



THE IMPACT OF HOME DELIVERY ON ALCOHOL CONSUMPTION DURING COVID-19

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ALCOHOL POLICY 19

SEPTEMBER 15, 2022; 11:00AM – 12:30PM

**AS REQUIRED BY THE ALCOHOL POLICY 19 CONFERENCE,
I HAVE SIGNED A DISCLOSURE STATEMENT AND NOTE
FOLLOWING CONFLICT(S) OF INTEREST:**

NONE



Evidence to Action: Building a Framework for Change
September 14-16, 2022 **Arlington, VA**



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Why Do We Care About Alcohol?

What is Home Delivery?

Changing Home Delivery Laws Due to COVID-19

The Impact of Changing Home Delivery Laws

Moving Forward From Here

WHY DO WE CARE ABOUT ALCOHOL?



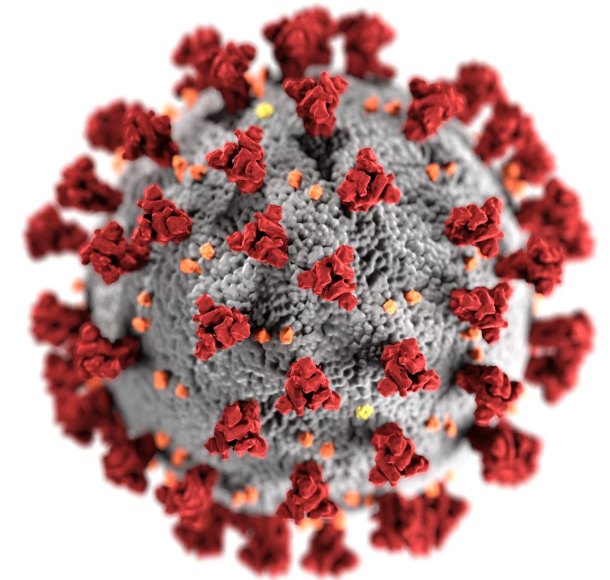
Excessive Alcohol Consumption is a Serious Public Health Problem!



- It is risky.
- It is deadly.
- It is costly.

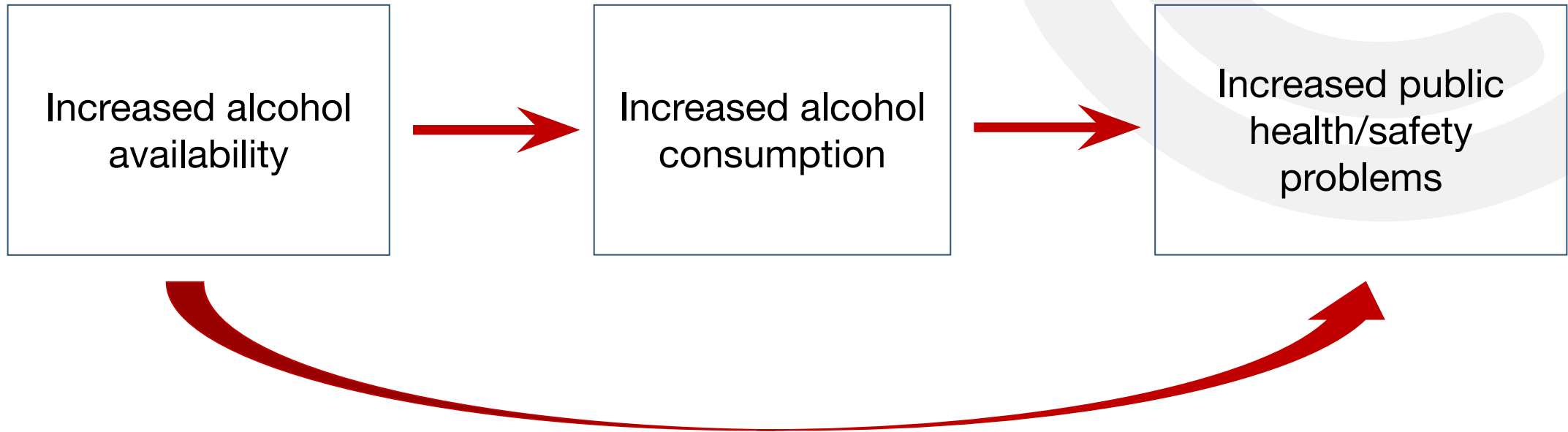
Alcohol Use & COVID-19

- Persons with an alcohol-use disorder have increased susceptibility to respiratory pathogens and lung injury, including 2x – 4x greater risk of acute respiratory distress syndrome (ARDS), a key cause of death in COVID-19

