



ACCEPT **Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics**

Agenda

Webex link to join from PC, Mac, iOS or Android:

<https://uwmadison.webex.com/uwmadison/j.php?MTID=m6dfbe50f3c56cb4719e74b72b73ef916>

Join by phone:

+1-415-655-0001

Meeting number/Access code: 120 276 9209

Password: 12345

For attendance, purposes please text the following code: RALQAW to 608-260-7097

Session Date: Friday, August 20, 2021

Didactic Topic and Presenter:

Post-COVID and Other Recent Trends in Drinking in the US and Wisconsin and the Impact of Heavy Drinking on Health

Michael M. Miller, MD, DFASAM, DLFAPA

Past President, Amer Society of Addiction Medicine (ASAM)

Former Director, Amer Board of Addiction Medicine (ABAM)

Former Director, Amer College of Academic Addiction Medicine (ACAAM)

Content Experts:

Ritu Bhatnagar, MD; Lindsey Peterson, MS, CRC; Sheila M. Weix, MSN, RN, CARN

-
- 12:15 PM: Attendance text-in – Introductions
 - 12:25 PM: Case Presentation
 - Presenter: Jillian Landeck, MD
 - 1 PM: Didactic Presentation
 - Presenter: Michael M. Miller, MD, DFASAM, DLFAPA
 - 1:15 PM: End of Session

Funding for this service was made possible by 435200-G-18-11448-285932-880 from Wisconsin Department of Health Services. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government or the State of Wisconsin.

CONTINUING EDUCATION INFORMATION:

Accreditation Statement



In support of improving patient care, the University of Wisconsin–Madison ICEP is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

JOINTLY ACCREDITED PROVIDER™

INTERPROFESSIONAL CONTINUING EDUCATION

Credit Designation Statements

Accreditation Council for Pharmacy Education (ACPE)

The University of Wisconsin-Madison ICEP designates this live activity for a maximum of 1 hour of knowledge-based CE credit. Credit can be earned by successfully completing this live activity. Pharmacists and Pharmacy Technicians should claim only the credit commensurate with the extent of their participation in the activity. CE credit information, based on verification of live attendance, will be provided to NABP within 60 days after the activity completion.

Pharmacists and Pharmacy Technicians must enter their NABP number in their profile in order to receive credit.

2021 Universal Activity Number (UAN) JA0000358-9999-21-065-L01-P

American Medical Association (AMA)

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

American Nurses Credentialing Center (ANCC)

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1 ANCC contact hour.

UW Continuing Education Credits

The University of Wisconsin–Madison ICEP, as a member of the University Professional & Continuing Education Association (UPCEA), authorizes this program for 0.1 CEUs or 1.0 hour.

POLICY ON FACULTY AND SPONSOR DISCLOSURE

It is the policy of the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP) to identify, mitigate and disclose all relevant financial relationships with ineligible companies* held by the speakers/presenters, authors, planners, and other persons who may influence content of this accredited continuing education (CE). In addition, speakers, presenters and authors must disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation. For this accredited continuing education activity, all relevant financial relationships have been mitigated and detailed disclosures are listed below.

* Ineligible companies are those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. The ACCME does not consider providers of clinical service directly to patients to be commercial interests.



**ECHO ACCEPT
Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics
2020-2022**

**Post-COVID and Other Recent Trends in Drinking in the US and Wisconsin and the Impact of Heavy Drinking on Health
8/20/21**

Didactic Presenter: Michael M. Miller, MD, DFASAM, DLFAPA
Case Presenter: Jillian Landeck, MD

Provided by the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP)

Intended Audience:

Nurses, Nurse Practitioners, Pharmacists, Physicians, Physician Assistants, Pharmacy Technicians, Psychologists, Social Workers, Patient/Caregivers, Students

Objectives:

As a result of this educational regularly scheduled series, learners as members of the healthcare team will be able to:

- A. Discuss the various causes of illness, injury and death attributable to alcohol use beyond alcohol liver disease.
- B. Apply Wisconsin-specific data on alcohol use, morbidity, and mortality to advocate more effectively.
- C. Speak more accurately about the impact on illness, injury, and death attributable to alcohol and how case rates have changed during the COVID-19 pandemic.

