9, 2019, to revise the building and lot layout, revise the sanitary sewer location and remove the vehicular access point off of W. Van Dorn St., generally located at West Van Dorn St. and South Coddington Street.
Council Members – I received this today.

Teresa J. Meier  
City Clerk  
555 S. 10th St.  
Lincoln NE 68508  
Ph: (402) 441-7438  

If you are always trying to be NORMAL, you will never know how AMAZING you can be. - Maya Angelou

From: Katy Kitrell <katy@projectextramile.org>  
Sent: Thursday, July 18, 2019 2:59 PM  
To: Teresa Meier <tmeier@lincoln.ne.gov>  
Cc: Chris Wagner <chris@projectextramile.org>  
Subject: Opposition of Agenda Item 2.b.

Dear Teresa Meier,

Attached please find a letter and supporting research from Project Extra Mile’s opposition to Go Brand’s liquor license. If the council has any questions or concerns regarding the supplied items please do not hesitate to reach out.

Kind regards,

Katy Kitrell  
Youth Coordinator  
Project Extra Mile  
Phone: (402) 963-9047  
Direct Line: (402) 898-7353  

Advocating for evidence-based policies and practices to prevent and reduce alcohol-related harms.
Council Chair Raybould and Members of the Council:

I am writing to express our opposition to GoBrands, Inc.’s application for a Class D liquor license at 301 Oakcreek Drive. Although there has already been approved of a Class D license to GoBrands, Inc. in the state of Nebraska, we feel it is important for you to have this scientific research to make an informed decision. The research provided highlights that alcohol is being delivered nationwide to underage youth, intoxicated individuals, and individuals with alcohol-related problems.

It is not surprising to see businesses striving to increase their efficiency and appeal for consumer convenience by looking to deliver alcohol. In the age of Amazon and increasing delivery services being offered by retailers in several areas, the push to expand delivery services to include alcohol is not unexpected. However, it is important to remember that alcohol is no ordinary commodity – it has great potential for harm when consumed in excess.

There is a wealth of scientific literature showing the disadvantages of convenience in regards to alcohol sales. When alcohol becomes more available to a population, it can also lead to increased alcohol consumption, increased excessive drinking, and the associated harms. The three studies that I have provided appear in medical journals and speak to the negative impacts that alcohol delivery has had on both underage and high-risk drinking.

I would like to briefly summarize the findings:

- The efficient purchase of alcohol is positively associated with the amount of alcohol consumed (Fletcher et. al., 1996).
- The exceptional convenience provided by delivery services could facilitate impulsive drinking by providing fast alcohol access requiring little foresight or planning (Fletcher et. al., 1996).
- Individuals reporting alcohol problems were significantly more likely to have used alcohol delivery services than non-problem drinkers (Fletcher et. al., 1996).
- Of the 20 regular drinkers using alcohol delivery services, only 1 (5%) had items other than alcohol and pizza delivered and 39% of those receiving delivery from a liquor store indicated that they had been drunk when the alcohol was delivered (Fletcher et. al., 1996).
• 45 out of 100 alcohol orders placed by 18-20 year olds were successfully delivered. Less than half of the packages were labeled as requiring age verification and – even then – that verification failed about 50% of the time (Williams & Ribisl, 2012).
• 12th graders reported using delivery services to obtain alcohol at a rate greater than that of 18- to 20-year-olds. Furthermore, more recent drinking and high-risk drinking were associated with purchasing delivered alcohol among both age groups (Fletcher et. al., 2000).

These findings suggest that the private nature of alcohol being purchased and then delivered may drive underage and intoxicated customers to this type of service, which reflect the concerns that we have for the Lincoln community. In particular, we are concerned about the business model of GoPuff, which appears to be almost exclusively targeting college students. As you know, a majority of the undergraduate population is underage but in close contact with peers that are 21 years or older.

Not allowing alcohol delivery would be the best option for protecting public health and safety. However, if these sales are to be allowed, researchers suggested heightened restrictions on these services (i.e. quantity limits, presence of minors, etc.) could help prevent illegal sales and consumption of alcohol and the associated harms.

Thank you for your thoughtful consideration of our comments.
The Use of Alcohol Home Delivery Services by Male Problem Drinkers: A Preliminary Report

Linda A. Fletcher  
Sean M. Nugent  
Sharon M. Ahern  
Mark L. Willenbring  
Minneapolis VA Medical Center

Alcohol home delivery services (AHDS) provide convenient and confidential access to alcohol, yet little is known about their use. The purpose of this report is to present preliminary data describing the use of AHDS by problem drinkers. We surveyed 174 males regarding social and demographic characteristics, alcohol use history, and use of AHDS. Use of AHDS was most common among problem drinkers. When statistically controlling for the effects of demographic and social characteristics, regular drinkers without a history of alcohol problems were significantly less likely to have had alcohol delivered than problem drinkers, $p = .0036$. Contrary to expectation, medically ill alcoholics with advanced and disabling medical complications of heavy drinking were not more likely than other problem drinkers to have alcohol delivered. Living in an urban area and not having a vehicle available were associated with the use of AHDS. The public health and safety considerations of alcohol availability via home delivery are discussed.

In Minnesota and in a number of other states, licensed off-sale, retail liquor dealers may make deliveries of alcohol from their store to a purchaser's residence or other location. This is a legal practice, and persons of legal drinking age may simply telephone a liquor store and have alcohol delivered. In spite of its potential importance as a source of alcohol, there appear to be no previously published reports on the use of alcohol home delivery.

The availability of alcohol has been linked with the rate of consumption and alcohol-related problems in the general population. A growing body of research demonstrates that laws controlling access to alcohol influence consumption at the aggregate level (for a review, see Ashley & Rankin, 1988; Moskowitz, 1989; Toomey, Jones-Webb, & Wagenaar, 1993). These "alcohol beverage control laws" have been shown to alter dimensions of the environment that promote hazardous patterns of

This work was supported by funds from the Department of Veterans Affairs Research Service. The authors thank the staff members of the Therapeutics and Alcohol Related Disorders Clinics, Jordan Holtzman, James Mitchell, and Nancy Raymond for their valuable assistance.

Correspondence and requests for reprints should be sent to Mark Willenbring, Psychiatry Service, Veterans Affairs Medical Center, One Veterans Drive, Minneapolis, MN 55417, Mail Stop 116A4.

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alcohol use and heavy drinking (Toomey et al., 1993). Greater restrictions on certain types of alcohol availability are typically inversely related to population level alcohol consumption and vice versa. For example, both raising the legal drinking age from 18 to 21 (Wagenaar, 1993) and increasing excise taxes and prices (Toomey et al., 1993) have resulted in reduced alcohol consumption. Conversely, laws that liberalize the availability of alcohol may increase population drinking. A change from a state-controlled monopoly to a private alcohol distribution system in Iowa and West Virginia in the 1980s was associated with increased alcohol sales in these states (Wagenaar & Holder, 1991). Of further note, the impact of alcohol availability may not be limited to social drinkers, as alcohol control measures have been shown to reduce consumption and alcohol-related health problems in even the heaviest drinkers (Room, 1984). Although it has never been specifically studied, the literature on alcohol availability raises questions about whether alcohol home delivery services may alter drinking patterns and have significant public health implications.

While alcohol availability through home delivery could potentially influence public alcohol consumption, it may particularly affect problem drinkers. There is literature suggesting that heavy or problem drinkers are more likely to take advantage of particular situations in which to procure or consume alcohol. For example, when a temporary increase in alcohol service hours was enacted in part of Western Australia for the 1986 America’s cup yacht races, there did not appear to be an increase in drinking on the aggregate level. There was, however, a positive association between the use of the extended hours and heavier drinking on the individual level. The authors of this study suggested the possibility that the extended hours facilitated heavy drinking among “at-risk” drinkers (McLaughlin & Harrison-Stewart, 1992). Another study from Western Australia found that persons patronizing hotel bars with early morning opening times were more likely to be drinking at hazardous levels relative to patrons of hotel bars with standard opening times (Smith, 1986).

The convenience with which alcohol can be obtained through home delivery also may have particular ramifications for problem drinkers. A study by Neuman and Rabow (1985-1986) suggested that on the individual level the efficient purchase of alcohol is positively associated with the amount of alcohol consumed. The exceptional convenience provided by delivery services could facilitate impulsive drinking by providing fast alcohol access requiring little foresight or planning. This may be significant for individuals who are trying to control their consumption or who are medically debilitated from alcohol and must avoid it at the risk of their health. Delivery also may provide greater opportunity to drink for medically compromised individuals who are not mobile. This has been an issue in clinical practice at the Minneapolis VA Medical Center where severely ill alcoholic patients too disabled to obtain alcohol on their own have been known to obtain alcohol through delivery. In such cases, delivery has presented a serious barrier to treatment and a significant medical risk for the patient.

The purpose of this report is to present preliminary data describing the use of alcohol home delivery services by problem drinkers and to raise questions about the significance of alcohol delivery as a public health issue. Data presented here are from a survey of three groups of male participants. Study participants were regular
drinkers without alcohol problems, problem drinkers, and alcohol-dependent persons with severe medical complications secondary to heavy drinking. We hypothesized that persons with a history of problem drinking would be more likely to have used alcohol delivery services than those without a history of problem drinking. Further we predicted that, within persons who have a history of problem drinking, those with advanced and disabling medical complications of alcoholism would be more likely to have used alcohol delivery services.

METHOD

Participants

One hundred seventy-four men from the Minneapolis VA Medical Center and the University of Minnesota took part in this study. The sample from the VA Medical Center was comprised of patients who were enrolled in one of three clinical programs: (a) the Therapeutics Clinic, which is an outpatient medical clinic devoted to the treatment of hypertension, (b) the Addictions Treatment Program (ATP), an inpatient treatment program for alcohol dependence, and (c) the Alcohol Related Diseases (ARD) Clinic, which is devoted to the treatment of alcohol-dependent patients with major medical complications of heavy drinking (e.g., severe alcoholic hepatitis, pancreatitis, alcoholic cirrhosis of the liver, cerebellar degeneration, peripheral neuropathy, gastrointestinal bleeding). The participants from the University of Minnesota participated as paid normal controls for several psychiatric research studies. They were prescreened and were included as participants if they reported no history of significant psychiatric difficulties including alcohol or drug dependence.

