

DAKOTA  
CONFERENCE ON  
RURAL AND PUBLIC  
HEALTH

# Addressing the Unique Dangers and Solutions of Alcohol Consumption in Rural America – North Dakota

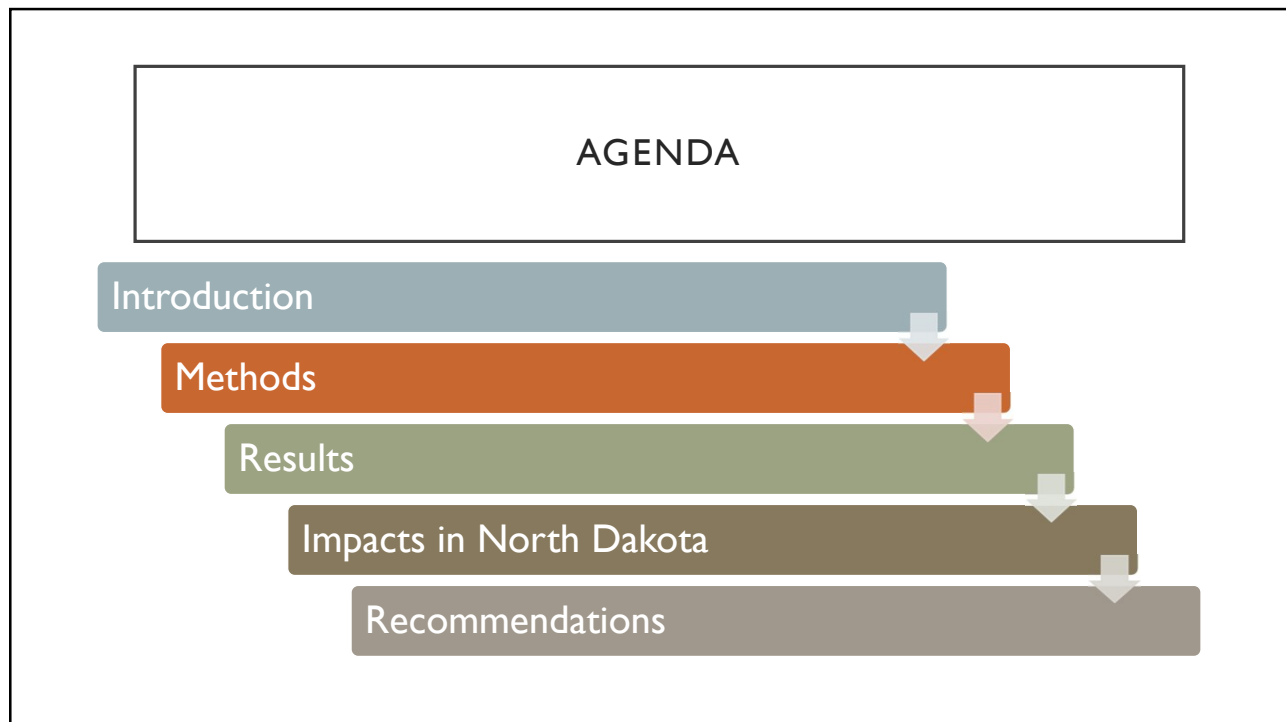
Presentation by:  
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(E-yobosa)

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I have no conflict of interest to disclose in relation to the materials in this presentation.

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**INTRODUCTION**

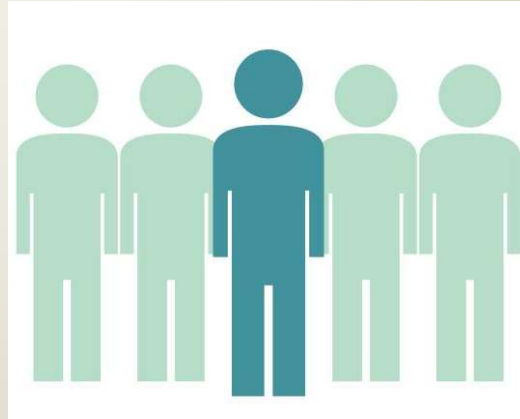
- Alcohol consumption and misuse continue to be one of the leading causes of deaths and preventable diseases leading to approximately 178,000 deaths and 4 million years of potential life lost in the United States annually.
- Approximately more than one-third of deaths caused by alcohol misuse and potential life lost can be attributed to binge drinking