Policy on Disclosure

It is the policy of the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP) to identify, mitigate and disclose all relevant financial relationships with ineligible companies* held by the speakers/presenters, authors, planners, and other persons who may influence content of this accredited continuing education (CE). In addition, speakers, presenters and authors must disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation. For this accredited continuing education activity, all relevant financial relationships have been mitigated and detailed disclosures are listed below.

**ineligible companies are those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. The ACCME does not consider providers of clinical service directly to patients to be commercial interests.*

Name	Role	Financial Relationship Disclosures	Discussion of Unlabeled/Unapproved uses of drugs/devices in presentation?	COI completion date
Randall Brown	RSS Chair	No relevant financial relationships to disclose	Yes	3/11/21
Nada Rashid	RSS Coordinator	No relevant financial relationships to disclose	No	3/11/21
Kathleen Maher	Planner	No relevant financial relationships to disclose	No	3/15/21
Ritu Bhatnagar	Planner	No relevant financial relationships to disclose	Yes	3/12/21
Paul Hutson	Planner	No relevant financial relationships to disclose	Yes	3/11/21
Susan Mindock	Planner	No relevant financial relationships to disclose	No	3/11/21
Lindsey Peterson	Planner	No relevant financial relationships to disclose	No	3/11/21
Sheila Weix,	Planner	No relevant financial relationships to disclose	No	3/11/21
Kellene Eagen	Planner	No relevant financial relationships to disclose	No	6/23/21

Joseph Galey	Planner	No relevant financial relationships to disclose	Yes	6/23/21
Michael M. Miller	Presenter	US WorldMeds, LLC (Contractor) Alkermes, Inc. (Contractor)	No	8/4/2021
Jillian Landeck	Presenter	No relevant financial relationships to disclose	No	8/15/2021

Accreditation Statement



In support of improving patient care, the University of Wisconsin–Madison ICEP is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

Credit Designation Statements

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1 ANCC contact hour(s).

The University of Wisconsin–Madison ICEP designates this knowledge-based activity for a maximum of 1 hour of CE credit. Credit can be earned by successfully completing the activity. Credit will be provided to NABP CPE Monitor within 60 days after the activity completion.
UAN: 2021 Universal Activity Number (UAN) JA0000358-9999-21-065-L01-P

The University of Wisconsin–Madison ICEP, as a member of the University Professional & Continuing Education Association (UPCEA), authorizes this program for 0.1 CEUs or 1 hour.



ACCEPT

Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics

Patient Case Presentation Form

***Please do not attach any patient-specific files or include any Protected Health Information.**

1. Date: 8/20/21
2. Presenter Name: Jillian Landeck
3. Presenter Organization: UW Madison
4. ECHO ID: 8830
5. Have you presented this patient during this teleECHO clinic before? ☐ Yes ☒ No
6. Please state your main question for this case:
Recommendations for medication management or treatment for stimulant use disorder/withdrawal

Patient Demographic Information:

7. Age: 32
8. Sex: F
9. Education/Literacy: High School
10. Income source: none, support from father's SSDI
11. Social Factors/History:
Unstable housing-- Currently living with father in trailer.
Has 4 year old son who is in her custody but living with her mother.
Unemployed currently. Past work as cashier at Culvers, Walmart, McDonalds.
Severe trauma/abuse history.

12. Substance Use History:

Methamphetamine—IV meth last use July 2021, initiated in 2019, heavy x 2-3 months
Cocaine— IV, inhaled and intranasal crack cocaine, last use July 2021
Heroin—IV, last use May 2021, intermittent x 10 years. Past treatment with buprenorphine.
Tobacco—current 2ppd smoker, initiated age 16
Alcohol—rare currently, heavy in the past but denies history of alcohol use disorder

13. Consequences of Substance Use:

- Social/occupational/educational:

- Physical (including evidence of tolerance/withdrawal):

14. Interventions that have been tried:

Past PCP (dx anxiety and depression, chronic pelvic pain)-- Amitriptyline 25mg

ED 9/2018, 3/2019, 5/2019, 11/2019-- opioid withdrawal, injection site cellulitis

5/28- taken by father to ED after fled from boyfriend. Physically and sexually assaulted for ~2 months. 9th and 10th rib fractures. SANE eval. D/c with oxycodone

5/30- taken to ED by father for agitation, active SI. IM Haldol, transferred to local facility x 5 days.