Measures

The authors developed the Home Delivery Survey specifically for this study. It was completed by patients in a self-report format and took on the average 10 min. The survey included multiple-choice questions on the following topics: (a) demographics, (b) self-perceptions of health status, (c) history of having groceries, dry cleaning, pharmacy items, or other nonalcohol items delivered to the home, (d) straightforward multiple-choice questions about the use of alcohol delivery services as in the following:

Did you ever try to have alcohol (beer, wine, or spirits) delivered to you?
Who has delivered alcohol to you?
Has anyone refused to deliver alcohol to you?
Who refused to deliver alcohol to you and why did they refuse?
Have you ever been drunk when you have had alcohol delivered to you?
Have you ever had a friend or relative bring you alcohol when you asked them to?

Participants from the Therapeutics Clinic and the University of Minnesota (U of M) also answered questions about alcohol use and treatment history and were asked to
complete the four-item CAGE tool (Mayfield, McLeod, & Hall, 1974) in order to screen for possible alcohol problems. The CAGE is a widely used instrument in medical settings and has been shown to perform well at identifying medical outpatients with alcohol problems (Buchsbaum, Buchanan, Centor, Schnoll, & Lawton, 1991). In line with current recommendations (Buchsbaum et al. 1991), participants with two or more positive CAGE items were considered to have an alcohol abuse or dependence problem.

Procedure

The study protocol was approved by the Human Studies Subcommittee of the Research Committee of the Minneapolis VAMC, and all participants signed informed consent documents prior to participation. Because persons who never drank alcohol are presumably less likely to have it delivered, only data from participants who presented evidence of regular alcohol consumption, current or past, on the Home Delivery Survey were included in the analyses. Regular drinkers were defined as those participants who either reported currently drinking alcohol at least once per month, who had a history of alcoholism treatment, or who endorsed one or more CAGE items. This selection criterion reduced the sample size to 138 from the original 174 by excluding 23 of 57 participants from the Therapeutics Clinic (40.4%) and 13 of 42 (31%) participants from the U of M control sample. All ATP and ARD participants remained in the sample, as all of them had a history of regular drinking.

The remaining sample of 138 was then divided into three groups based on their alcohol use history. The “alcohol history condition” was made up of the following three groups: (a) the Nonproblem Drinker group consisting of 45 regular drinkers (current or by history) from Therapeutics or the U of M who never had treatment for alcoholism and scored less than 2 on the CAGE, (b) the Alcohol Problems group ($n = 49$), including all ATP patients and any Therapeutics or U of M patients with two or more positive CAGE items and/or who had a history of alcoholism treatment, and (c) Medically Ill Alcoholics ($n = 44$), consisting of ARD Clinic patients. In summary, there was one group of participants with a history of regular drinking but without a history of problem drinking, and two groups of problem-drinking participants who differed primarily on degree of medical disability resulting from heavy drinking.

RESULTS

Data were analyzed with the objective of determining the relationship between alcohol use history and other demographic characteristics with delivery status. Inferential and descriptive statistical procedures were performed to compare study participants as a function of alcohol history condition (Nonproblem Drinker, Alcohol Problems, Medically Ill Alcoholic) and delivery status (whether or not the participant had ever had alcohol delivered to them by a business).

Table 1 presents the results of chi-square statistics and an analysis of variance describing participant demographic characteristics by alcohol history condition.
Table 1. Demographic and Social Characteristics by Alcohol History Condition

<table>
<thead>
<tr>
<th>Social or Demographic Variable</th>
<th>Nonproblem Drinker (n = 46)</th>
<th>Alcohol Problems (n = 49)</th>
<th>Medically Ill Alcoholic (n = 44)</th>
<th>Significance Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (SD)</td>
<td>55.5 (15.0)</td>
<td>48.7 (13.6)</td>
<td>61.4 (11.3)</td>
<td>F(2, 136) = 10.30, p = .0001</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Married</td>
<td>64.4(^a)</td>
<td>32.7</td>
<td>38.6</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Never Married</td>
<td>15.6</td>
<td>30.6</td>
<td>4.5</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Previously Married</td>
<td>20.0</td>
<td>36.7</td>
<td>56.8</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Annual Household Income</td>
<td></td>
<td></td>
<td></td>
<td>(\chi^2(10, N = 136) = 43.90, p = .001)</td>
</tr>
<tr>
<td>$0-4,999</td>
<td>0.0(^a)</td>
<td>25.0</td>
<td>23.3</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>$5,000-$9,999</td>
<td>17.8</td>
<td>16.7</td>
<td>27.9</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>15.6</td>
<td>27.1</td>
<td>34.9</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>$20,000-$29,999</td>
<td>11.1</td>
<td>14.6</td>
<td>11.6</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>$30,000-$49,999</td>
<td>33.3</td>
<td>12.5</td>
<td>2.3</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>22.2</td>
<td>4.2</td>
<td>0.0</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Size of Household</td>
<td></td>
<td></td>
<td></td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Living Alone</td>
<td>22.2(^a)</td>
<td>40.8</td>
<td>38.6</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>57.8</td>
<td>34.7</td>
<td>52.3</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Three or More</td>
<td>20.0</td>
<td>24.5</td>
<td>9.1</td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>in Household</td>
<td></td>
<td></td>
<td></td>
<td>(\chi^2(4, N = 138) = 23.10, p = .001)</td>
</tr>
<tr>
<td>Current Employment</td>
<td>48.9</td>
<td>44.7</td>
<td>11.9</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Area of Residence</td>
<td></td>
<td></td>
<td></td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Twin Cities</td>
<td>26.7(^a)</td>
<td>42.9</td>
<td>40.9</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Suburban Area</td>
<td>37.8</td>
<td>32.7</td>
<td>31.8</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Outside Metro Area</td>
<td>35.6</td>
<td>24.5</td>
<td>27.3</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Vehicle Available for Use</td>
<td>97.8</td>
<td>73.5</td>
<td>72.1</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Having Other Items Delivered(^b)</td>
<td>0.0</td>
<td>0.0</td>
<td>4.5</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
<tr>
<td>Other Household Members Drink</td>
<td>52.3</td>
<td>44.9</td>
<td>21.4</td>
<td>(\chi^2(2, N = 134) = 15.40, p = .001)</td>
</tr>
</tbody>
</table>

\(^a\)Column percentages within this category.
\(^b\)Excluding pizza delivery.

The three groups were significantly different on several variables. Compared to the Alcohol Problems group and the Medically Ill Alcoholics, the Nonproblem Drinkers were more affluent and were more likely to be married and have a vehicle available for use.

Table 2 displays the results of chi-square statistics and a t test describing participant demographic characteristics by delivery status. Both the Medically Ill Alcoholics and the Alcohol Problems group were more likely to have used alcohol delivery services than the Nonproblem Drinkers group. Participants who had used alcohol delivery services were more likely to live in the Twin Cities as opposed to the suburbs or outside the metro area and were less likely to have access to a vehicle.

A multivariate analysis was performed to identify factors that were the best predictors of having had alcohol delivered. Logistic regression was used to deter-
mine the likelihood of having alcohol delivered based on demographics (age, marital status, household income, size of household, current employment, and area of residence), social factors (having a vehicle available for use, having had other items delivered to the home, and having other household members who drink), and alcohol history condition. Brown's partial association model selection procedure (Benedetti & Brown, 1978) was employed to judge the significance of the relationship between alcohol delivery and each variable by comparing the change in $G^2 (-2 \log$ likelihood) between the full model (containing all variables) to a model with all variables except the variable being tested.

As was observed in the univariate analyses, alcohol history condition, area of residence, and having a vehicle available were again significantly associated with the

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**Table 2. Demographic and Social Characteristics by Alcohol Delivery**

<table>
<thead>
<tr>
<th>Social or Demographic Variable</th>
<th>Alcohol Delivery (n = 20)</th>
<th>No Alcohol Delivery (n = 118)</th>
<th>Significance Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol History Condition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonproblem Drinker</td>
<td>5.0*</td>
<td>37.2</td>
<td>$\chi^2(2, N = 138) = 8.40, p = .017$</td>
</tr>
<tr>
<td>Alcohol Problems</td>
<td>50.0</td>
<td>33.1</td>
<td>$t(138) = 0.42, p = .67$</td>
</tr>
<tr>
<td>Medically Ill Alcoholic</td>
<td>45.0</td>
<td>29.7</td>
<td></td>
</tr>
<tr>
<td>Age (SD)</td>
<td>53.5 (14.2)</td>
<td>55.0 (14.3)</td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td>$\chi^2(2, N = 138) = 2.30, p = .32$</td>
</tr>
<tr>
<td>Married</td>
<td>30.0*</td>
<td>47.5</td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>25.0</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>Previously Married</td>
<td>45.0</td>
<td>36.4</td>
<td></td>
</tr>
<tr>
<td>Annual Household Income</td>
<td></td>
<td></td>
<td>$\chi^2(5, N = 136) = 5.70, p = .34$</td>
</tr>
<tr>
<td>$0-$4,999</td>
<td>30.0*</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>$5,000-$9,999</td>
<td>30.0</td>
<td>18.6</td>
<td></td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>20.0</td>
<td>26.3</td>
<td></td>
</tr>
<tr>
<td>$20,000-$29,999</td>
<td>10.0</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>$30,000-$49,999</td>
<td>5.0</td>
<td>17.8</td>
<td></td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>5.0</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Size of Household</td>
<td></td>
<td></td>
<td>$\chi^2(2, N = 138) = 3.80, p = .15$</td>
</tr>
<tr>
<td>Living Alone</td>
<td>55.0*</td>
<td>36.4</td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td>40.0</td>
<td>43.2</td>
<td></td>
</tr>
<tr>
<td>Three or More in Household</td>
<td>5.0</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>Current Employment</td>
<td>20.0</td>
<td>38.6</td>
<td>$\chi^2(1, N = 134) = 2.50, p = .11$</td>
</tr>
<tr>
<td>Area of Residence</td>
<td></td>
<td></td>
<td>$\chi^2(2, N = 138) = 14.60, p = .001$</td>
</tr>
<tr>
<td>Twin Cities</td>
<td>75.0*</td>
<td>30.5</td>
<td></td>
</tr>
<tr>
<td>Suburban Area</td>
<td>15.0</td>
<td>37.3</td>
<td></td>
</tr>
<tr>
<td>Outside Metro Area</td>
<td>10.0</td>
<td>32.2</td>
<td></td>
</tr>
<tr>
<td>Vehicle Available for Use</td>
<td>55.0</td>
<td>83.9</td>
<td>$\chi^2(1, N = 136) = 8.80, p = .003$</td>
</tr>
<tr>
<td>Having Other Items Delivered</td>
<td>5.0*</td>
<td>0.8</td>
<td>$\chi^2(1, N = 138) = 2.10, p = .15$</td>
</tr>
<tr>
<td>Other Household Members Drink</td>
<td>35.0*</td>
<td>39.8</td>
<td>$\chi^2(1, N = 138) = 0.68, p = .77$</td>
</tr>
</tbody>
</table>