Alcohol-Related Emergencies and Deaths in the United States | National Institute on Alcohol Abuse and Alcoholism (NIAAA). (n.d.). Retrieved March 23, 2024, from <https://www.niaaa.nih.gov/alcohol-effects-health/alcohol-topics/alcohol-facts-and-statistics/alcohol-related-emergencies-and-deaths-united-states>  
Data on Excessive Drinking | CDC. (n.d.). Retrieved March 23, 2024, from <https://www.cdc.gov/alcohol/data-stats.htm>

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## A PREVENTABLE PUBLIC HEALTH PROBLEM

- Binge drinking is an excessive form of alcohol intake of more than 4 (female) or 5 (male) drinks in a single occasion.
- About 25% of adults binge drink weekly.



Data on Excessive Drinking | CDC. (n.d.). Retrieved March 23, 2024, from <https://www.cdc.gov/alcohol/data-stats.htm>

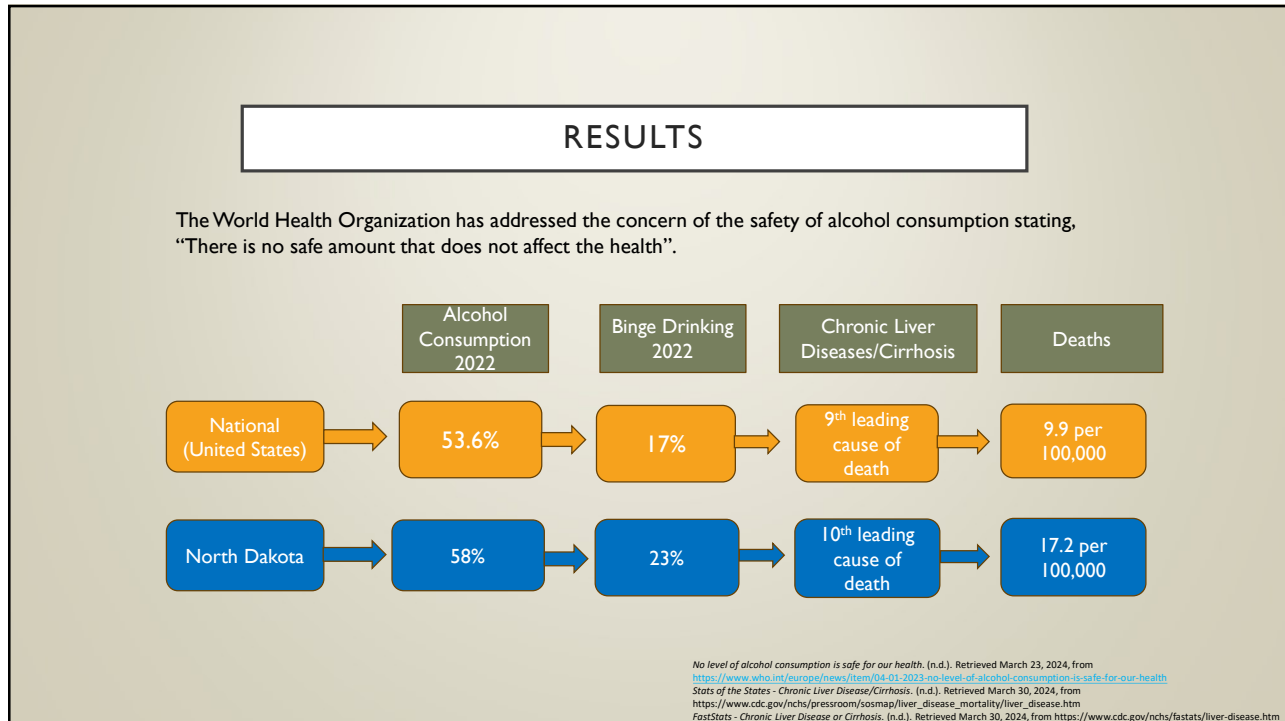
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## METHODOLOGY