6/4- OV. Reports severe anxiety, agitation, panic attacks, insomnia, cocaine and crystal meth cravings. Father described her going into rants and rages, bizarre statements about TV talking to her, cannot tell "fiction from reality", wanting to leave to use cocaine, see ex-boyfriend because he still loves her. Denies any drug use. Denies SI.

Escitalopram 10mg

Hydroxyzine 25mg QID prn

Lidocaine 4% patch

Acetaminophen 1000mg TID

Ibuprofen 800mg TID

Oxycodone 5mg every 6h prn #10 – for rib fractures

6/7 call from father re: medications "not strong enough". Used mother's Belsomra 20mg on 6/5 and she finally fell asleep after 1.5 hours. Next day pacing, irritable, angry, increasing flashbacks. Refusing to inpatient or to ED.

Quetiapine 50mg qhs added

6/8 call that she still cannot relax, not sleeping. Still having flashbacks, auditory hallucinations. Took amitriptyline as well as quetiapine 6/7 hs.

Quetiapine increased to 100mg qhs

6/9 OV. Cravings to use cocaine and meth. Denies opioid cravings, not interested in buprenorphine. Naloxone rx given.

Increased quetiapine to 200mg qhs

Increased hydroxyzine to 50mg QID prn

Referrals to psychiatry, SW, CCS

Declines peer support

6/10 call re: insomnia. Tried Benadryl without relief.

Added melatonin 3-6mg prn.

6/15 OV-- reports tremor/akathisia, only sleeping 3 hours with nightmares. Intake with CCS. Dentist- 4 teeth pulled.

d/c quetiapine

spoke with psychiatrist on call- consider risperidone, recommended inpatient, patient refuses

6/16 call re: uncontrolled anxiety, flashbacks. Tried Suboxone 4mg BID—no benefit, but wondering if she should get a rx for this. Talking about leaving to get a hotel room- father able to convince her to stay.

Prazosin 1mg qhs added

6/17 Telemed visit. No benefit from Prazosin, sleeping 2-3h at most. Tremor resolved. Persistent cocaine craving. Antibiotic associated diarrhea (Augmentin).

Continue prazosin, increase to 2mg

6/29 Call re: insomnia. Last week was better—less anxiety. Then no sleep for 50h and panic attack in the car, still having auditory hallucinations.

Telemed with colleague

Added trazodone 50mg qhs and increased prazosin to 4mg

6/30 Telemed. Tremor returning after increasing prazosin (before adding trazodone). Still having panic attacks and severe anxiety symptoms some days. Enrolled in CCS program, psychiatry and psychology appts next week.

Buspirone 10mg BID added

7/30 Cancelled appt

8/16 Phone call. Left x 7 days in late July—relapsed on cocaine and meth with ex-boyfriend. Physical abuse. Arrested, bailed out by mother. Established with psychiatrist and therapist in July. Escitalopram stopped due to questionable benefit, fogginess, anxiety. Continues on buspirone 10mg BID and trazodone 50mg qhs. Clonidine 0.1mg QID added. Less agitation, but significant anxiety. Insomnia some nights.

15.

Current Addiction and Mental Health-related Medications:	Medical/Behavioral Health Diagnosis:
<ul style="list-style-type: none">• Clonidine 0.1mg QID• Buspirone 10mg BID• Trazodone 50mg qQHS• Naloxone nasal spray	<ul style="list-style-type: none">• Methamphetamine and cocaine withdrawal• Stimulant Use Disorder, in early remission• Opioid Use Disorder, in early remission• Anxiety• PTSD• Tobacco Use Disorder• Hepatitis C- treated with Epclusa 2015, negative 6/2021• Dental abscess/poor dentition• Chronic pelvic pain• Stockholm syndrome

16.

Patient Strengths/protective factors:	Risk factors:
<ul style="list-style-type: none">• 4 year old son, motivation to parent• Goal to get associate's degree• Father's desire to support patient in recovery	<ul style="list-style-type: none">• Unstable social situation• Craving• IPV

17. Labs (as indicated), include summary of urine testing or last urine drug screen results:

18. Patient Goals/Motivations for Treatment:

- Control anxiety, insomnia, PTSD symptoms
- Control cravings, prevent relapse
- Obtain stable housing, employment, take care of son

19. Proposed Diagnoses:

20. Proposed Treatment Plan:

- Housing
- CCS program
- Medication management
 - o F/U visit 9/2 (cancelled 7/30)
 - o ? role for bupropion, mirtazapine, GABAergic medications, modafinil?