*a Column percentages within this category.
bExcluding pizza delivery.
likelihood of having used alcohol delivery services. Table 3 shows the adjusted odds ratio (AOR) for the full model with 95% confidence intervals (CI). With all other variables held constant, alcohol history condition was significantly associated with the likelihood of having used alcohol delivery, $G^2 (2) = 11.28, p = .0036$. The Medically Ill Alcoholic (AOR = 41.14; 95% CI = 1.25, 1348.94) and the Alcohol Problems (AOR = 73.16; 95% CI = 2.96, 1808.47) groups were significantly more likely to have used alcohol delivery services than the Nonproblem Drinkers. Adjusted for other variables in the model, area of residence was also significantly associated with having alcohol delivered, $G^2 (2) = 8.66, p = .013$. More specifically, living in the suburbs surrounding Minneapolis and St. Paul (AOR = 0.19; 95% CI = 0.037, 0.969) or outside the metro area (AOR = 0.099; 95% CI = 0.013, 0.764) was associated with a lesser likelihood of utilizing alcohol delivery services as compared to living within the Twin Cities. Finally, when adjusting for other variables in

### Table 3. Logistic Regression Analysis of the Likelihood of Alcohol Delivery (Column Percentages)

<table>
<thead>
<tr>
<th>Social or Demographic Variable</th>
<th>Adjusted Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (SD)</td>
<td>0.971</td>
<td>0.911, 1.034</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>4.35</td>
<td>0.578, 32.77</td>
</tr>
<tr>
<td>Never Married</td>
<td>4.71</td>
<td>0.517, 42.91</td>
</tr>
<tr>
<td>Previously Married</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Annual Household Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-$4,999</td>
<td>0.007</td>
<td>.00006.0, 0.836</td>
</tr>
<tr>
<td>$5,000-$9,999</td>
<td>0.107</td>
<td>.001, 7.18</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>0.015</td>
<td>.0002.3, 0.966</td>
</tr>
<tr>
<td>$20,000-$29,999</td>
<td>0.018</td>
<td>.0002.4, 1.28</td>
</tr>
<tr>
<td>$30,000-$49,999</td>
<td>0.14</td>
<td>.004, 4.94</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Size of Household</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Alone</td>
<td>17.58</td>
<td>0.653, 473.47</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>13.45</td>
<td>0.915, 197.66</td>
</tr>
<tr>
<td>Three or More in Household</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>5.21</td>
<td>0.654, 41.47</td>
</tr>
<tr>
<td>Area of Residence*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twin Cities</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Suburban Area</td>
<td>0.19</td>
<td>0.037, 0.969</td>
</tr>
<tr>
<td>Outside Metro Area</td>
<td>0.099</td>
<td>0.013, 0.764</td>
</tr>
<tr>
<td>No Vehicle Available for Use*</td>
<td>8.27</td>
<td>1.28, 53.51</td>
</tr>
<tr>
<td>Having Other Items Delivered</td>
<td>8.67</td>
<td>0.252, 297.45</td>
</tr>
<tr>
<td>Other Household Members Drink</td>
<td>1.92</td>
<td>0.996, 9.27</td>
</tr>
<tr>
<td>Alcohol History Condition*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonproblem Drinker</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Alcohol Problems</td>
<td>73.16</td>
<td>2.96, 1808.47</td>
</tr>
<tr>
<td>Medically Ill Alcoholic</td>
<td>41.14</td>
<td>1.25, 1348.94</td>
</tr>
</tbody>
</table>

*Indicates a statistically significant, $p < .05$, likelihood of having had alcohol delivered when other variables in the model are adjusted for, using the $-2 \log$ likelihood statistic.
the model, not having a vehicle available for use was associated with having used alcohol delivery services, $G^2 (1) = 5.50$, $p = .019$. Participants had a greater likelihood of having alcohol delivered if they did not have a vehicle available (AOR = 8.27; 95% CI = 1.28, 53.51).

Post hoc comparisons of participants who had alcohol delivered by a business and those who had not yielded a number of similarities and differences. Ten of 20 (50%) delivery participants had a valid drivers license compared to 94 of 116 (81%) nondelivery participants, $\chi^2 (1, N = 136) = 9.13$, $p = .01$. Twelve of 20 (60%) delivery participants, and 43 of 118 (36.4%) nondelivery participants had at least one DWI arrest; $\chi^2 (1, N = 138) = 3.96$, $p = .05$. Participants with a history of delivery did not rate their health status, $\chi^2 (4, N = 137) = 2.85$, $p = .58$, nor health-related physical activity limitations, $\chi^2 (4, N = 137) = 1.40$, $p = .76$, differently from those with no history of delivery, tending to confirm the finding that medical status was not likely a factor in having alcohol delivered. Seventeen of 20 (85%) participants who had alcohol delivered by a business also had friends or relatives bring alcohol upon request, compared to 24 of 114 (21.1%) of those who never had alcohol delivered, $\chi^2 (1, N = 134) = 32.77$, $p = .001$.

Eighteen of the 20 delivery participants had alcohol delivered to them by a liquor store, 1 had alcohol delivered both from a liquor store and a taxi, and 1 had alcohol delivered by another business. Of the entire 138 participants, only 1 was ever refused alcohol delivery by a business. This participant had used delivery services but was refused once by a taxi service because the company did not accept checks. Of participants who have had alcohol delivered by a liquor store, $7/18$ (38.9%) indicated that they had been drunk when the alcohol was delivered. The 1 person who had alcohol delivered by taxi said he had been drunk when a taxi delivered. Participants selected one or more reasons for using delivery services from a multiple-choice list as follows: $13/19$ (68.4%) for convenience, $6/19$ (31.6%) had no transportation, $6/19$ (31.6%) wished to avoid driving after drinking, $5/19$ (26.3%) for a party or special event, $4/19$ (21.1%) had no license, $2/19$ (10.5%) were unable to drive, $3/19$ (15.8%) endorsed "other" with one specifying that he had the shakes and another saying he was underage.

**DISCUSSION**

This report describes a small sample of midwestern men who have used home delivery services to purchase alcohol and provides preliminary evidence that problem drinkers may be the predominant users of these services. Because the availability of alcohol through delivery may present certain public health and safety considerations, additional study is needed to more clearly ascertain patterns of use by problem and nonproblem drinkers and to confirm public policy decisions concerning statutes allowing alcohol home delivery. What follows is a general discussion of issues raised by alcohol home delivery.

In light of the previously described research linking alcohol availability and alcohol consumption, if alcohol delivery services influence the drinking patterns of a significant number of people, they may have the potential to increase public health risks in terms of alcohol-related injuries, accidents, and medical problems. It
does appear that the availability of alcohol delivery services is not unique to the venue that was studied. An informal survey conducted by the authors indicated that alcohol can be purchased through delivery in a number of U.S. cities. The authors checked 248 yellow pages telephone directories from major U.S. cities and found one or more directory advertisements for alcohol delivery by a retail alcohol establishment in 36 (72%) of the largest 50 cities by population (Metro Market Rankings, 1995). At the state level, the authors found alcohol delivery advertisements in at least one city yellow pages corresponding to 26 (52%) of the 50 states. The results of this survey are not definitive but do present evidence that the use of alcohol delivery services could be widespread across the United States.

Alcohol delivery services may particularly affect the drinking patterns of specific groups. Alcohol sales via delivery represent a unique form of alcohol availability because they may take place in private. In contrast to the more usual situation in which a liquor sale can be observed when made in a bar, liquor store, or restaurant, a sale of liquor via delivery usually occurs at an individual's residence. This makes the sale less likely to be observed and raises the question of whether liquor is more likely to be sold illegally to underaged and intoxicated persons due to a perception that the chances of getting caught are low, and because there may be tips or incentives from the customer involved. In Minnesota, it is illegal to sell or provide alcohol for use by an obviously intoxicated individual, yet in this study, 39% of participants who had ever had a liquor store deliver alcohol reported that they were intoxicated at the time of a sale. Because many of these individuals may have also been intoxicated while purchasing alcohol other than through delivery, the significance of this finding is unclear. However, the greater privacy afforded by delivery services has the potential to increase the likelihood of illegal alcohol sales to youth or intoxicated persons and is a cause for concern.

Delivery does appear to be one of a number of ways in which minors obtain alcohol, as there have been anecdotal reports describing delivery as a safe means to procure alcohol which rarely results in refusal or a check of age identification. Although there are no research data available on the topic of youth and alcohol delivery, to the extent that minors find it easier to procure alcohol through delivery as compared to a direct purchase from a store, it could be a significant problem.

There may be some benefits to home delivery as well. Some delivery customers are undoubtedly responsible users of alcohol who take advantage of the convenience and time savings provided by delivery services. Others may be house-bound and rely on delivery in order to drink. In addition to the benefits of delivery, the possibility must be considered that delivery has little influence on how much or how often people drink. Participants in this study who had alcohol delivered by a business were about four times as likely as those who did not to have friends or family members bring them alcohol upon request, suggesting that delivery service users have multiple sources for obtaining alcohol. It is possible that delivery service users would consume no less alcohol if the services were not available—they might simply employ other means to obtain it.

Specific alcohol control policies alter the pattern of alcohol consumption in terms of how a given quantity of alcohol is consumed across time and across situations (Wagenaar & Farrell, 1989). Changes in policies governing the availability
of alcohol via delivery thus could result in a shift in patterns of alcohol-related problems and should not be taken lightly. In this regard, an issue of particular relevance is that of drinking and driving. Survey data presented here reveal that 32% of delivery service users said they did so to avoid driving after drinking on one or more occasions, suggesting that delivery may reduce the likelihood of driving under the influence. Alternatively, some patients have reported receiving alcohol through delivery with the intention of drinking at home. Once under the influence of alcohol, however, they drove their car in spite of earlier intentions. Home delivery could thus lead to drunk driving as the disinhibiting effects of alcohol sometimes lead people to behaviors they had not intended when they were sober. Clearly the issues involved are complex and require further study and consideration.