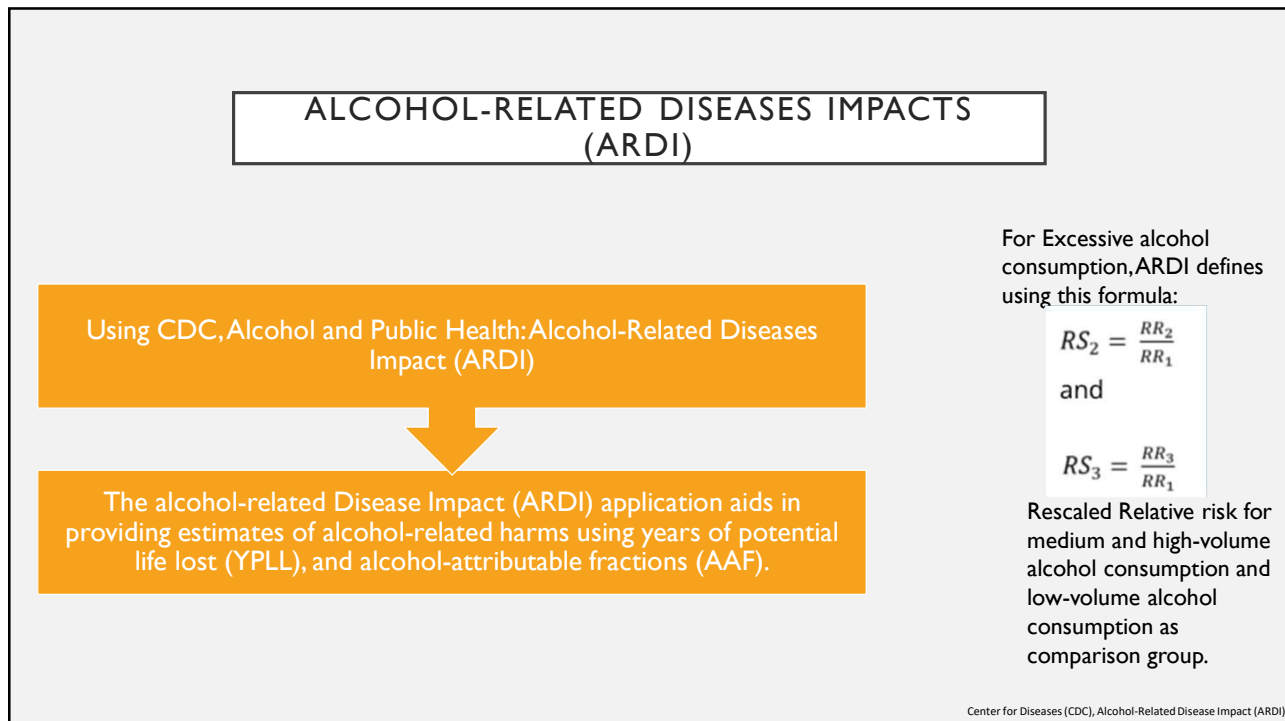
A literature review was performed, Using, Pubmed, CDC statistics on alcohol use, National Institute on Alcohol Abuse and Alcoholism, CDC, Alcohol and Public Health: Alcohol-Related Disease Impact (ARDI)

Primary literature to research articles that addressed the current distribution of excessive drinking/binge drinking in the United States, North Dakota, and its health outcomes.

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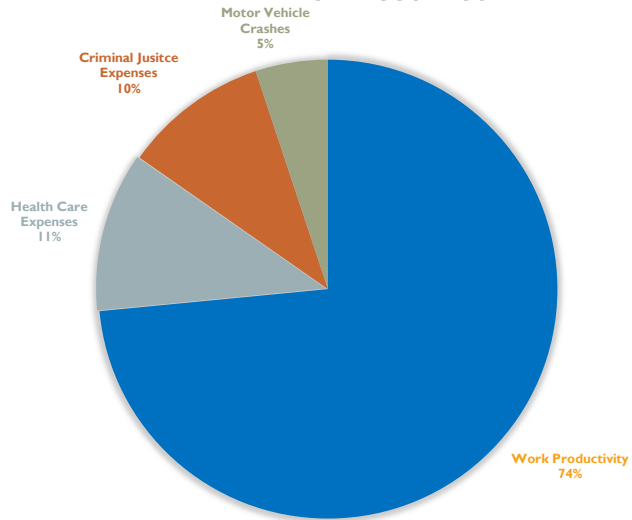


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### ECONOMIC IMPACTS

- Excessive alcohol consumption has led to economic loss with 2 of every 5 dollars being paid by federal, state, or local government.
- In 2010, the cost of excessive alcohol use reached \$249 billion in the United States.
- North Dakota state excessive alcohol costs an estimated \$488 million, which is \$725 per person and \$1.4 per drink.