By initialing here JL you have acknowledged that Project ECHO case consultations do not create or otherwise establish a provider-patient relationship between any ECHO clinician and any patient whose case is being presented in a teleECHO clinic.

DSM 5 Criteria for Substance Use Disorder

A use disorder is characterized by maladaptive use resulting in repetitive consequences over the previous 12 months. A minimum of 2-3 criteria is required for a mild substance use disorder diagnosis, while 4-5 is moderate, and 6-7 is severe (American Psychiatric Association 2013)

1. Taking the substance in larger amounts and for longer than intended
2. Wanting to cut down or quit but not being able to do it
3. Spending a lot of time obtaining the substance
4. Craving or a strong desire to use
5. Repeatedly unable to carry out major obligations at work, school, or home due to use

6. Continued use despite persistent or recurring social or interpersonal problems caused or made worse by use
7. Stopping or reducing important social, occupational, or recreational activities due to opioid use
8. Recurrent use in physically hazardous situations
9. Consistent use despite acknowledgment of persistent or recurrent physical or psychological difficulties from using
10. *Tolerance as defined by either a need for markedly increased amounts to achieve intoxication or desired effect or markedly diminished effect with continued use of the same amount. (Does not apply for diminished effect when used appropriately under medical supervision)
11. *Withdrawal manifesting as either characteristic syndrome or the substance is used to avoid withdrawal (Does not apply when used appropriately under medical supervision)



“Post-COVID and Other Recent Trends in Drinking in the US and Wisconsin and the Impact of Heavy Drinking on Health”

Michael M. Miller, MD, DFASAM, DLFAPA

UW ACCEPT Project ECHO Didactic

Department of Family Medicine and Community Health

University of Wisc. School of Medicine and Public Health

Madison, Wisconsin

August 20, 2021

Funding for this service was made possible by 435200-G-18-11448-285932-880 from Wisconsin Department of Health Services. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government or the State of Wisconsin.



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

Accreditation Statement:

In support of improving patient care, the University of Wisconsin–Madison ICEP is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

POLICY ON FACULTY AND SPONSOR DISCLOSURE

It is the policy of the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP) to identify, mitigate and disclose all relevant financial relationships with ineligible companies* held by the speakers/presenters, authors, planners, and other persons who may influence content of this accredited continuing education (CE). In addition, speakers, presenters and authors must disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation. For this accredited continuing education activity, all relevant financial relationships have been mitigated and detailed disclosures are listed below.

* Ineligible companies are those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. The ACCME does not consider providers of clinical service directly to patients to be commercial interests.

Disclosures

I disclose the following relevant relationships with ineligible companies:

- ▶ US WorldMeds, LLC (Contractor)
 - ▶ Alkermes, Inc. (Contractor)

Michael M. Miller, MD, DFASAM, DLFAPA

asamdrmike@gmail.com

Clinical Adjunct Professor

Department of Family Medicine and
Community Health

University of Wisconsin School of Medicine
and Public Health

(ASAM)

Distinguished Life Fellow

American Psychiatric Association (APA)

Clinical Associate Professor

Department of Psychiatry and Behavioral
Medicine

Medical College of Wisconsin (MCW)

Past President and Board Chair

American Society of Addiction Medicine
(ASAM)

Interim Medical Director

Connections Counseling, LLC
5005 University Avenue, Suite 100
Madison, WI 53705

Former Director

American Board of Addiction Medicine
(ABAM) and American College of Academic
Addiction Medicine (ACAAM)

Distinguished Fellow

American Society of Addiction Medicine

▶ Heavy Drinking

15 or more drinks per week ♂

8 or more drinks per week ♀

▶ Binge Drinking

5 or more drinks per day ♂

4 or more drinks per day ♀

What's a Standard Drink?

A standard drink in the United States is any drink that contains about 14 grams of pure alcohol (about 0.6 fluid ounces or 1.2 tablespoons). Below are U.S. standard drink equivalents. These are approximate, since different brands and types of beverages vary in their actual alcohol content.