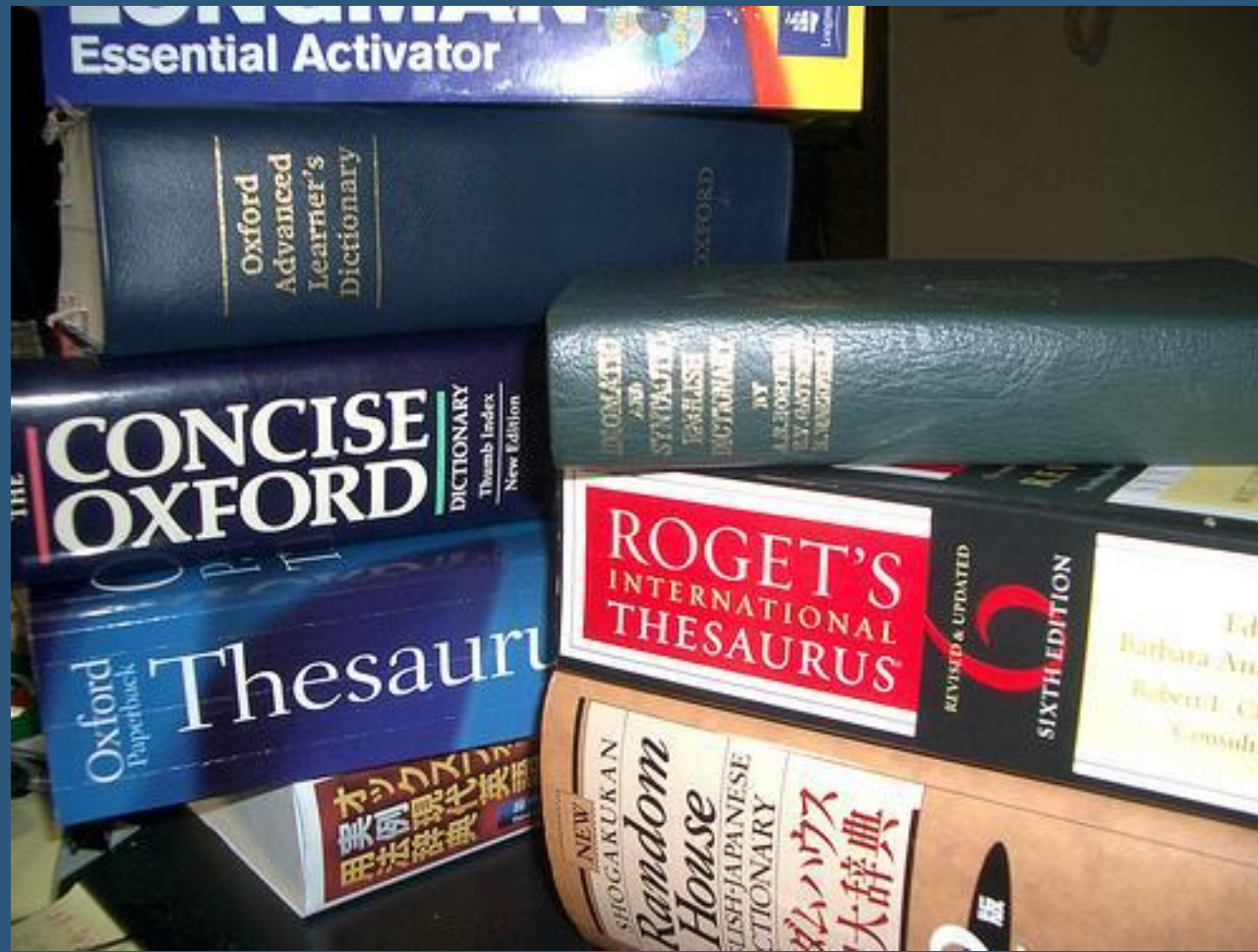


World Health Organization (WHO)

“Alcohol consumption is associated with a range of communicable and noncommunicable diseases and mental health disorders, which can make a person more vulnerable to COVID-19. In particular, alcohol compromises the body’s immune system and increases the risk of adverse health outcomes. Therefore, people should minimize their alcohol consumption at any time, and particularly during the COVID-19 pandemic.”



WHAT IS HOME DELIVERY?