This is a preliminary study with multiple limitations. The generalizability of the findings to females is unknown. The temporal relationships between the behaviors described are also unknown. It was not determined if people who have had alcohol delivered were problem drinkers at the time of the delivery. It can only be concluded that people who have ever used alcohol home delivery services are significantly more likely to have a lifetime history of alcohol problems relative to those who have not. Similarly, for demographics such as place of residence, household income, and so forth, the status of these characteristics at the time of alcohol delivery is not known. The finding that living in an urban area is related to the use of alcohol delivery services also must be viewed with caution as it is not known if delivery services for alcohol are as available in rural areas compared to urban areas. Lastly, the findings are from a small sample of mostly veterans in a limited geographic area and may not be generalizable. Thus, broad conclusions cannot be drawn from this report. However, in spite of its limitations, the data do raise questions that deserve further study.

REFERENCES


Internet Alcohol Sales to Minors

Rebecca S. Williams, MHS, PhD; Kurt M. Ribisl, PhD

Objectives: To determine whether minors can successfully purchase alcohol online and to examine age verification procedures at the points of order and delivery.

Design: A cross-sectional study evaluated underage alcohol purchase attempts from 100 popular Internet vendors.

Setting: The study was conducted at the University of North Carolina at Chapel Hill, July 14–27, 2011.

Participants: Eight 18- to 20-year-old individuals participated.

Outcome Measures: Rates of successful sales to minors and use of age verification procedures at order and delivery were determined.

Results: Of the 100 orders placed by the underage buyers, 45% were successfully received; 28% were rejected as the result of age verification. Most vendors (59%) used weak, if any, age verification at the point of order, and, of 45 successful orders, 23 (51%) used none. Age verification at delivery was inconsistently conducted and, when attempted, failed about half of the time.

Conclusions: Age verification procedures used by Internet alcohol vendors do not adequately prevent online sales to minors. Shipping companies should work with their staff to improve administration of age verification at delivery, and vendors should use rigorous age verification at order and delivery. Further research should determine the proportion of minors who buy alcohol online and test purchases from more vendors to inform enforcement of existing policies and creation of new policies to reduce youth access to alcohol online.


INTERNET ALCOHOL SALES HAVE RECEIVED relatively little legislative attention in recent years compared with Internet cigarette sales, which are now regulated by 34 state laws,1 2 federal laws,2,3 and 4 federal agreements.4-7 One reason that Internet cigarette sales garnered such public health and regulatory attention was that few Internet cigarette vendors (ICVs) properly verified buyers’ ages, resulting in as many as 92% selling to minors.5,9 The issue of age verification is potentially a concern for the Internet alcohol vendor (IAV) industry as well, but has not been the focus of what little regulatory attention has been given to this $2.4-billion-a-year industry (verbal and written communication, Wanda V. Vega-Garcia, BS, Service Sector Statistics Division, Retail Census Branch, US Census Bureau, January 27, 2012).10 Instead, the legislative focus for Internet alcohol sales has primarily been on loosening commerce restrictions to allow interstate shipment of wine from vineyards11,12 rather than on youth access prevention.

This issue came before the US Supreme Court in 2005 in Granholm v Heald.13 The court ruled that laws in New York and Michigan allowing in-state but not out-of-state wineries to ship wine to consumers were unconstitutional because they interfered with free trade and interstate commerce by giving an unfair economic advantage to in-state wineries. The states claimed that these sales undermined their ability to police underage drinking, asserting that minors have easy access to credit cards and are likely to purchase alcohol online, but the court found that

“The States, aided by several amici, claim that allowing direct shipment from out-of-state wineries undermines their ability to police underage drinking. Minors, the States argue, have easy access to credit cards and the Internet and are likely to take advantage of direct wine shipments as a means of obtaining alcohol illegally. The States provide little evidence that the purchase of wine over the Internet by minors is a problem.”13(p26)

No peer-reviewed studies have examined the sales and age verification practices of IAVs and assessed whether mi-
nors can purchase alcohol. Several anecdotal reports, however, have shown that youth can easily obtain alcohol from IAVs. In 2003 and 2004, student studies at Gonzaga University14 and the University of Tennessee15 reported underage buyers receiving online alcohol orders without being questioned about their age. In 2006, an investigative reporter detailed 2 cases in which a 15-year-old individual received alcohol without age verification, even though one of the packages was clearly labeled as wine and in need of an adult signature.16 In addition, a 2004 undercover operation in Massachusetts led to lawsuits against 4 IAVs for selling to minors.17

The goals of this study were to determine whether minors can successfully purchase alcohol from Internet vendors and to examine age verification procedures at the points of order and delivery.

METHODS

SAMPLE

One hundred popular alcohol vendor websites composed the study sample. A private sector online risk-monitoring firm (Cyveillance, Inc) helped to develop the strategy for identifying IAV websites.18 Specially developed search algorithms and intelligent web spiders reviewed more than 40 million websites, postings to approximately 100,000 message boards and newsgroups, and 1 million spam e-mail messages to identify websites that were likely to be IAVs based on key words appearing in text and features indicative of online retailers (eg, prices and secure shopping carts). Each website on the list of possible IAVs was reviewed manually by trained data collectors to determine whether it was an English-language website direct shipping alcohol to consumers. In cases in which websites on the list turned out to be online shopping portals for IAVs, all links were reviewed as potential IAVs.

A similar approach for a longitudinal study of ICVs19 yielded at its peak 775 websites, and the present study was modeled after that one. Using the same procedures to identify IAVs, however, yielded a larger number of websites, and, because of budgetary constraints, only the first 5000 sites identified could be screened. Alexa.com traffic-ranking data based on the number of unique monthly visitors to each site were used to identify the 100 most popular IAVs after applying the exclusion criteria detailed in Table 1 (eg, vendor does not ship to North Carolina).

BUYERS

The study buyers were eight 18- to 20-year-old English-speaking individuals who lived in the county where the study was conducted. At this age, they were adults but still minors according to the legal age to purchase alcohol. Purchases were divided among multiple buyers (with each making 11-14 purchase attempts) to minimize the chances that delivery drivers’ age verification attempts might be biased by a growing recognition of recipients. A letter of immunity from prosecution was obtained from the local district attorney to protect all staff and buyers involved in the study.

STUDY PROCEDURES

In July 2011, under one-on-one staff supervision and using procedures approved by the University of North Carolina institutional review board, buyers visited the study websites and attempted to purchase the minimum order of the lowest-priced alcohol available, tracking the process in the study’s online data collection system. The buyers recorded details of the order (alcohol type, brand, volume, cost, shipper, age warnings, and age verification attempts) and the delivery (shipping company, whether there was human interaction, and age verification attempts).

A large proportion of the IAVs in the study sample exclusively sell wine, and FedEx and UPS have policies and procedures for age verification at delivery (AVAD) for wine shipments; it is against FedEx and UPS policies to ship any other type of alcohol (eg, beer, liquor). Both companies have official stickers for labeling packages as alcohol requiring AVAD, as well as labeling embedded in (and printed underneath) their shipping label barcodes to trigger AVAD by delivery drivers (the second feature can be used for AVAD of nonalcohol products without the alcohol sticker). It is against federal law to ship any alcohol via the United States Postal Service.20 When nonwine products were available, buyers ordered them to test how they would be shipped and to maximize the data available on sales of these products. To ensure unbiased representation of all shipping companies, in cases in which vendors offered multiple carrier options, the shipper was randomly selected. Purchases were made using Visa debit gift cards purchased with cash.

When encountering age verification, buyers were allowed to misrepresented their age by clicking a button or checkbox or typing a false birth date. However, if they were required to provide identification (ID) to complete a purchase, they provided their real North Carolina driver’s license, which uses 3 visual cues to clearly identify individuals younger than 21: vertical orientation, a colored border around the photo, and text in that border indicating the date that they will become 21.20 Buyers were not allowed to alter their own ID, use a friend’s or relative’s ID, or use any other strategies to thwart age verification. Although youth outside a study setting could use these strategies, this protocol measured the extent to which minors can successfully obtain alcohol without engaging in these illegal activities.

When packages were delivered, buyers recorded the date, by whom the package was delivered, details of age verification attempts, and whether the package was labeled for AVAD.

RESULTS

ORDER SUCCESS RATES

Of the 100 online alcohol purchase attempts made by underage buyers in this study, 45 were successfully received (Figure). Of the remaining orders, 12 were rejected at or shortly after the point of order as a result of

<table>
<thead>
<tr>
<th>Table 1. Internet Alcohol Vendor Purchase Survey Sample Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
</tr>
<tr>
<td>1. Vendor does not accept online orders</td>
</tr>
<tr>
<td>2. Vendor does not ship to North Carolina (study location)</td>
</tr>
<tr>
<td>3. Sites with a minimum purchase that is prohibitively high for youth (more than $100)</td>
</tr>
<tr>
<td>4. International sites, as the study’s prepaid Visa debit cards do not allow international purchases</td>
</tr>
<tr>
<td>5. Buyers’ clubs for which: Buyer cannot place and receive order within 30 d, eg, club distributes quarterly shipments</td>
</tr>
<tr>
<td>Buyer will receive multiple shipments of alcohol after study ends, eg, 1-y subscription to wine-of-the-month club</td>
</tr>
<tr>
<td>Orders will incur recurring credit card charges, eg, monthly billed wine-of-the-month club</td>
</tr>
</tbody>
</table>

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age verification and 16 were rejected after the delivery driver checked the recipient’s ID. Eleven more failed at the point of delivery because no one was home to receive the order, although it is unclear whether these IAVs had requested a signature or AVAD. The remaining 16 orders failed for other reasons that appear to be unrelated to age verification (eg, technical and communication problems with vendors).

Most (65%) of the websites sold wine exclusively. When other categories of alcohol were available, they were purchased in lieu of wine (Table 2). The IAVs that sold non-wine products were more likely than wine-only vendors to sell to minors, but the differences were not statistically significant (P=.50). While 42% of wine orders (n=27) were successfully received, 53% of liquor orders (n=9) and 57% of beer orders (n=8) were successfully received.