12 oz. of beer or cooler	8–9 oz. of malt liquor (5 oz. shown in a 12-oz. glass that, if full, would hold about 1.5 standard drinks of malt liquor)	5 oz. of table wine	3–4 oz. of fortified wine (such as sherry or port) (3.5 oz. shown)	2–3 oz. of cordial, liqueur, or aperitif (2.5 oz. shown)	1.5 oz. of brandy (a single jigger)	1.5 oz. of spirits (a single jigger of 80-proof gin, vodka, whiskey, etc.) Shown straight and in a highball glass with ice to show the level before adding a mixer
~5% alcohol	~7% alcohol	~12% alcohol	~17% alcohol	~24% alcohol	~40% alcohol	~40% alcohol
12 oz.	8.5 oz.	5 oz.	3.5 oz.	2.5 oz.	1.5 oz.	1.5 oz.

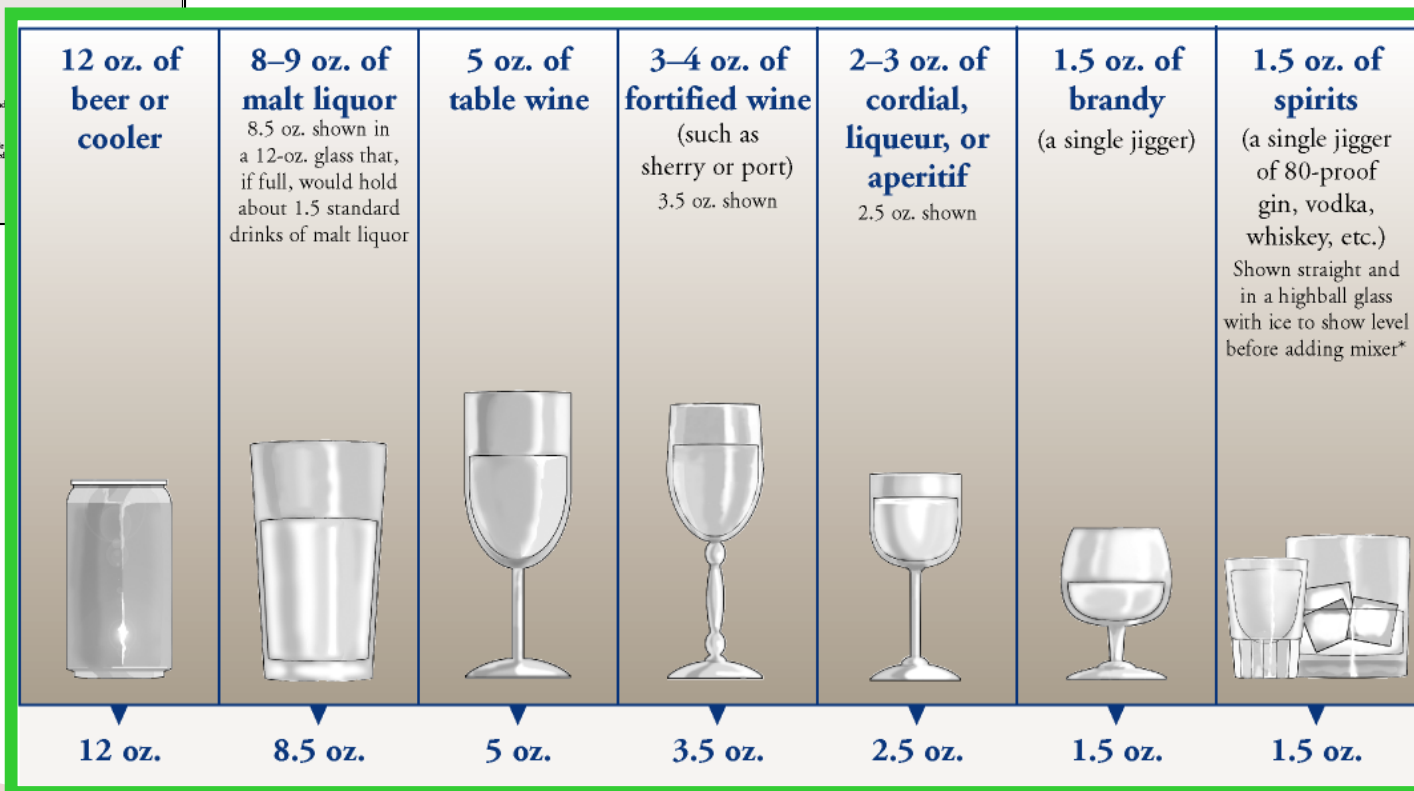
Many people don't know what counts as a standard drink and so they don't realize how many standard drinks are in the containers in which these drinks are often sold. Some examples:

- For beer, the approximate number of standard drinks in
 - 12 oz. = 1
 - 16 oz. = 1.3
 - 22 oz. = 2
 - 40 oz. = 3.3
- For malt liquor, the approximate number of standard drinks in
 - 12 oz. = 1.5
 - 16 oz. = 2
 - 22 oz. = 2.5
 - 40 oz. = 4.5
- For table wine, the approximate number of standard drinks in
 - a standard 750 mL (25.4 oz.) bottle = 5
- For 80-proof spirits, or "hard liquor," the approximate number of standard drinks in
 - a mixed drink = 1 or more
 - a fifth (25 oz.) = 17
 - a pint (16 oz.) = 11
 - 1.75 L (59 oz.) = 39

*Note: It can be difficult to estimate the number of standard drinks in a single liquor. Depending on factors such as the type of spirit and the recipe, a mixed drink can contain three or more standard drinks.

What's a Standard Drink? (page 24)

- In the U.S., a standard drink is any drink that contains about 14 grams of pure alcohol (about 0.6 fluid ounces or 1.2 tablespoons).



- ▶ Binge drinking is defined as a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 g/dl or above. This typically happens when men consume 5 or more drinks or women consume 4 or more drinks in about 2 hours. Most people who binge drink do not have a severe alcohol use disorder.

- ▶ Excessive alcohol use includes binge drinking, heavy drinking, any alcohol use by people under the age 21 minimum legal drinking age, and any alcohol use by pregnant women.

About 90% of people who drink excessively would *not* be expected to meet the clinical diagnostic criteria for having severe alcohol use disorder (DSM-IV Alc. Dependence)

- ▶ Esser MB, Hedden SL, Kanny D, Brewer RD, Gfroerer JC, Naimi TS. Prevalence of alcohol dependence among US adult drinkers, 2009–2011. *Prev Chronic Dis*. 2014;11:140329. doi: <http://dx.doi.org/10.5888/pcd11.140329>.
- ▶ Data were analyzed from the 138,100 adults who responded to the National Survey on Drug Use and Health in 2009, 2010, or 2011.

Kanny D, Naimi TS, Liu Y, Lu H, Brewer RD. Annual Total Binge Drinks Consumed by U.S. Adults, 2015. *Am J Prev Med* 2018;54:486–496.

- ▶ One in six US adults binge drinks about four times a month, consuming about seven drinks per binge. This results in 17 billion total binge drinks consumed by adults annually, or 467 binge drinks per binge drinker.

Kanny D, Naimi TS, Liu Y, Lu H, Brewer RD. Annual Total Binge Drinks Consumed by U.S. Adults, 2015. *Am J Prev Med* 2018;54:486–496.

- ▶ Binge drinking is most common among younger adults aged 18–34 years, but more than half of the total binge drinks are consumed by those aged 35 and older.

Kanny D, Naimi TS, Liu Y, Lu H, Brewer RD. Annual Total Binge Drinks Consumed by U.S. Adults, 2015. *Am J Prev Med* 2018;54:486–496.

- ▶ Binge drinking is twice as common among men than among women. Four in five total binge drinks are consumed by men.
- ▶ Binge drinking is more common among people with household incomes of \$75,000 or more and higher educational levels. Binge drinkers with lower incomes and educational levels, however, consume more binge drinks per year.