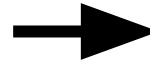
Home Delivery



Restaurants, bars, or retailers delivering alcohol to consumers' homes through either the use of their own employees or through a third-party delivery system

Direct-To-Consumer

The ability of alcohol producers (i.e., breweries, wineries, and distilleries) to ship alcohol directly to consumers' homes



Previous Research on Home Delivery

1. Adults in US (1996):

- Found problem drinkers were more likely to use alcohol home delivery services than drinkers without a history of alcohol problems (Fletcher et al.)

2. Adults in New Zealand (2020):

- 40% of participants used online alcohol delivery services (vs. 2% in 2015)
- Those that did had 75% higher odds of heavier drinking in past week than those who purchased alcohol in person from a supermarket (Huckle et al.)

HOME DELIVERY PRE-COVID-19

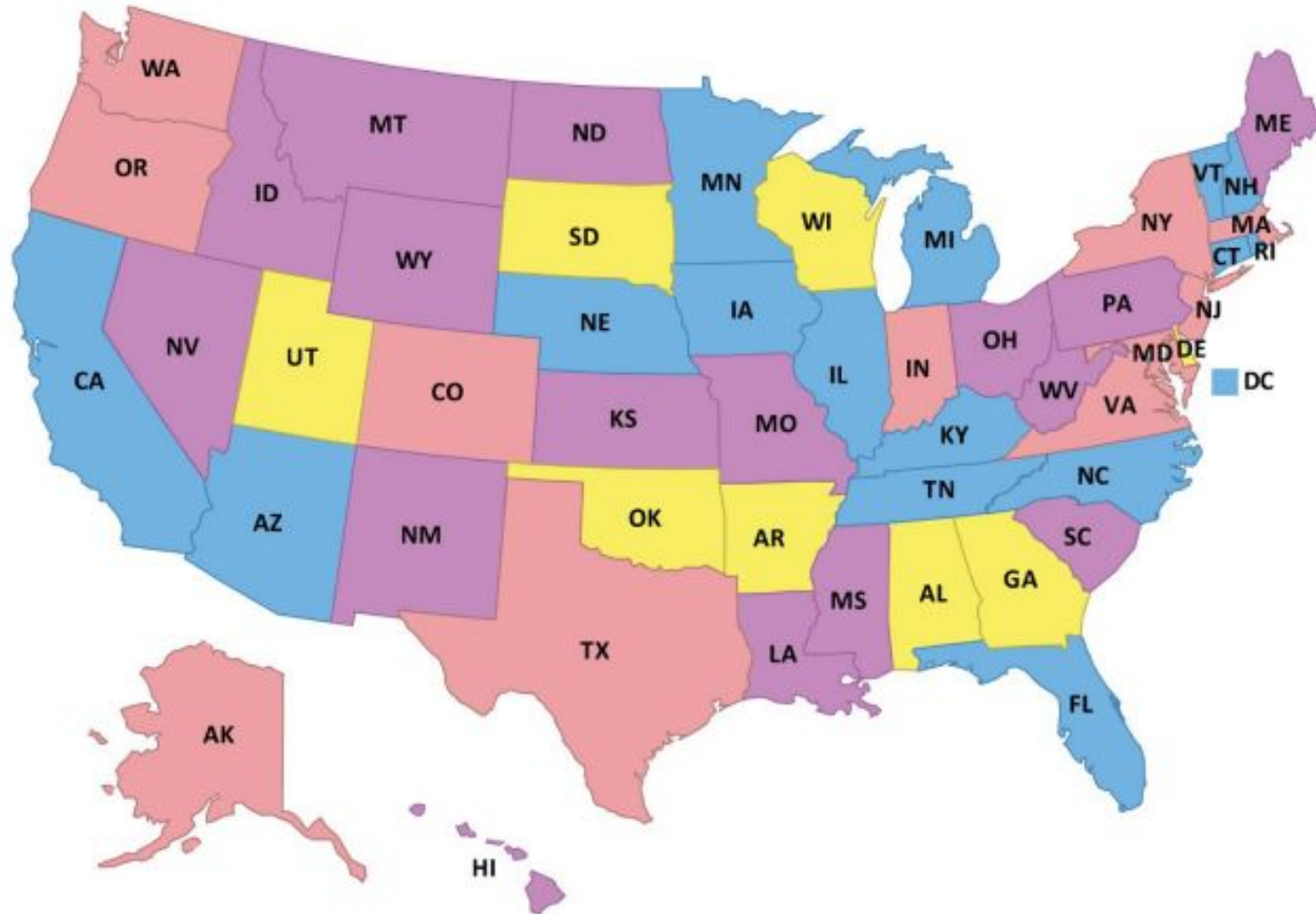






STOP Act State Performance & Best Practices (SPBP) Report



- Data are limited, but the *SPBP Report* tracks the ability of retailers to deliver alcoholic beverages to customers who are not present at their retail outlet
- As of January 1, 2019:
 - 21 states permitted home delivery of all three beverages
 - The rest either prohibited delivery of some or all the beverages or have no law