Table 2. Types of Alcohol Ordered and Received in Internet Alcohol Youth Purchase Survey Involving 100 Orders

<table>
<thead>
<tr>
<th>Type of Alcohol</th>
<th>No. Ordered</th>
<th>Successfully Received</th>
<th>Failed Related to Age Verification</th>
<th>Failed for Other Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine</td>
<td>65</td>
<td>27 (42)</td>
<td>30 (46)</td>
<td>8 (12)</td>
</tr>
<tr>
<td>Liquor</td>
<td>17</td>
<td>9 (53)</td>
<td>2 (12)</td>
<td>6 (35)</td>
</tr>
<tr>
<td>Beer</td>
<td>14</td>
<td>8 (57)</td>
<td>5 (36)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Mead</td>
<td>1</td>
<td>1 (100)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hard cider</td>
<td>1</td>
<td>0</td>
<td>1 (100)</td>
<td>0</td>
</tr>
<tr>
<td>Order rejected before alcohol selected</td>
<td>2</td>
<td>0</td>
<td>1 (50)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>45 (45)</td>
<td>39 (39)</td>
<td>16 (16)</td>
</tr>
</tbody>
</table>

a The percentages in the table represent the percentage of all orders placed for that type of alcohol. So, for example, of the 65 wine orders placed, 42% were successfully received, 46% failed because of age verification, and 12% failed for other reasons.
Table 3. Age Verification Strategies Encountered at the Point of Order in Internet Alcohol Youth Purchase Survey Involving 100 Orders

<table>
<thead>
<tr>
<th>Strategy</th>
<th>No. Ordered</th>
<th>Successfully Received, No. (%)&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age verification strategies that do not effectively verify age</td>
<td>59</td>
<td>32 (71)</td>
</tr>
<tr>
<td>User clicks checkbox/button</td>
<td>31</td>
<td>8 (18)</td>
</tr>
<tr>
<td>&quot;Submitting order&quot; certifies age</td>
<td>23</td>
<td>10 (23)</td>
</tr>
<tr>
<td>Credit card number used to verify age</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Vague &quot;age will be verified&quot; statement</td>
<td>8</td>
<td>2 (5)</td>
</tr>
<tr>
<td>No attempts to verify age</td>
<td>41</td>
<td>23 (51)</td>
</tr>
<tr>
<td>Age verification strategies that could potentially block youth access</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date of birth</td>
<td>39</td>
<td>12 (27)</td>
</tr>
<tr>
<td>Entering driver’s license number</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Sending a copy of driver’s license</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Online age verification service</td>
<td>2</td>
<td>1 (23)</td>
</tr>
<tr>
<td>Challenge questions&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>45 (100)</td>
</tr>
</tbody>
</table>

<sup>a</sup>The percentages in the Successfully Received column represent the percentage of all successfully received orders that used that youth access prevention strategy; eg, 27% of all successfully received orders used date of birth to verify buyers’ age.

<sup>b</sup>When used, challenge questions are multiple choice questions based on public records information, asked after identification (ID) information has been verified against government databases as a real adult ID, to determine whether the ID actually belongs to the buyer. This method may thwart underage buyers using a parent’s or friend’s ID; however, since the buyers in this study used their own IDs, they would not have seen challenge questions even if they were in use by the vendor because their ID would not have been verified as an adult ID.

**AGE VERIFICATION AT THE POINT OF ORDER**

There was very little use of age verification at the point of order (Table 3). In fact, age warnings were infrequent (18%) on the 100 IAV websites, especially by those that sold to minors (9%). Most vendors (59%) used weak age verification, if any, relying on checkboxes or buttons (31%) or spurious claims that by merely submitting an order, users were legally certifying their age (23%). Many vendors (41%) did not address age verification at the point of order at all. Of the orders successfully received, 71% (n = 32) did not use rigorous age verification at the point of order and 51% (n = 23) used none. Orders from vendors that used weak or no age verification at the point of order were significantly more likely to be successful than those from vendors using more rigorous age verification (P = .03).

Buyers entered a false date of birth for the 39 vendors that requested their birth date. Only 3 of those orders (7.7%) were rejected for age verification reasons; those vendors may have used an online age verification service to determine that the date of birth did not match that in the buyer’s government records.

In all 3 cases in which the vendor collected a driver’s license number, they rejected the sale after receiving the buyer’s actual license number, indicating that the number was used to verify the buyer’s age. At the point of order, 2 vendors requested that the user enter their driver’s license number and 1 asked the user to send a copy of the license. Two more contacted the buyer after the order was placed and requested a copy of the license.

Only 2 vendors indicated use of online age verification services on their websites. One was unspecified and blocked the underage sale. The other used IDology, and not only failed to block the sale at the point of order but also failed to block the sale at delivery; the FedEx delivery driver handed the recipient the package after merely asking whether the recipient was older than 21 years.

**AGE VERIFICATION AT DELIVERY**

Age verification at delivery was inconsistently administered and, when used, failed about half the time (Table 4). A total of 47 packages arrived labeled as requiring AVAD. Twenty-three featured the carrier’s AVAD and alcohol labeling and 7 used the carrier’s AVAD barcode labeling without the alcohol sticker. One was labeled as requiring age verification but not using the carrier’s official labeling standards. Because delivery was refused on the basis of age verification and the packages were returned to the senders, it is unknown how the remaining 16 packages were labeled.

Table 4. Use of Age Verification at Delivery in Internet Alcohol Youth Purchase Survey Involving 100 Orders

<table>
<thead>
<tr>
<th>Age Verification at Delivery Condition</th>
<th>Overall</th>
<th>FedEx</th>
<th>UPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package marked as requiring age verification at delivery</td>
<td>47</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>Official age verification and alcohol label</td>
<td>23</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Official age verification label, not labeled as alcohol</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Unofficially labeled as requiring age verification</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Labeling unknown; package returned to sender because of age verification failure</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Driver attempted to verify age at delivery</td>
<td>30</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Driver erroneously delivered package to underage buyer after attempting to verify age</td>
<td>14</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

DELIVERY staff attempted to verify the recipient’s age for 30 orders but blocked only 16 of those. In 14 cases (31.1% of successful orders), the alcohol was delivered to underage recipients after taking their word that they were older than 21 years or after examining their vertical driver license that clearly labeled them as being younger than 21. In one case, the driver “looked it over, claimed it was a new license and he didn’t know how to read it, looked at it a few seconds longer, then had me sign for the delivery.”

FedEx did a poorer job than UPS of verifying age at delivery. About a third of each company’s deliveries labeled for AVAD were returned to the sender after delivery was refused on the basis of age verification. However, in cases in which delivery staff attempted to perform AVAD, FedEx packages were significantly more likely to be delivered to the underage buyer (P = .007).
Four orders (3 FedEx, 1 UPS) were picked up by recipients at the company’s package distribution centers. All were labeled for AVAD and in each case, despite showing an underage ID, the minor was given the package. One buyer said, “The clerk checked my ID, pointed at it right where it said WILL TURN 21 IN 2014 and said ‘OK!,’ and gave me the package.”

In another case, after making several attempts to deliver a package labeled for AVAD while a buyer was out of town, the driver simply left the package at the door rather than returning it to the sender. On a separate delivery, because the buyer was not home, the driver delivered 2 packages to the buyer’s middle-aged neighbor, who in turn delivered the packages to the buyer, unaware of what was in them.

With 45 of 100 alcohol purchase attempts successfully received by underage buyers, the age verification procedures in use by IAVs clearly do not adequately prevent online alcohol sales to minors. This sales rate is comparable to the rate of offline retail sales in communities where there is little or no enforcement. In such areas, individuals who look younger than 21 years can buy alcohol without showing ID in 45%-50% of attempts.21-23 However, compliance checks and active enforcement of youth access laws in retail stores have been shown to reduce underage sales by as much as half.24-27 Enforcement operations that replicate our findings and cite vendors and shipping companies might also reduce sales to minors.

For online stores, AVAD is the only opportunity for face-to-face age verification (the standard in retail stores), yet fewer than half of the vendors used this option. Furthermore, in cases in which the vendor used AVAD, it was frequently implemented improperly by delivery services, resulting in a substantial number of successfully received orders. In 36.1% of cases in which the vendor paid for AVAD, delivery staff failed to administer it. In the cases in which the delivery staff did attempt AVAD, they failed to do so properly about half the time. Delivery staff examining recipients’ driver licenses should have been able to consistently reject the deliveries; each buyer’s license used no less than 3 strategies to very clearly label the owner as younger than 21 years.

It is very important that shipping companies work with their staff to ensure more faithful execution of their policies and procedures for alcohol shipments. In this study, shipping companies frequently delivered beer and liquor in violation of their own policies, and AVAD was often executed poorly, if at all. Furthermore, it is important that alcohol be delivered only to the individual who ordered it, not to neighbors who may unwittingly participate in the delivery of alcohol to underage buyers. While the delivery driver technically delivered the packages to an adult, they also facilitated the underage buyer in obtaining alcohol. Also, although AVAD is very important, IAVs should not rely so heavily on using only AVAD to prevent youth access. Because age verification left to delivery drivers was frequently done incorrectly, IAVs should also use rigorous age verification at the point of order.

It is important to note that buyers in this study were barred from using a strategy to bypass age verification that minors overwhelmingly say they have access to and are very willing to use: a parent’s driver license.28 Future studies should assess the ease with which youth in real-world circumstances (ie, with access to a friend’s or parent’s license) can bypass age verification, as well as vendors’ ability to thwart such purchases by using rigorous age verification at both the points of order and delivery.

This study’s purchases were made using prepaid Visa gift cards, which necessarily limited the study sample to domestic websites (these cards were not usable for international purchases). They were selected after we concluded that they would provide the greatest protection against buyers being linked to their study participation. Future studies should include international vendors because, in the ICV industry, many vendors ship from overseas to offer lower prices by avoiding payment of excise taxes, and it is important to determine whether this is also an issue for IAV sales.

Prepaid gift cards are easy for youth to obtain and are difficult to track. The cards were purchased with cash without ID, were managed online, and nothing was ever mailed to the user; it would be easy for minors to buy and maintain such cards for online purchases without their parents being aware.

This study was limited to the 100 most popular IAVs, which were disproportionately wine vendors (vs beer, liquor, or other alcohol, which are more frequently used by youth).29 Although this study provides important evidence that these IAVs do a poor job of preventing youth access, further research is needed to determine the proportion of minors who buy alcohol online and to guide the formation of public health policy on online alcohol sales and age verification, with samples including larger numbers of vendors selling nonwine alcohols.