<https://www.dhs.wisconsin.gov/stats/aoda.htm>

- ▶ In 2019, **Wisconsin** ranked third in the country in terms of the percentage of adults who **currently drink alcohol (64.4%)**, behind only Washington D.C. (68.7%) and New Hampshire (64.6%), and higher than other Midwest states like Minnesota (60.5 %), Iowa (58.9%), Illinois (57.4%), and Michigan (56.7%) [Source: [Centers for Disease Control and Prevention\(link is external\)](#)]
- ▶ More Wisconsin adults reported current alcohol use (in the past 30 days) than the **national average (55.1%)**.
- ▶ When Wisconsin adults drink, they drink more often and consume more alcohol than adults in other states, drinking an average of 2.6 drinks per drinking occasion [Source: [Centers for Disease Control and Prevention\(link is external\)](#)]. **Wisconsin (21.9%)** ranks third in **the nation (16.1%)** for **adult binge drinking**, which is defined as four or more drinks for a woman or five or more drinks for a man on a single occasion [Source: [Centers for Disease Control and Prevention\(link is external\)](#)]

Adolescents in Wisconsin to not drink more frequently or exhibit more binge drinking than the national average; but the perception of harm from binge drinking is lower (36.7%) than the national average (43.1%).

Research has shown that people who start drinking before the age of 15 are four times more likely to meet the criteria for alcohol dependence at some point in their lives [Source: [Centers for Disease Control and Prevention\(link is external\)](#)]. Research has also indicated that drinking alcohol is associated with the use of drugs and interferes with brain development. Accordingly, prevention efforts should focus on addressing the low perception of risk related to alcohol consumption among Wisconsin youth [Sources: [Wisconsin Department of Public Instruction\(link is external\)](#) (PDF) and [Centers for Disease Control and Prevention\(link is external\)](#)].

Alcohol Use Adult Population (18+)

	Alcohol Use in the Past Month	Binge Drinking in the Past Month	Perceive Great Risk from Weekly Binge Drinking
Wisconsin	64.8%	21.9%	37.9%
U.S.	55.1%	16.1%	45.0%

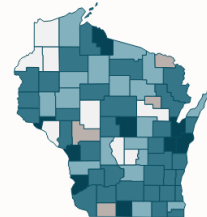
Overview:

This dashboard displays estimates of adult alcohol consumption from two national health surveys, the Behavioral Risk Factor Survey and the National Survey on Drug Use and Health. These surveys present a picture of alcohol consumption in Wisconsin and the nation.

Binge Drinking

22.9%

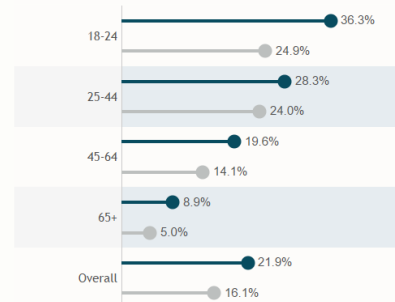
Statewide Estimate
(2014 - 2019)



Binge Drinking
Rates by County

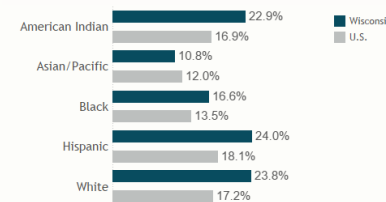
- 13-16%
- 17-21%
- 22-26%
- 27-31%
- Insufficient data

Percentage who Engaged in Binge Drinking in the Past Month by Age (2019)



Wisconsinites in every age group engaged in more binge drinking than the U.S. median for that age group. Wisconsinites ages 18 to 24 had the highest proportion of binge drinkers.

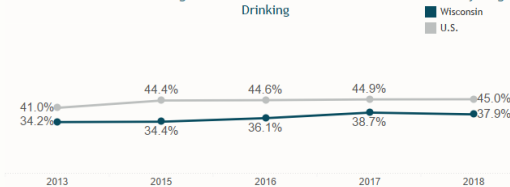
Percentage who Engaged in Binge Drinking in the Past Month, by Race/Ethnicity (2014-2019)



With the exception of Asians, Wisconsinites of all races and ethnicities engaged in binge drinking at higher rates than the U.S. median.

Select a question to see trend over time:
Perception of Great Risk From Weekly Binge Drinking

Trend Over Time: Percentage who Perceived Great Risk of Harm From Weekly Binge Drinking



Recommended Citation: Wisconsin Department of Health Services. DHS Interactive Dashboards, Alcohol Adult Consumption Module [web query].

Filters

Select a Demographic:
Age

Technical Notes

Email Us!