Retailer Home Delivery of Beer



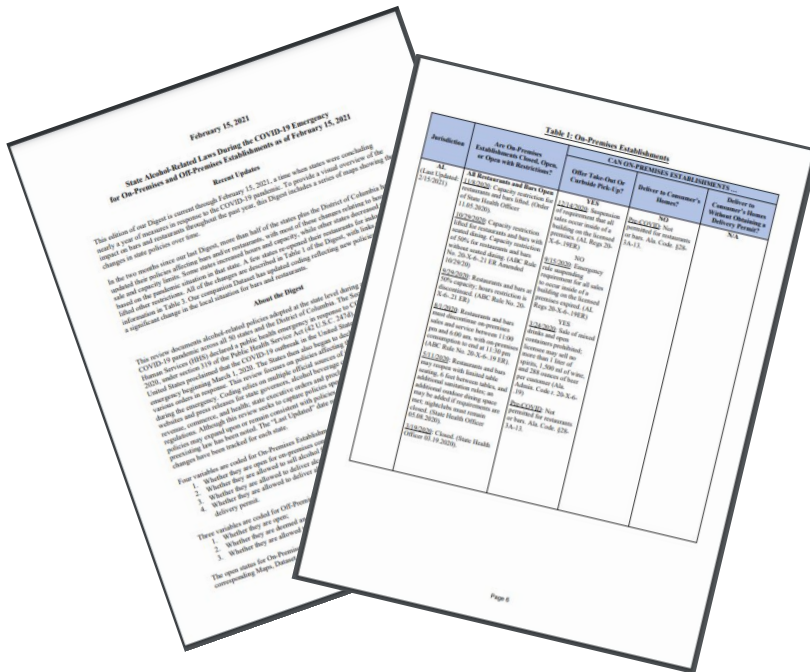
-  Home Delivery Permitted (16)
-  Home Delivery w/Restrictions (11)
-  Home Delivery Prohibited (8)
-  No Law (16)

<https://www.stopalcoholabuse.gov>

Alcohol Policy Information System (APIS)



- During the pandemic, APIS expanded to include coverage of alcohol laws during COVID-19
- Tracked whether on-premises establishments could deliver to consumers' homes pre-COVID-19
 - 28 states did NOT permit restaurants or bars to deliver to consumers' homes