At the peak of the ICV industry, the methods described herein identified 775 IVCs.18 Owing in large part to extensive regulatory attention, that number dwindled to 392 in 2009 before beginning to rise again (R.S.W., unpublished data, 2009). Considering that there are generally fewer cost advantages to buying alcohol online compared with cigarettes (because of lower excise taxes and higher shipping cost for alcohol vs cigarettes), we expected to find substantially fewer IAVs than IVCs. However, we had to stop counting when we reached 5000 because of budgetary constraints—clearly there were more to be found. The community of IAVs is far larger than the community of IVCs; future research should more completely identify the population and capture data on sales and age verification practices from a greater proportion of the IAV population.

The application of similar approaches that have been used to regulate IVC sales to IAV sales may be effective in regulating this industry. As with IVCs, issues of jurisdiction, interstate sales, and the sheer number of vendors make it difficult for state officials to intervene directly with the IAVs. However, working at the federal level to cut off vendors from their established shipping and payment-processing partners could, as it did with IVCs, lead to an increase in vendors going out of business and
a substantial decrease in vendors using banned shippers and payment processors. Greater enforcement of existing policies, or perhaps new policies, are needed to effectively reduce youth access to alcohol online.


Correspondence: Rebecca S. Williams, MHS, PhD, Center for Health Promotion and Disease Prevention, University of North Carolina at Chapel Hill, 200 N Greensboro St, Ste D-13, Carrboro, NC 27510 (rebeccawilliams@unc.edu).

Author Contributions: Dr Williams had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. Study concept and design: Williams. Acquisition of data: Williams and Ribisl. Drafting of the manuscript: Williams and Ribisl. Critical revision of the manuscript for important intellectual content: Williams and Ribisl. Statistical analysis: Williams. Obtained funding: Williams and Ribisl. Administrative, technical, and material support: Williams. Study supervision: Williams.

Financial Disclosure: None reported.

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Role of the Sponsor: The funding source had no role in the design and conduct of the study; in the collection, analysis, and interpretation of the data; or in the preparation, review, or approval of the manuscript.

Additional Information: This study of the practices of Internet alcohol vendors was a part of the authors’ larger longitudinal study of Internet cigarette vendors ongoing since 1999 and funded from 2008-2011 by a grant from the Robert Wood Johnson Foundation Substance Abuse Policy Research Program. The grant funded ongoing surveillance of Internet cigarette vendors as well as exploratory research to identify Internet alcohol vendors, analyze their website content, compare their practices with those of Internet cigarette vendors, and examine the extent to which Internet alcohol vendors prevent sales to minors.

REFERENCES


Alcohol Home Delivery Services: A Source of Alcohol for Underage Drinkers*

LINDA A. FLETCHER, B.A., TRACI L. TOOMEY, PH.D., ALEXANDER C. WAGENAAR, PH.D., BRIAN SHORT, M.S., M.P.H., AND MARK L. WILLENBRING, M.D.

Division of Epidemiology, School of Public Health, University of Minnesota, 1300 South Second Street, Suite 300, Minneapolis, Minnesota 55454

ABSTRACT. Objective: This study describes the use of alcohol home delivery services by underage drinkers, and characteristics of grocery and liquor stores that deliver alcohol. The availability of alcohol home delivery services across the United States is also described. Method: Individuals surveyed were from 15 small- and medium-sized midwestern communities. Of all enrolled 12th graders, 83.3% (N = 4,487) responded, and of a randomly selected cohort of 18- to 20-year-olds, 93.9% (N = 1,721) responded. All grocery stores that sold alcohol and liquor stores in the corresponding communities were invited to participate in the study and 124 (92.5%) of those businesses completed surveys regarding outlet characteristics and practices. Data for the surveys were based on a nested cross-sectional design with individual respondents nested within the 15 communities. Results: Purchases of delivered alcohol were made by 10% of 12th graders and 7.3% of 18- to 20-year-olds within the past year; 20.2% of outlets delivered alcohol. Using bivariate analyses, purchasing delivered alcohol was associated with male gender, high-risk drinking (drinking five or more drinks on an occasion), more recent and more frequent drinking. Providing delivery services was more common among outlets selling keg beer and/or single servings. Multivariate analyses revealed positive associations between purchasing delivered alcohol and male gender for the 12th graders, and high risk and more recent drinking for both the 12th graders and 18- to 20-year-olds. For outlets, selling keg beer was positively associated with providing delivery services. A separate survey indicated that home delivery services appear to be available in many areas of the country. Conclusions: Home delivery is a previously unidentified source of alcohol for underage drinkers that could be curtailed with effective alcohol policies. (J. Stud. Alcohol 61: 81-84, 2000)

Despite the minimum legal drinking age of 21, young people who are under age 21 can easily obtain alcohol (Jones-Webb et al., 1997; Wagenaar et al., 1996). Throughout the United States, alcohol is readily available to young people who attempt to buy it through commercial sources. Sales rates to underage youth vary by community. Estimates of rates of sale range from 33% to 97% (Forster et al., 1994, 1995; Grube, 1997; O'Leary et al., 1994; Preusser and Williams, 1992; Preusser et al., 1994). As young people age, they increasingly obtain alcohol from commercial sources; 3% of 9th graders, 9% of 12th graders and 14% of 18- to 20-year-olds obtained alcohol directly from a commercial establishment on their most recent drinking occasion (Wagenaar et al., 1996).

Noncommercial sources, e.g., older friends, siblings and coworkers, are also important sources of alcohol (Goldsmith, 1988; Smart et al., 1996; Wagenaar et al., 1993, 1996). One study found that adults 21 years of age or older are the most common source of alcohol for individuals in the 9th and 12th grades and for those 18 to 20 years of age. Individuals under age 21 are the second most common source of alcohol for 9th and 12th graders (Wagenaar et al., 1996).

Young people's access to alcohol through commercial and noncommercial sources may be increased by means of alcohol home delivery services; however, this has not been previously studied. Alcohol home delivery services are a unique form of alcohol availability in that the sale occurs privately, away from commercial outlets, making it less likely to be observed by other customers, outlet management, surveillance cameras or enforcement agents. Outlet employees may perceive less risk of being observed and incurring consequences, such as fines or firing, for selling to an underage person. Outlets that have systems in place to monitor employee sales are less likely to sell to individuals who appear to be underage (Wolfsen et al., 1996a). Young people may feel more comfortable attempting to buy alcohol in unmonitored home-delivery settings, believing they are less likely to be caught making an illegal alcohol purchase. Young people's perceptions about the level of risk involved in obtaining alcohol may affect their use of certain sources for alcohol (Wagenaar et al., 1996).


*This study was supported in part by a Health Services Research and Development Merit Review grant to Mark L. Willenbring from the Department of Veterans Affairs, and also by National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Center for Substance Abuse Prevention grant R01AA09142 (Alexander C. Wagenaar, Principal Investigator) to the University of Minnesota School of Public Health and NIAAA grant R01AA10426 (Alexander C. Wagenaar, Principal Investigator).

Brian Short is with the Department of Family Practice and Community Health, Medical School, University of Minnesota, Minneapolis. Mark L. Willenbring is with the Department of Psychiatry, Minneapolis VA Medical Center, and the Department of Psychiatry, University of Minnesota, Minneapolis.
Through sales to older teens, alcohol home delivery services may also serve as an important noncommercial, secondary source of alcohol for underage drinkers. Delivery services are convenient when large orders are placed for parties or events involving drinking, and parties are an important source of alcohol for young people in their early- to mid-teen years (Wagenaar et al., 1993). A single (legal or illegal) sale of alcohol through delivery may therefore lead to illegal underage drinking and unintended consequences on a larger scale.

This article assesses use of alcohol delivery services by underage individuals, business practices and characteristics of off-sale retail alcohol outlets that provide delivery, and the number of states that allow delivery services.

Method

Data presented here are from follow-up surveys of the Communities Mobilizing for Change on Alcohol (CMCA) project, which included 15 communities with populations ranging from 8,029 to 64,797 (average of 20,836) in Minnesota and Wisconsin (see Wagenaar et al., 1994). CMCA communities were: (1) within a 5-hour drive of the University of Minnesota, (2) at least 25 miles from other eligible communities, (3) had at least 200 students in the 9th grade and (4) primarily drew their students from no more than three municipalities.

Three surveys were conducted as part of CMCA: a student survey of 12th graders, a young adult survey of 18- to 20-year-olds and a survey of commercial alcohol outlets. All subjects surveyed gave informed consent. Parents of 12th graders under age 18 provided passive consent. The student survey was conducted during class sessions by trained researchers and consisted of a self-report questionnaire. Surveys were completed by 83.5% (4,487) of the 5,374 enrolled 12th graders. Respondents were 94% white and 51.1% female, with a mean age of 17.3 years.

For the young adult survey, we selected a random group of 18- to 20-year-olds from a list derived from driver's license records and college directories. From this group, sequential subsets of 50 names stratified by community were selected at random and confirmed to be residents of the participating communities and eligible for the study. Of these young adults, 93.9% (1,721) provided data for the analyses reported in this article; 112 refused to participate. Respondents were 95.7% white and 51.7% male, with a mean age of 19.1 years. The student and young adult surveys took, on average, 25 minutes to complete. All subjects were included in the analyses even if they had not drunk alcohol in the last year.

Data for both the student and young adult surveys were based on a nested cross-sectional design with individual respondents nested within the 15 communities. For the student and young adult analyses, the dependent variable was whether, in the past year, they had purchased alcohol that was delivered by a store to a home or an individual. This would include alcohol purchases delivered directly from an outlet, as well as alcohol purchases delivered to someone else who then resold the alcohol (such as at a party). Independent variables included: gender, time of the respondent's last drinking occasion, number of drinking occasions in the previous month and whether the respondent had five or more drinks on one occasion in the last 2 weeks (high-risk drinkers).

For the commercial outlet survey, managers and owners of all grocery stores licensed to sell alcohol and all off-sale liquor stores in the 15 communities were surveyed. Surveys were obtained from 92.5% (124) of the total 134 grocery and liquor stores. For outlet analyses, the dependent variable was whether the outlet provided alcohol home delivery services. Independent measures were: whether alcohol is sold by the single serving, average length of staff employment, whether the business is part of a chain or franchise, length of ownership of current license, whether kegs or party balls are sold and whether the business has a system to monitor employees' compliance with age-of-sale laws.