### EXCESSIVE DRINKING EFFECTS ON ECONOMY AND THE TOTAL COST LOST



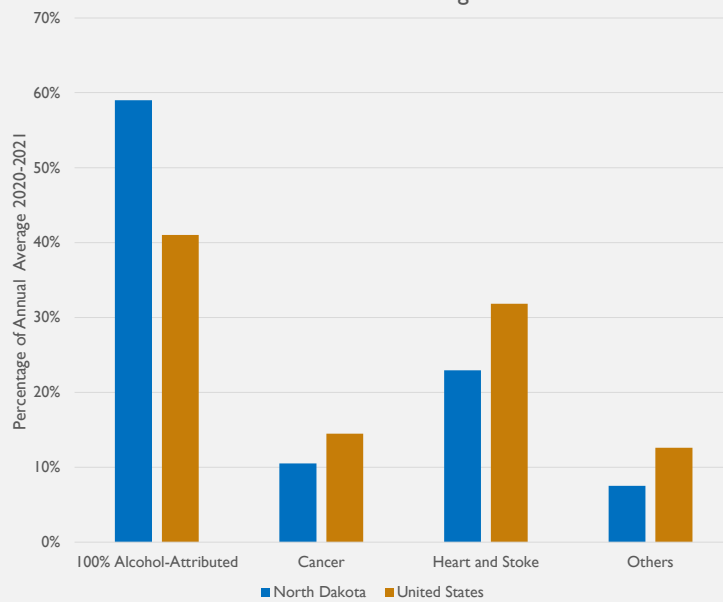
Excessive Drinking is Draining the U.S. Economy. (n.d.). Retrieved March 30, 2024, from <https://www.cdc.gov/alcohol/features/excessive-drinking.html>  
 2020-ND-DV-Fact-Sheet\_8.5x11. (n.d.).  
 Dakota Interagency Council on Homelessness, N. (2020). North Dakota Interagency Council on Homelessness 2020 Annual Report.

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### IMPACTS ON NORTH DAKOTA

- Alcohol-attributable deaths due to excessive alcohol use caused a total of 432 deaths in North Dakota 2020-2021 among individuals aged 0-65+. A total of 305 chronic causes of death.
- 100% Alcohol attributable chronic causes include alcohol abuse, alcoholic liver diseases, fetal alcohol syndrome, etc.
- Other causes include liver, gallbladder, and pancreatic diseases, chronic hepatitis, infant death, low birth weight, etc.

### Harmful Effects According to Chronic Causes

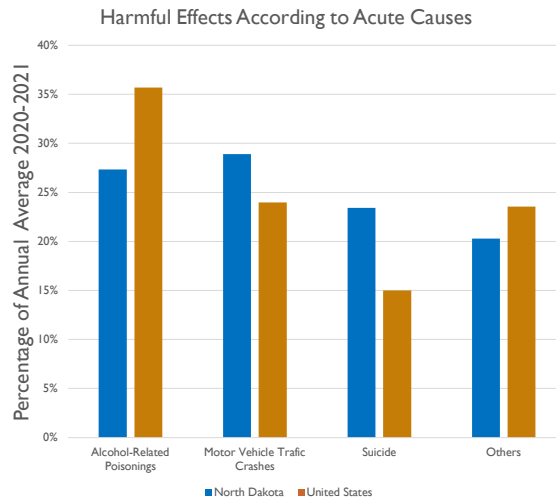


ARDI Alcohol-Attributable Deaths, ND | CDC. (n.d.). Retrieved March 24, 2024, from [https://nccd.cdc.gov/DPH\\_ARDI/Default/Report.aspx?T=AAM&P=BS1CD9A6-EBEC-4CCE-8CE1-08A85A546406&R=364A9A0A-8D65-4699-BEC6-A35D88AC78C2&M=D36AB84C-2C4E-4B7A-83EF-C7653655A5CD&L=&F=AAMCauseAgeGroupAllNew&D=H#](https://nccd.cdc.gov/DPH_ARDI/Default/Report.aspx?T=AAM&P=BS1CD9A6-EBEC-4CCE-8CE1-08A85A546406&R=364A9A0A-8D65-4699-BEC6-A35D88AC78C2&M=D36AB84C-2C4E-4B7A-83EF-C7653655A5CD&L=&F=AAMCauseAgeGroupAllNew&D=H#)

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### IMPACT ON NORTH DAKOTA

- A total of 432 alcohol-attributable deaths occurred in North Dakota, from 2020-2021.
- Approximately 30% lead to acute outcomes. A total of 128 deaths as a result of acute causes.
- Acute causes identified as other causes include drowning, homicide, hypothermia, motor vehicle nontraffic crashes, etc.