CHANGING HOME DELIVERY LAWS DUE TO COVID-19



Changing Alcohol Laws: An Overview

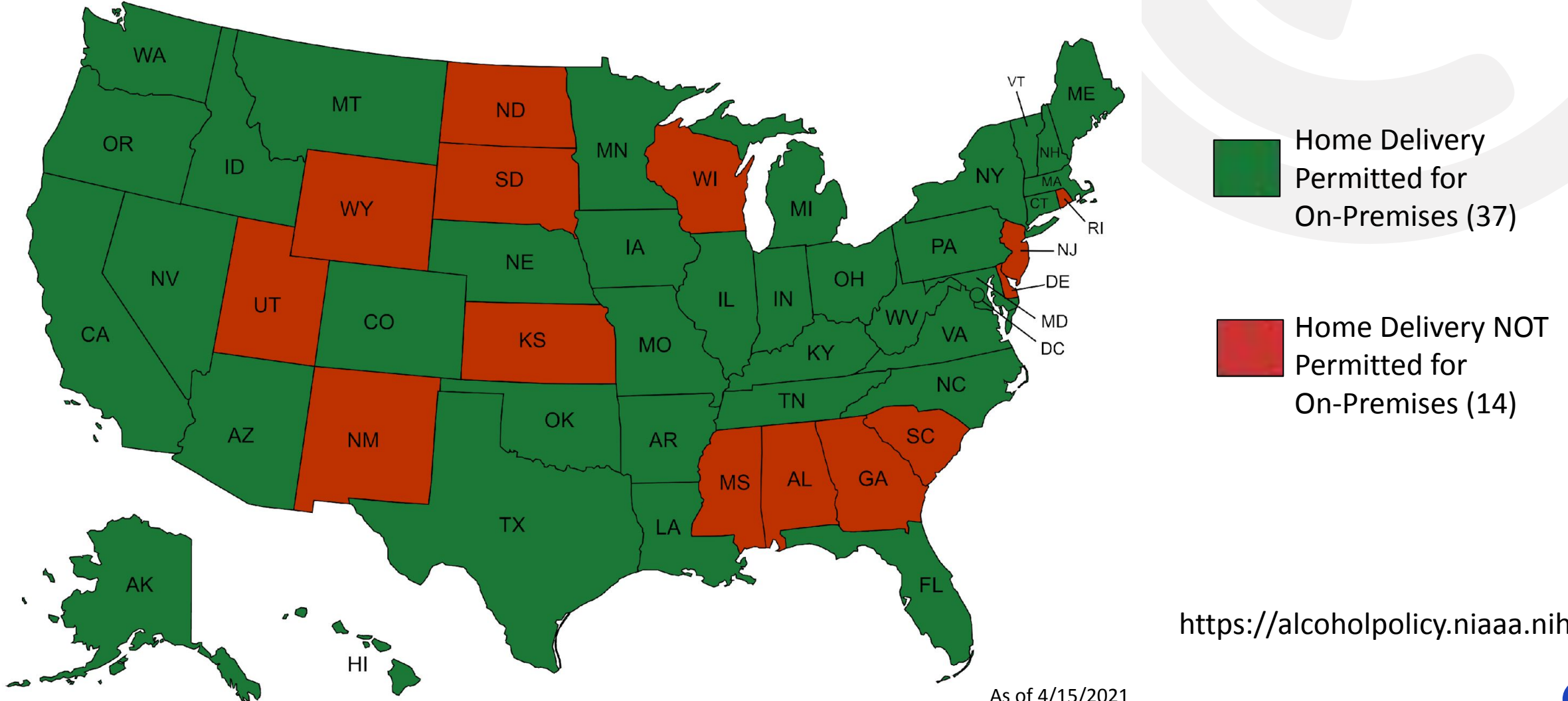
Many states changed laws to allow...

- Home delivery
- Curbside delivery
- Sale of drinks-to-go

This led to regulating the...

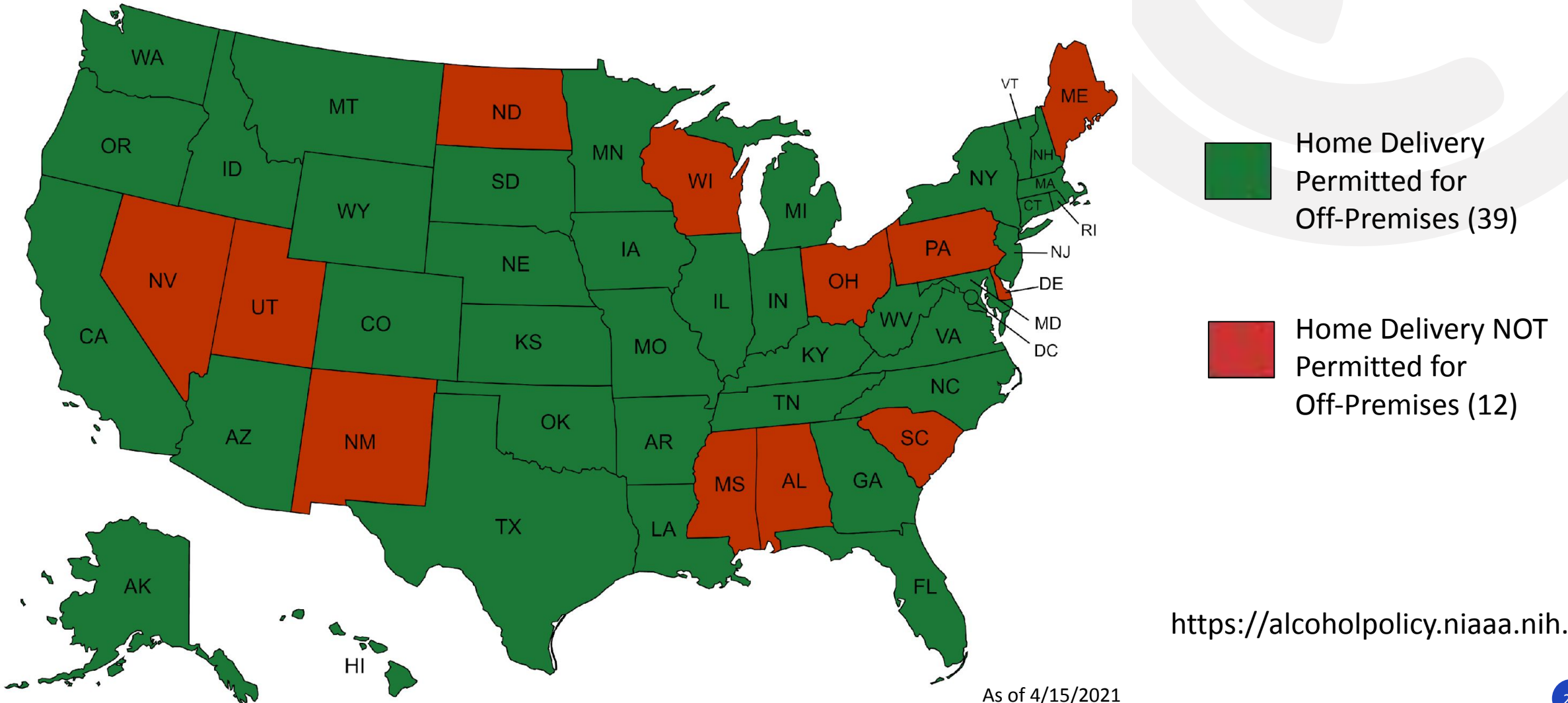
- Quantity of purchases
- Food requirements with sale of alcohol
- Types of containers
- Seals on containers
- Delivery drivers (e.g., age, training)
- Licensing requirements