We also conducted a mail survey of U.S. state alcohol beverage control (ABC) agencies and legislative research bureaus, inquiring about state alcohol policies, including whether the state allows retailers to provide home deliveries of alcohol. Response rates were 84% for ABC agencies and 58% for legislative research bureaus. We received at least one of the two surveys from 94% of the states.

We conducted a series of mixed-model logistic regressions using SAS/Glimmix, a mixed-model logistic regression program especially suited to the analysis of data from a complex survey design (Murray and Wolfinger, 1994; SAS Institute Inc., 1992). We completed bivariate and multivariate analyses for the student, young adult and outlet surveys. Backward selection techniques were used to derive the final multivariate models. We reported F tests with denominator degrees of freedom greater than 100 as chi-square tests based on numerator degrees of freedom.

Results

Bivariate results from CMCA surveys

Of 12th graders, 10% (447/ 4,469) indicated purchasing alcohol delivered by a store to a home or an individual in the past year, compared to 7.3% (125/1,720) of 18- to 20-year-olds ($\chi^2 = 10.73$, 1 df, $p = .001$). Within both age strata, those who purchased delivered alcohol were more likely to be male, to have engaged in high-risk drinking in the last 2 weeks, and to have engaged in more recent and more frequent drinking in the previous month (see Table 1).

Of the 124 grocery stores and liquor outlets, 20.2% reported providing alcohol home delivery services. Providing delivery services is associated with selling alcohol by the single serving (odds ratio [OR] = 2.77; $\chi^2 = 4.53$, 1 df,
TABLE 1. Characteristics of 12th graders and 18- to 20-year-olds: Comparisons as a function of having purchased home-delivered alcohol in the past year (bivariate analyses)

<table>
<thead>
<tr>
<th>Relationship to purchasing home-delivered alcohol in the past year</th>
<th>12th graders</th>
<th>18- to 20-year-olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (compared to females)</td>
<td>OR = 1.36</td>
<td>OR = 1.74</td>
</tr>
<tr>
<td></td>
<td>( \chi^2 = 9.39, 1 \text{ df} )</td>
<td>( \chi^2 = 8.46, 1 \text{ df} )</td>
</tr>
<tr>
<td></td>
<td>( p = .0022 )</td>
<td>( p = .0037 )</td>
</tr>
<tr>
<td>High-risk drinking* last 2 weeks (vs no high-risk drinking last 2 weeks)</td>
<td>OR = 4.26</td>
<td>OR = 3.26</td>
</tr>
<tr>
<td></td>
<td>( \chi^2 = 192.86, 1 \text{ df} )</td>
<td>( \chi^2 = 39.34, 1 \text{ df} )</td>
</tr>
<tr>
<td></td>
<td>( p = .0001 )</td>
<td>( p = .0001 )</td>
</tr>
<tr>
<td>Time since last drinking occasion (vs no drinking in last year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last week</td>
<td>OR = 14.23</td>
<td>OR = 44.12</td>
</tr>
<tr>
<td>Last month</td>
<td>OR = 7.69</td>
<td>OR = 20.61</td>
</tr>
<tr>
<td>Last year</td>
<td>OR = 4.53</td>
<td>OR = 15.75</td>
</tr>
<tr>
<td></td>
<td>( \chi^2 = 53.18, 3 \text{ df} )</td>
<td>( \chi^2 = 10.54, 3 \text{ df} )</td>
</tr>
<tr>
<td></td>
<td>( p = .0001 )</td>
<td>( p = .0001 )</td>
</tr>
<tr>
<td>Number of drinking occasions last month (compared with 6+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>OR = 0.14</td>
<td>OR = 0.15</td>
</tr>
<tr>
<td>1-2</td>
<td>OR = 0.32</td>
<td>OR = 0.35</td>
</tr>
<tr>
<td>3-5</td>
<td>OR = 0.47</td>
<td>OR = 0.71</td>
</tr>
<tr>
<td></td>
<td>( \chi^2 = 75.20, 3 \text{ df} )</td>
<td>( \chi^2 = 16.27, 3 \text{ df} )</td>
</tr>
<tr>
<td></td>
<td>( p = .0001 )</td>
<td>( p = .0001 )</td>
</tr>
</tbody>
</table>

Note: OR = odds ratio. Discrepancies in sample size are due to missing data.
*Five or more drinks on a single occasion.

\( p = .04 \) and selling kegs (OR = 5.53; \( \chi^2 = 4.90, 1 \text{ df} \), \( p = .03 \)). None of the other outlet policies or characteristics were significantly related to home delivery services.

**Multivariate results from CMCA surveys**

For 12th-grade students, gender, high-risk drinking in the last 2 weeks and more recent drinking were significantly associated with having purchased home-delivered alcohol in the past year. High-risk drinking and more recent drinking were related to having purchased delivered alcohol for 18- to 20-year-olds (see Table 2). For outlets, only selling alcohol by the keg was positively related to providing alcohol sales through delivery (OR = 5.5; \( \chi^2 = 4.90, 1 \text{ df} \), \( p = .03 \)).

**Survey results from ABC agencies and legislative research bureaus**

Regarding legal restrictions on home delivery, 52% (22 of 42) of the responding ABC agencies and 59% (17 of 29) of the responding legislative research bureaus indicated that home delivery of alcohol was allowed in their state (with varying degrees of restrictions on delivery). We observed discrepancies in seven states where one survey indicated delivery was allowed in the state and the other survey indicated it was not.

**Table 2. Adjusted multivariate analyses: Factors related to purchasing alcohol that was delivered to a home or individual in the last year**

<table>
<thead>
<tr>
<th>Factor</th>
<th>OR</th>
<th>( \chi^2 )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>12th graders (n = 4,454) Males (compared to females)</td>
<td>1.23</td>
<td>4.01, 1 df</td>
<td>.0453</td>
</tr>
<tr>
<td>High-risk drinking* last 2 weeks (vs no high-risk drinking last 2 weeks)</td>
<td>2.15</td>
<td>27.53, 1 df</td>
<td>.0001</td>
</tr>
<tr>
<td>Time since last drinking occasion (vs no drinking in last year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last week</td>
<td>7.80</td>
<td>18.75, 3 df</td>
<td>.0001</td>
</tr>
<tr>
<td>Last month</td>
<td>6.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last year</td>
<td>4.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18- to 20-year olds (n = 1,720) High-risk drinking* last 2 weeks (vs no high-risk drinking last 2 weeks)</td>
<td>1.73</td>
<td>5.31, 1 df</td>
<td>.0213</td>
</tr>
<tr>
<td>Time since last drinking occasion (vs no drinking in last year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last week</td>
<td>31.77</td>
<td>5.08, 3 df</td>
<td>.0017</td>
</tr>
<tr>
<td>Last month</td>
<td>18.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last year</td>
<td>16.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: OR = odds ratio. Discrepancies in sample size are due to missing data.
*Five or more drinks on a single occasion.

**Discussion**

Home delivery provides a source of alcohol for underage drinkers. An unexpected finding was that 12th graders were significantly more likely than 18- to 20-year-olds to have purchased delivered alcohol, possibly because older drinkers may be able to more easily make direct alcohol purchases at an outlet and have less need for unmonitored delivery services. The results of the study raise the possibility that, through delivery services, young drinkers are able to access alcohol more regularly at an earlier age. The implications of this are serious, as drinking at an earlier age has been linked with a higher risk of future alcohol-related problems (Gonzalez, 1989; Grant and Dawson, 1997; Robins, 1978). For both age groups, multivariate results indicate that more recent drinking and high-risk drinking were associated with purchased delivering alcohol; for these individuals, alcohol consumption may more often take place in the context of events involving heavier or problem drinking.

Outlet policies may be related to an outlet’s propensity to sell alcohol to underage drinkers (Forster et al., 1995; Wofson et al., 1996a, 1996b). Outlets providing delivery services were more likely to sell keg beer; this finding has implications for the prevention of underage drinking since beer kegs are common at parties attended by high school students and by episodic heavy-drinking teenagers (Wagenaar et al., 1993). Kegs delivered to homes are not only a source of alcohol for the purchaser but also for the potentially large numbers of young people who drink at parties. In the absence of
restrictions on home delivery, other policies such as keg registration may be necessary to identify the keg purchaser who supplies alcohol to underage drinkers.

There are several limitations to this study. First, the findings are from small and mid-sized midwestern communities, and alcohol delivery services may be more common in urban areas. We analyzed yellow-page telephone directories from 248 U.S. cities with populations over 100,000. Overall, 104 (41.9%) of the city directories contained one or more outlet advertisements for alcohol delivery. Similar to results from the ABC and legislative research bureau surveys, we found alcohol delivery advertisements in at least one city yellow pages for 26 of the 50 states. For the 50 largest U.S. cities by population, 36 (72%) of the corresponding telephone directories contained one or more delivery advertisements (Fletcher et al., 1996). Major metropolitan areas may, therefore, have a higher prevalence of delivery service availability and use. In addition, data presented here do not reveal the frequency of delivery use or whether delivery purchases served as a primary source of alcohol (respondent bought alcohol directly from deliverer) versus a secondary source (respondent bought from someone else who obtained alcohol from a home delivery).

Alcohol home delivery services appear to be one of a number of sources of alcohol for underage drinkers. Approximately half of the U.S. states allow home delivery of alcohol (although, given the complexity of state laws, in-depth legal research would be required to accurately identify legal availability of alcohol home delivery services). Knowledge of the sources of alcohol to underage drinkers is an important step in developing policies that help reduce youth alcohol access and resulting injuries, violence and social problems. Placing restrictions on or more closely monitoring home deliveries of alcohol may be part of a larger set of policies that need to be implemented. Policy measures that target alcohol sales via delivery may particularly affect younger drinkers and those at greater risk for alcohol-related problems.

References


Ladies & Gentlemen – I received this this morning.

Teresa J. Meier  
City Clerk 
555 S. 10th St. 
Lincoln NE 68508 
Ph: (402) 441-7438

If you are always trying to be NORMAL, you will never know how AMAZING you can be. - Maya Angelou

Good morning, Teresa. Per our telephone conversation, attached is the amendment to the above liquor license that we filed with the Nebraska Liquor Control Commission on Friday afternoon. This changes the parent company of the licensee; however, the people involved do not change.

I had initially indicated that Jack Shultz from our office was going to attend this hearing. Tim O'Neill is now going to attend on behalf of goPuff.

