How Has Drinking Behavior Changed During the COVID-19 Pandemic?

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Alcohol Consumption and Related Harms
Alcohol consumption in the U.S.

About 70% of the U.S. population aged 18 or older consumed alcohol in 2018, and more than half drank alcohol in the past 30 days.

About 27% of the adult population reported binge drinking in the past month.
Excessive Alcohol Use: the Toll on Society

More than 200 diseases and injury-related health conditions

A 62% increase in Emergency Department visits between 2006 and 2014. A particularly large increase among females

88,000 annual deaths → fourth-leading preventable cause of death

Societal costs of nearly $250 billion in 2010
Alcohol Policy and the COVID-19 Pandemic
Policies to Limit the Spread of COVID-19

44 states + DC enacted stay-at-home orders.

All states closed bars. Most states restricted dine-in service at restaurants.

Where Could You Buy Alcohol Before the Pandemic?

- In most states, food stores sold beer (N=47) and wine (N=37).
- In most states, liquor was available in controlled outlets. Liquor was available in food stores in 20 states.

Source: https://www.nabca.org/covid-19-resources
With Stay-at-Home Orders, States Relaxed Curbside and/or Delivery Restrictions for Off-Premise Operators

Source: https://www.nabca.org/covid-19-resources
With Stay-at-Home Orders, States Permitted Mixed Drinks to Go

What Do We Know About Drinking During the Pandemic in the U.S.?
Changes in Alcohol Sales in the US

How The COVID-19 Pandemic Is Upending The Alcoholic Beverage Industry

Joseph V. Micaleff
Contribution

Spirits

An article about a novel virus and its impact on the beverage industry.

Rebalancing the ‘COVID-19 Effect’ on Alcohol Sales

Coronavirus brings quick changes to state alcohol laws

Nielsen Says Beverage Alcohol Retail Sales Are Soaring During The Crisis

Alcohol sales surge during pandemic, lockdowns. Here’s what people are drinking

eCommerce drives triple-digit growth in alcohol sales

Alcohol sales jump 234 percent during COVID-19
Anecdata! Consumption in the U.S.

Happy Hours: More People Drinking While Working from Home During COVID-19

'More Zoom Parties, More Alcohol Consumption': Hard Seltzer, Tequila Sales Boom During COVID-19 Lockdown

Travel around the world during Zoom happy hours with these global drinking traditions

'Quarantinis' and beer chugs: Is the pandemic driving us to drink?

Alcohol sales have soared as people use drinking to relax during the Covid-19 crisis, and experts are raising concerns

Half of us are gonna come out of the quarantine as amazing cooks and the other half is gonna come out with a drinking problem. There is no in between

What Past Disasters Tell Us About COVID-19 and Substance Abuse

STRESS DRINKING: ALCOHOL CONSUMPTION INCREASES DURING COVID-19
The RTI Survey on Alcohol Consumption During the COVID-19 Pandemic
Research Questions

How did overall alcohol consumption change after the onset of policies to tackle COVID-19?

How did excessive consumption change?

Was the change larger among certain groups (e.g., women, people experiencing unemployment)?
The Survey

What?
Web-based survey using Ipsos’ KnowledgePanel Academic Omni

When?
May 8–15

How?
We asked about the following in February and April:
• Alcohol consumption
• Mental health
• Employment status

Plus:
• Lifetime alcohol experiences
A Standard Drink: “0.6-oz/14g of alcohol”

- A 12-oz beer (5% ABV)
- A 5-oz glass of wine (12% ABV)
- 1.5-oz of 80-proof spirits (40% ABV)

<table>
<thead>
<tr>
<th>Question</th>
<th>Category</th>
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<tbody>
<tr>
<td>How often did you have one or more drinks?</td>
<td>Frequency</td>
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<tr>
<td>How many drinks did you usually have?</td>
<td>Quantity</td>
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<tr>
<td>What was the largest number of drinks you drank in a single day?</td>
<td>Maximum quantity</td>
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<tr>
<td>How often did you drink that larger-than-usual amount?</td>
<td>Maximum frequency</td>
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<tr>
<td>How often did you drink four (female)/five (male) or more drinks within 2 hours?</td>
<td>Binge drinking</td>
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Survey Questions: Other Measures

Mental health

- Depressive symptoms
- Anxiety symptoms

Employment status

- Nine exclusive categories (e.g., work full-time, retired)

Lifetime experiences with alcohol

- Questions to understand need for, and access to, treatment for alcohol use
Survey Respondents

993 Surveyed
555 Reported Drinking in February

Female: 52%
Male: 48%

21–34: 25%
35–49: 25%
50–64: 30%
65+: 20%

White, non-Hispanic: 66%
Black, non-Hispanic: 9%
Other, non-Hispanic: 7%
Hispanic: 19%

Northeast: 22%
South: 30%
West: 24%
Midwest: 24%
Analysis

- Compared February and April estimates
  - Used regression methods to adjust for gender, age, race, and other factors
- Examined what dimension of alcohol consumption changed the most (e.g., quantity versus frequency)
Survey Results
Three Main Drinking Outcomes in This Presentation

- Average drinks per day
- Percentage of people exceeding drinking guidelines
- Percentage of people binge drinking
Calculation of Drinks per Day

Usual drinking →

**Usual number of drinks consumed in a drinking day**

```
+ 
```

**Extra drinks** consumed on a day when drinking maximum quantity

```
× 
```

“More than usual” drinking →

Number of days drinking the maximum amount
Average Drinks per Day

**February:** 0.74 drinks per day

**April:** 0.94 drinks per day

**Result:** +27%, p<0.001
Exceeding Drinking Guidelines

What is considered low-risk drinking, according to the National Institute on Alcohol Abuse and Alcoholism?