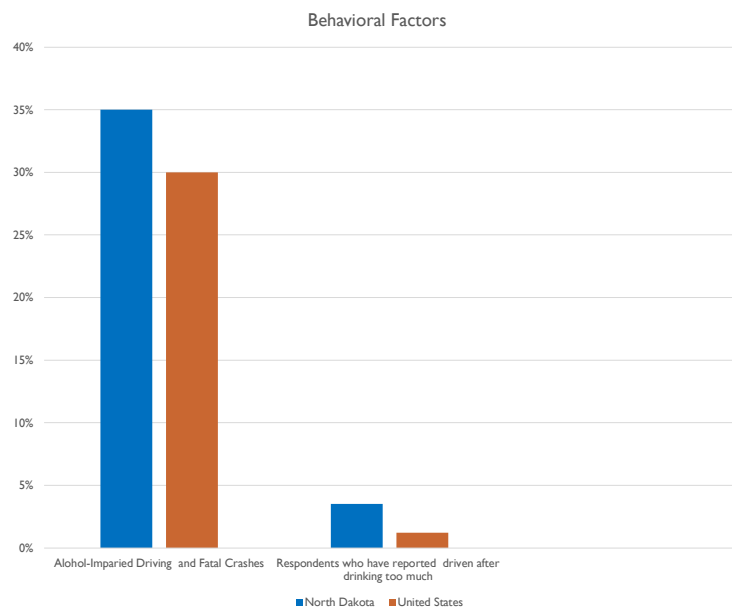


ARDI Alcohol-Attributable Deaths, ND | CDC (n.d.). Retrieved March 24, 2024, from [https://nccd.cdc.gov/DPH\\_ARDI/Default/Report.aspx?T=AAM&P=BS1CD9AG-EBEC-4CCE-BCE1-08A85A546406&R=364A9ADA-8D65-4699-BEC6-A35D88AC78C2&M=D36A884C-2C4E-4B7A-83EF-C7653655A5CD&L=&F=AAMCauseAgeGroupAllNew&D=H#](https://nccd.cdc.gov/DPH_ARDI/Default/Report.aspx?T=AAM&P=BS1CD9AG-EBEC-4CCE-BCE1-08A85A546406&R=364A9ADA-8D65-4699-BEC6-A35D88AC78C2&M=D36A884C-2C4E-4B7A-83EF-C7653655A5CD&L=&F=AAMCauseAgeGroupAllNew&D=H#)

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### IMPACT ON NORTH DAKOTA

- From 2009 to 2018, a total of 430 people have been killed in crashes involving an alcohol-impaired driver.
- In 2015, CDC BFRSS data ranked first in binge drinking with 24.1% admitting to binge drinking.
- Most recent data in 2022 shows a decline to 22.8% admitting to binge drinking, with North Dakota still ranked as the highest state with binge drinking in the United States excluding DC.
- Higher than the median rates in All States and DC of 17.0%



Center for Disease Control and Prevention (CDC); Behavioral Risk Factor Surveillance System (BRFSS) Fatality Analysis Reporting System (FARS) 2020