Changing State Home Delivery Laws: On-Premises



<https://alcoholpolicy.niaaa.nih.gov>

Changing State Home Delivery Laws: Off-Premises



IMPACT OF CHANGING HOME DELIVERY LAWS



Relevant Research Questions

1. What were the **rates of US adult alcohol consumption** during the early months of the COVID-19 pandemic?
2. How were US adults **obtaining their alcohol** during the early months of the COVID-19 pandemic?
3. Did **rates of US adult alcohol consumption differ** depending on whether at least some of the alcohol was **delivered** to their homes?

Collecting Data

- **The Survey**: 61 online questions (29 demographic questions, 18 related to alcohol consumption, 14 related to stress or lifestyle changes during COVID-19)
- **Distribution of Survey**: Recruited participants from across US through social media posts and emails sent via group listservs in May 2020
- **Participants**: 998 people from across the US who were 21 years of age or older accessed survey; 838 remained in final sample

Primary Exposure Variable

- Derived from survey question asking:

“During the last 30 days, how did you obtain the alcohol that you were drinking?”

- We collapsed responses into 3 non-mutually exclusive categories:
 1. Alcohol was delivered
 2. Alcohol was purchased in-person
 3. Alcohol was already present in participant’s home

Outcome Measures

1. The # of days in the past 30 days on which alcohol was consumed
2. The total # of drinks consumed over the past 30 days
 - Calculated by multiplying the first outcome by the average quantity of drinks consumed per day
3. Whether participants had engaged in binge drinking
 - Defined as having 4+ (for females) or 5+ (for males) drinks in one sitting at least once over the past 30 days
4. Whether participants had engaged in extreme binge drinking
 - Defined as being drinking 10+ times over the past 30 days

Additional Variables

- Participants were also asked:

“Has your drinking changed due to COVID-19?”

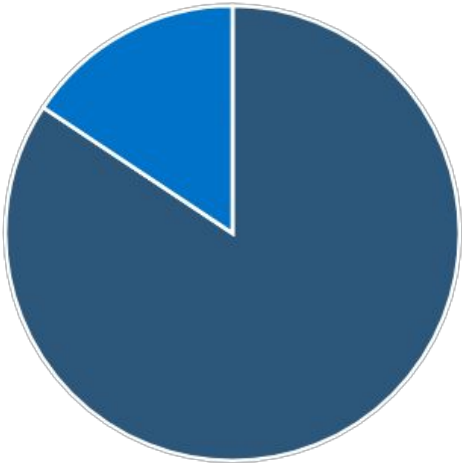
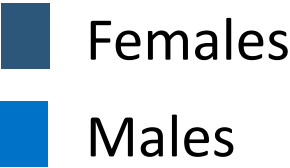
- There were three answer choices:

1. Not at all
2. My drinking has decreased
3. My drinking has increased

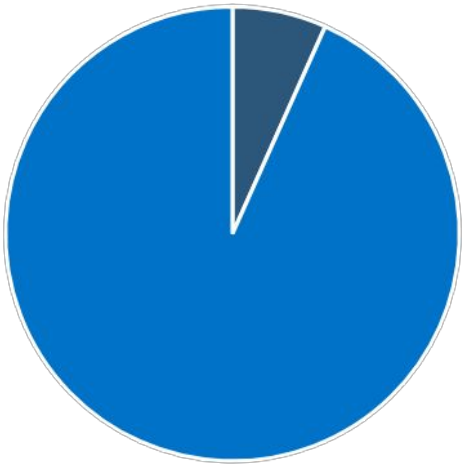
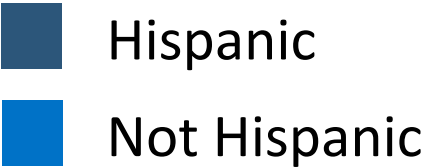
- For those who answered #2 or #3, they were asked why they thought their drinking had decreased or increased

Demographics

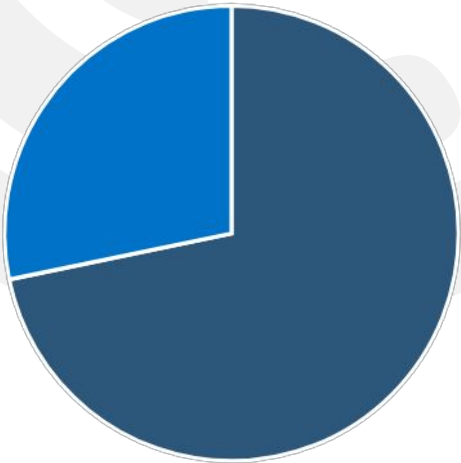
GENDER



ETHNICITY

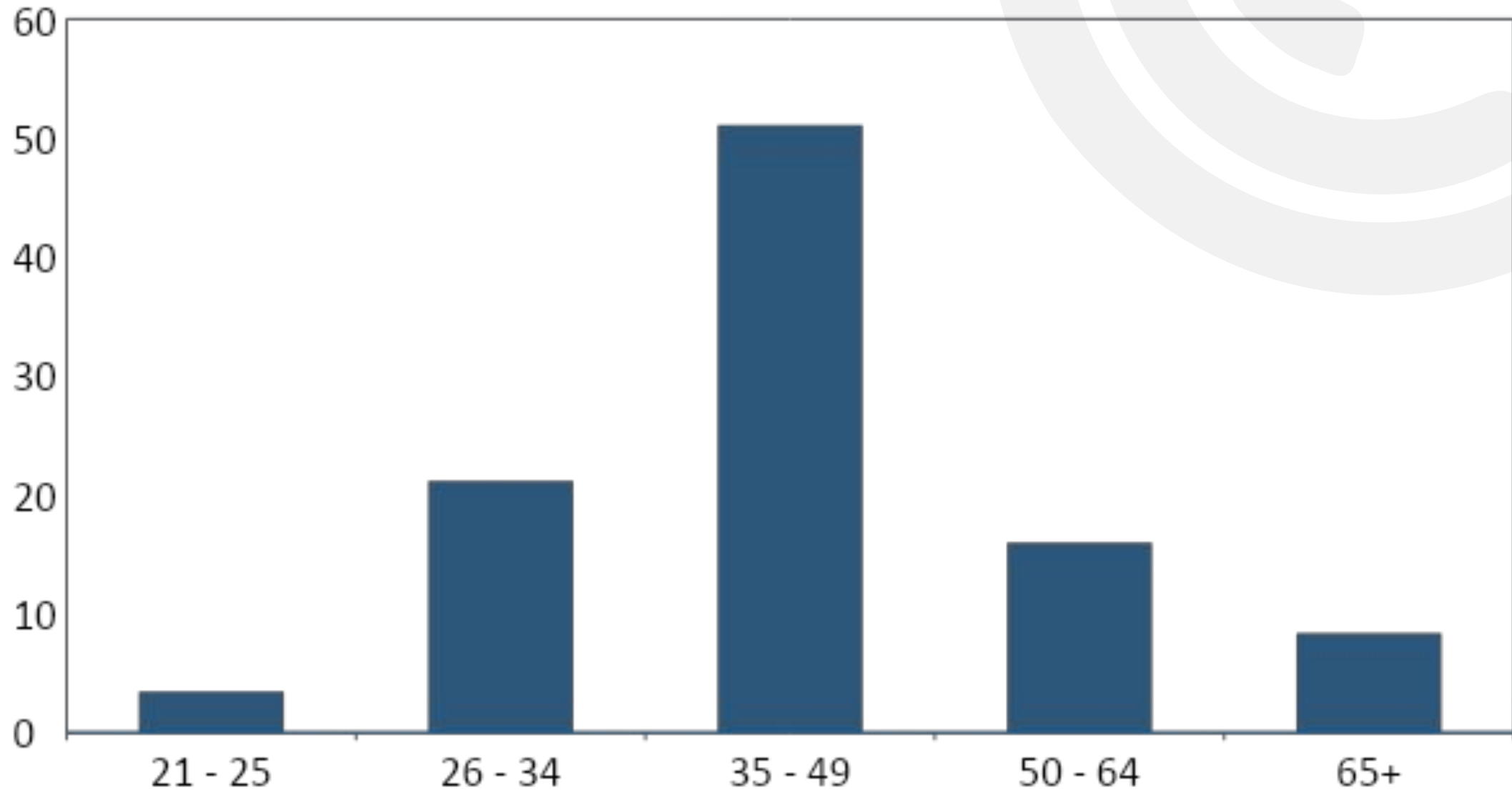


RACE



PARENTS

Demographics – Age of Participants



Results – Rates of Consumption

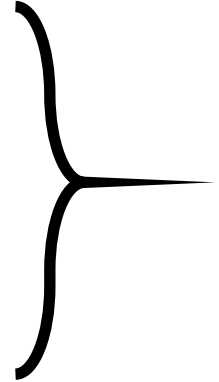
- Participants during COVID-19 consumed alcohol on an average of 12 days and 27 drinks over the past 30 days
- 34% reported binge drinking
- 7% reported extreme binge drinking



Results – Drinking Patterns

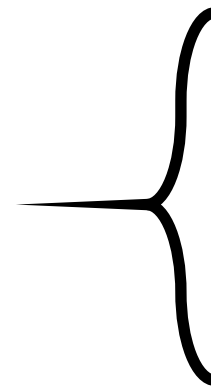


60%

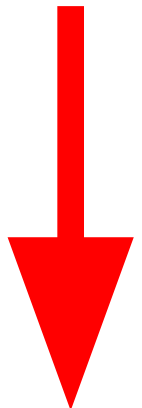


- Increased stress
- **Increased availability of alcohol**
- Boredom

- Diminished alcohol availability
- Less free time
- Less money



13%



Results – Methods of Obtaining Alcohol



- 21% had at least some alcohol delivered
 - 60% from liquor store or restaurant or bar
 - 16% from grocery store
 - 18% from a third-party delivery service
 - 6% from other places or services

□ 69% had at least some alcohol at home

□ 72% had purchased at least some alcohol in-person

Results – Impact of Home Delivery

- Adults who obtained at least some of their alcohol via delivery, reported consuming significantly more alcohol (both number of days and number of drinks) than participants who obtained alcohol through other means
- Were also 2x more likely to report engaging in binge drinking than participants who obtained alcohol through other means



Limitations

- ❑ Convenience sample