The number of drinks below is determined by the U.S. National Institute on Alcohol Abuse and Alcoholism to minimize risk for development of an alcohol use disorder.

<table>
<thead>
<tr>
<th></th>
<th>WOMEN</th>
<th>MEN</th>
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<tr>
<td><strong>DAILY</strong></td>
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<tr>
<td><strong>WEEKLY</strong></td>
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<td></td>
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<tr>
<td>NO MORE THAN</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>

Image Source: https://www.recoveryanswers.org/assets/V2-ALCOHOL-GUIDELINES-2.png
Exceeding Drinking Guidelines

February: 29%
April: 36%
Result: +21%, p<0.001
Binge Drinking

Having more than four (for men) or three (for women) drinks over a 2-hour period

Binge Drinking

February: 22%
April: 27%
Result: +26%, p=0.001
Stratified Results
Average Drinks per Day

*Males increased drinks per day slightly more than females (0.21 versus 0.19, p=0.77)
Average Drinks per Day

*Change ranged from 0.17 (White, non-Hispanic) to 0.29 (other, non-Hispanic). No significant differences between groups.
*Respondents with kids in the household increased more than those without kids (0.45 versus 0.11 drinks, p=0.007)
*Respondents who were unemployed in Feb. or Apr. increased drinks per day by 0.37, compared to 0.19 for those not unemployed (p=0.49)
*Respondents with positive mental health screens in Feb. or Apr. increased drinks per day by 0.30, compared to 0.18 for those without a positive screen (p=0.33).
Average Drinks per Day

*Respondents with evidence of alcohol problems barely increased their drinks per day (+0.02).
Average Change in Drinks per Day
February to April, by Census Region

Note: Alaska and Hawaii are included in the West region. Change in West region significantly larger than change in Northeast (p<0.05).
31% of respondents increased their **drinking frequency** by an average of more than 7 days.
16% of respondents increased their **usual quantity** by an average of almost 2 drinks.
27% of respondents increased total drinks consumed on “more than usual” days by almost 4.5 drinks.
Changes in Alcohol Consumption

Drinks per Day Decreased

Drinks per Day Unchanged

↑Frequency, ↑Quantity
↑Quantity
↑Max Drinking
↑Frequency, ↑Quantity, ↑Max Drinking
↑Frequency
↑Frequency, ↑Max Drinking
Changes in Alcohol Consumption

- 5% of respondents increased alcohol consumption from February to April in each of the three main dimensions:
  - They drank more every day.
  - They drank on more days of the week.
  - They increased consumption on days when they drank more than normal.

- This group accounted for over 40% of the increase in alcohol consumption for all respondents.
Excessive Consumption Behaviors
Excessive consumption increased considerably for females:

- Drinking guidelines (10% versus 2%, p=0.026)
- Binge drinking (8% versus 3%, p=0.12)
Excessive consumption increased considerably for Black respondents:

- Drinking guidelines (17% versus 3% among Whites, p=0.028)
- Binge drinking (13% versus 3% among Whites, p=0.07)
Excessive consumption increased more for respondents with kids:

- Drinking guidelines (11% versus 4%, p=0.21)
- Binge drinking (12% versus 3%, p=0.09)
Excessive Consumption Behaviors

- Exceeding drinking guidelines increased more for respondents who were not unemployed (6% versus 4%, p=0.72)
- Binge drinking increased more for respondents who were unemployed (10% versus 5%, p=0.56)
Both measures of excessive consumption increased slightly more for those without positive mental health screens:

- Drinking guidelines (7% versus 4%, $p=0.54$)
- Binge drinking (6% versus 4%, $p=0.54$)
Unlike average drinks per day, excessive consumption did increase for respondents with evidence of alcohol problems:

- Drinking guidelines (11% versus 6%, p=0.51)
- Binge drinking (13% versus 5%, p=0.42)
Excessive Consumption Behaviors

Change in Percentage Exceeding Drinking Guidelines
February to April, by Census Region

Note: Alaska and Hawaii are included in the West region. Change in West region significantly larger than change in Northeast (p<0.01).
Change in Percentage Binge Drinking
February to April, by Census Region

Note: Alaska and Hawaii are included in the West region.
The largest changes in alcohol consumption were concentrated among people who did not exceed drinking guidelines in February.
The Big Picture

- **50%** overlap
- **7%** of respondents
- **65%** of total increase in drinks per day
- **85%** did not exceed guidelines in February
Conclusions
Key Takeaways

Alcohol consumption, including excessive consumption behaviors, has increased overall and across several groups.

Being female, Black, or having children in the household was associated with significant increases on at least one measure.

The largest increases in all measures were observed in the Western U.S.

The largest increases in alcohol consumption were among people who increased their usual quantity consumed and those who were not drinking in excess of recommended guidelines in February.
Why Did Alcohol Consumption Increase?

- Some studies predicted lower alcohol consumption
- Why might that not be the case?
  - Expectation of lower access to alcohol offset by policy changes
  - More leisure time and fewer alternative activities
  - Response to stress
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Implications of Increased Alcohol Consumption

- **Short-term**
  - Uncertain impact on accidents and injuries
  - Potential impact of increased drinking at home on domestic violence and child neglect
  - Impact of alcohol on immune system and complications of COVID-19

- **Long-term**
  - Potential for escalation into alcohol use disorder
  - Morbidity and mortality associated with increased alcohol consumption
Research Priorities Moving Forward

- Monitor alcohol consumption and alcohol policies as COVID-19-related restrictions are lifted.
- Monitor alcohol-attributable harms during and following the COVID-19 pandemic.
- Support wider implementation of public awareness campaigns that encourage people to drink less or at least not drink more than usual.
- Understand connection between policy changes and alcohol consumption.
- Conduct more waves of the current survey.
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