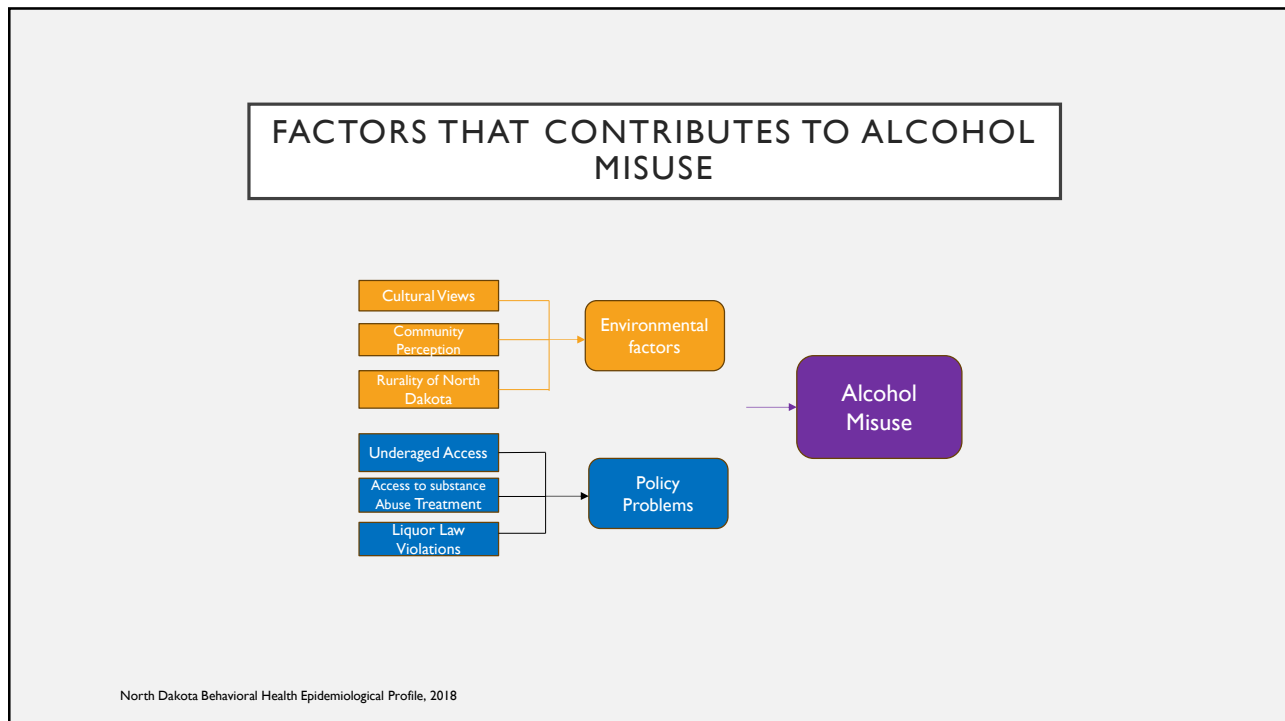
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## SOCIETAL IMPACT ON NORTH DAKOTA

- The impacts of alcohol abuse/misuse can be observed in various aspects of society.
- In 2020, North Dakota agencies served 4,436 homeless individuals.
- Approximately 340 individuals (7.6%) reported alcohol abuse.
- A total of 4,674 new victims of domestic violence in 2020 received services from 18 crisis intervention centers in North Dakota.
- An estimated 87% of the victims were women, and 63% of all cases were at least physically abused.
- Alcohol use was indicated in 29% of the new cases by abusers and 7% of both victims and offenders

2020-ND-DV-Fact-Sheet\_8.5x11. (n.d.).  
 15. Dakota Interagency Council on Homelessness, N. (2020). North Dakota Interagency Council on Homelessness 2020 Annual Report.

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North Dakota Behavioral Health Epidemiological Profile, 2018

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## POLICY RECOMMENDATIONS

- Improve access to alcohol problem assessment and treatment programs for individuals with alcohol misuse disorder.
- Provide school-based interventions to teach teenagers not to drink and drive or ride with alcohol-impaired drivers.
- Increase education/campaigns aimed at addressing alcohol misuse and the consequences of providing or selling alcohol to minors.
- Introduce and enforce the Dram Shop Laws policy that holds bars and bartenders legally responsible for over-serving patrons resulting in binge drinking.
- Increase and enforce publicized sobriety checkpoints at certain highly visible locations.
- Increase public health awareness of the dangers of binge drinking.
- Reduce the density of alcohol outlets to reduce access to alcohol.
- Increase taxation on alcohol sales especially in cases of one-time large sales to discourage the buying of large quantities of alcohol.

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## PUBLIC HEALTH INITIATIVES


- Improve funding for public health research addressing alcohol abuse in North Dakota and Rural America
- Public health quality improvement programs addressing the effectiveness of alcohol abuse preventative measures in North Dakota.
- Encourage evidence-based policies that address the reduction of alcohol abuse for legislative purposes.


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ACKNOWLEDGEMENTS

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Questions?

Thank you!

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