- ❑ Snowball sampling method
- ❑ Differences in those who completed survey vs. those who did not
- ❑ Question included in survey on home delivery
- ❑ Self-reported data
- ❑ Did not include participants' geographic locations

Conclusions

As demonstrated in previous research, and now proven true by the COVID-19 pandemic:

When alcohol is more available, there is more consumption and related harms

MOVING FORWARD FROM HERE



Future Research

□ Future studies are needed that:

- Continue to examine rates of alcohol consumption now that it has been 2-3 years since the pandemic began and we could expect to see an even greater impact
- Delve into policy differences by state and the impact of these changing policies on alcohol consumption
- Assess the rate of underage alcohol consumption during COVID-19
- Examine the impact of changing home delivery laws on underage alcohol consumption

Relevant Resources



Published Articles

- Grossman, E.R., Benjamin-Neelon, S.E., & Sonnenschein, S. (2020). Alcohol consumption during the COVID-19 pandemic: A cross-sectional survey of US adults. *International Journal of Environmental Research and Public Health*, 17(24): 9189. <https://www.mdpi.com/1660-4601/17/24/9189>
- Grossman, E.R., Benjamin-Neelon, S.E., & Sonnenschein, S. (2022). Alcohol consumption and alcohol home delivery laws during the COVID-19 pandemic. *Substance Abuse*, 43(1): 1141-1146. DOI: [10.1080/08897077.2022.2060432](https://doi.org/10.1080/08897077.2022.2060432)



Websites

- SAMHSA STOP Act Report to Congress: <https://www.stopalcoholabuse.gov>
- NIAAA Alcohol Policy Information System: <https://alcoholpolicy.niaaa.nih.gov>



THANK YOU!

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