If you have any questions or concerns, please feel free to contact Tim or me.
July 19, 2019

Hand Delivered

Nebraska Liquor Control Commission
ATTN: Licensing
301 Centennial Mall South, 5th Floor
Lincoln, NE 68509

Re: GB License Nebraska, LLC d/b/a goPuff – D-123120

Dear Sir or Madam:

Our firm represents GB License Nebraska, LLC. It has come to our attention that there was an error on the application currently being processed. Please see the enclosed new Ownership Chart. I have also enclosed a new revised Limited Liability Company form and Controlling Corporation Insert.

If you have questions or need anything further, please contact me. Thank you.

Very truly yours,

O'NEILL, HEINRICH, DÄMKROGER, BERGMeyer & SHULTZ, P.C., L.L.O.

Trish Bell, Paralegal
tbell@ohdbslaw.com

/tkb
Enclosures
I:59901001OWNERSHIP TRANSFERCORRECTIONLTR. TO NLCC.DOCX
OWNERSHIP CHART

GoBrands Inc.
(no individual or entity owns >25% of this entity)

100%

GB License Holdco, LLC

100%

GB License Holdings, LLC

100%

GB License, LLC

100%

GB License Nebraska LLC
Licensee
APPLICATION FOR LIQUOR LICENSE
LIMITED LIABILITY COMPANY (LLC)
INSERT - FORM 3b

NEBRASKA LIQUOR CONTROL COMMISSION
301 CENTENNIAL MALL SOUTH
PO BOX 9046
LINCOLN, NE 68509-0046
PHONE: (402) 471-2571
FAX: (402) 471-2814
Website: www.lcc.nebraska.gov

All members including spouse(s), are required to adhere to the following requirements:
1) All members spouse(s) must be listed
2) Managing/Contact member and all members holding over 25% interest and their spouse(s) (if applicable) must submit fingerprints. See Form 147 for further information, this form MUST be included with your application.
3) Managing/Contact member and all members holding over 25% shares of stock and their spouse(s) (if applicable) must sign the signature page of the Application for License form 100 (even if a spousal affidavit has been submitted).

Name of Registered Agent: GoBrands, Inc.

GB License Nebraska LLC

LLC Address: 454 N. 12th Street
City: Philadelphia State: PA Zip Code: 19123

LLC Phone Number: (484) 352-3079 LLC Fax Number:

Last Name: Gola First Name: Yakir
Home Address: 1214 Chestnut St., Apt. 1 City: Philadelphia
State: PA Zip Code: 19107 Home Phone Number: (856) 237-7860

Signature of Managing/Contact Member

ACKNOWLEDGEMENT

The foregoing instrument was acknowledged before me this

Yakir Gola name of person acknowledge

COMMONWEALTH OF PENNSYLVANIA
SECRETARY OF STATE NOTARY PUBLIC
OLANNA NISSIM
My Commission Expires Aug 31, 2020
List names of all members and their spouses (even if a spousal affidavit has been submitted)

Last Name: Gola                        First Name: Yakir                        MI: ___
Social Security Number: 147-94-7725    Date of Birth: 4-4-96
Spouse Full Name (indicate N/A if single): N/A
Spouse Social Security Number: Date of Birth:
Percentage of member ownership

Last Name: GB License, LLC        First Name: ___                        MI: ___
Social Security Number: ___        Date of Birth: ___
Spouse Full Name (indicate N/A if single): ___
Spouse Social Security Number: Date of Birth: ___
Percentage of member ownership 100%

Last Name: ___                        First Name: ___                        MI: ___
Social Security Number: ___        Date of Birth: ___
Spouse Full Name (indicate N/A if single): ___
Spouse Social Security Number: Date of Birth: ___
Percentage of member ownership ___

Last Name: ___                        First Name: ___                        MI: ___
Social Security Number: ___        Date of Birth: ___
Spouse Full Name (indicate N/A if single): ___
Spouse Social Security Number: Date of Birth: ___
Percentage of member ownership ___
List names of all members and their spouses (even if a spousal affidavit has been submitted)

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<tr>
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Is the applying Limited Liability Company controlled by another corporation/company?

☐ YES  ☐ NO

If yes, provide the following: GB License, LLC
1) Name of corporation
2) Supply an organizational chart of the controlling corporation named above
3) Controlling corporation MUST be registered with the Nebraska Secretary of State, copy of articles must be submitted with application §53-126

Indicate the company’s tax year with the IRS (Example January through December)

Starting Date: January 1 Ending Date: December 31

Is this a Non Profit Corporation?

☐ YES  ☐ NO

If yes, provide the Federal ID #.
APPLICATION FOR CERTIFICATE OF AUTHORITY
FOREIGN LIMITED LIABILITY COMPANY
Submit in Duplicate

Robert B. Evnen, Secretary of State
P.O. Box 94608
Lincoln, NE 68509
(402) 471-4079
www.sos.ne.gov

An original certificate of existence from the appropriate authority in the jurisdiction or state under whose laws the limited liability company was organized must be filed with this document.
NOTE: A certified copy of the company’s certificate of organization may not be filed in lieu of a certificate of existence.

Name of Limited Liability Company: GB License Nebraska, LLC

Alternate Name (complete only if actual name is unavailable for use or does not comply with Nebraska law)

Name and address of registered agent in Nebraska:

Registered Agent Name: GoBrands Inc

Registered Agent Address:

301 Oakcreek Dr, Lincoln NE 68528

City

Address of Principal Office:

454 N 12th St, Philadelphia PA 19123

Street and Mailing Address

City

State

Zip

If required by state or jurisdiction of organization, office maintained in that jurisdiction;

Organized under the laws of the State or Jurisdiction of Delaware

Nature of the Business, purposes to be conducted or promoted in this state or professional services being rendered:

Retail

Effective date if other than the date filed

Signature of Authorized Representative

Yakir Gola

Printed name of Authorized Representative

FILING FEE: $120.00

Revised 01/10/2019


AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN ASSESSED TO DATE.

7414010 8300
SR# 201905090252
You may verify this certificate online at corp.delaware.gov/authver.shm

Authentication: 202937425
Date: 05-31-19
STATE OF NEBRASKA

I, Robert B. Evnen, Secretary of State of the State of Nebraska, do here by certify that

GB LICENSE NEBRASKA, LLC

a(n) Delaware Limited Liability Company, filed an Application for Certificate of Authority on May 31, 2019 and is hereby authorized to transact business in the state of Nebraska as of the date of this certificate.

This certificate is not to be construed as an endorsement, recommendation, or notice of approval of the entity’s financial condition or business activities and practices.

In Testimony Whereof,

I have hereunto set my hand and affixed the Great Seal of the State of Nebraska on this date of May 31, 2019.

[Signature]
Secretary of State
CONTROLLING CORPORATION INSERT
NEBRASKA LIQUOR CONTROL COMMISSION
391 CENTENNIAL MALL SOUTH
PO BOX 95046
LINCOLN, NE 68509-5046
PHONE: (402) 471-2571
FAX: (402) 471-2814
Website: www.lcc.nebraska.gov

Attach copy of Articles as filed with the Nebraska Secretary of State * §53-126

Name and address of the controlling corporation of the applying corporation

Controlling Corporation Name: GB License, LLC
Controlling Corporation Address: 454 N. 12th Street
City: Philadelphia State: PA Zip Code: 19123

Provide the names of the top four officer/members of the controlling corporation

1. Full Name: Rafael Illishayev
   Job Title: CEO, Treas., Asst. Sec.

2. Full Name: Yakir Gola
   Job Title: Pres., Sec.

3. Full Name: ____________________________
   Job Title: ____________________________

4. Full Name: ____________________________
   Job Title: ____________________________
APPLICATION FOR CERTIFICATE OF AUTHORITY
FOREIGN LIMITED LIABILITY COMPANY
Submit in Duplicate

Robert B. Evnen, Secretary of State
P.O. Box 94608
Lincoln, NE 68509
(402) 471-4079
www.sos.ne.gov

An original certificate of existence from the appropriate authority in the jurisdiction or state under whose laws the limited liability company was organized must be filed with this document. NOTE: A certified copy of the company’s certificate of organization may not be filed in lieu of a certificate of existence.

Name of Limited Liability Company: GS LICENSE, LLC

Alternate Name: (Complete only if actual name is unavailable for use or does not comply with Nebraska law)

Name and address of registered agent in Nebraska:

Registered Agent Name: GDSbrandz, Inc.

Registered Agent Address:
301 Oakgrove Drive, Lincoln, NE 68520

Address of Principal Office:

454 N. 12th Street, Philadelphia, PA 19123

If required by state or jurisdiction of organization, office maintained in that jurisdiction:

Organized under the laws of the State or Jurisdiction of Delaware

Nature of the Business, purposes to be conducted or promoted in this state or professional services being rendered:

Retail

Effective date if other than the date filed

Signature of Authorized Representative

Printed name of Authorized Representative

FILING FEE: $120.00

Revised 01/10/2019


AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN ASSESSED TO DATE.
July 22, 2019

Hand Delivered

Nebraska Secretary of State
Corporations Division
State Capitol
P.O. Box 94808
Lincoln, NE 68509-4808

Re: GB License, LLC and GB License Holdings, LLC

Dear Sir or Madam:

I hereby recognize the similarity of our company names and hereby consent for your office to accept for filing the Applications for Certificate of Authority of GB License, LLC and GB License Holdings, LLC.

Sincerely,

[Signature]

GB License Nebraska, LLC

Yakir Gola, Its President

GB License, LLC

[Signature]

Yakir Gola, Its President

GB License Holdings, LLC

[Signature]

Yakir Gola, Its President
STATE OF NEBRASKA

United States of America
State of Nebraska

} ss.

Secretary of State
State Capitol
Lincoln, Nebraska

I, Robert B. Evnen, Secretary of State of the
State of Nebraska, do here by certify that

GB LICENSE, LLC

a(n) Delaware Limited Liability Company, filed an Application for Certificate of
Authority on July 19, 2019 and is hereby authorized to transact business in the state
of Nebraska as of the date of this certificate.

This certificate is not to be construed as an
endorsement, recommendation, or notice of approval of the entity's
financial condition or business activities and practices.

In Testimony Whereof,

I have hereunto set my hand and
affixed the Great Seal of the
State of Nebraska on this date of

July 19, 2019

Robert Evnen
Secretary of State