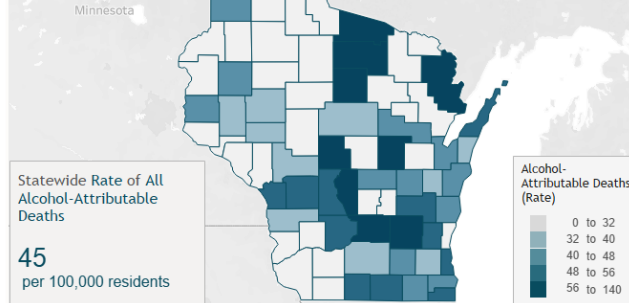
Wisconsin's Estimated Alcohol-Attributable Deaths

All Alcohol Deaths
45
per 100,000 residents

Chronic Deaths
20
per 100,000 residents

Acute Deaths
25
per 100,000 residents

Click on a county to filter the dashboard. Ctrl-click to select multiple counties.



Filters

Cause of Death
All Alcohol-Attributable Deaths

Rate or Count
Rate

Year
☐ 2014
☐ 2015
☐ 2016
☐ 2017
☐ 2018
☒ 2019
☐ 2020

Age
All

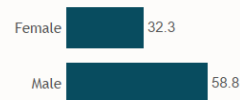
Ethnicity
All

Race
All

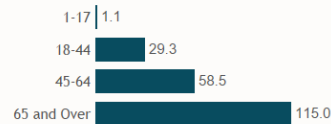
Sex
All

Click on a demographic group in the bar chart (e.g., "Female") to filter the rest of the dashboard.

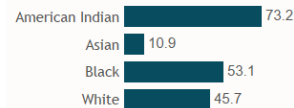
All Alcohol-Attributable Deaths by Sex (2019)



All Alcohol-Attributable Deaths by Age (2019)



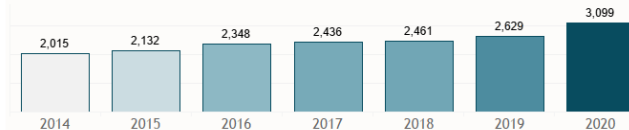
All Alcohol-Attributable Deaths by Race (2019)



All Alcohol-Attributable Deaths by Ethnicity (2019)



All Alcohol-Attributable Deaths Over Time



Technical Notes

Email Us!

Recommended Citation:

Wisconsin Department of Health Services. DHS Interactive Dashboards: Alcohol Death Module. Last Updated 7/9/2021 8:00:35 PM.

Other great information is available at the Wisconsin Alcohol Policy Project

- ▶ <https://law.wisc.edu/wapp/>
- ▶ At the Law School: director is Julia.Sherman@wisc.edu

Alcohol–Related Harms are Increasing

www.law.wisc.edu/wapp

- Between 2000—2016, death rates from alcohol more than doubled. Source: White et al. 2020
- Emergency Department visits involving alcohol increased by 61.6%, costing \$15.3 billion, from 2006-2014 Source: White et al., ACER, 2018
- From 1999-2016, annual deaths from liver cirrhosis increased by 62%; liver cancer deaths doubled. Source: Tapper & Parikh 2018
- Age-adjusted death rates for alcoholic liver disease up by 40.6% 1999-2017; increase higher among women and young people. Source: Woolf and Schoomaker, JAMA, 2019

Scott S, Kaner E. (Guest Editorial) *J Public Health (Oxf)*. 2014; 36:396-98.

Alcohol and public health: heavy drinking is a heavy price to pay for populations.

- ▶ Alcohol use is 5th leading risk factor for development of chronic disease
- ▶ Alcohol contributes more to risk of hypertension than does salt intake (not from this editorial, but from AT McLellan, PRISM Project, U Penn)
- ▶ In the UK alone, alcohol-related hospital admissions increased by 41% between 2003 and 2013

Rehm J, et al. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*. 2009; 373:2223-33.

- ▶ An estimated 3·8% of all global deaths and 4·6% of global disability-adjusted life-years (DALYs) are attributable to alcohol.
- ▶ The costs associated with alcohol amount to more than 1% of the gross national product in high-income and middle-income countries.
- ▶ Alcohol is linked to many disease categories, but alcohol-use disorders, cancer, cardiovascular disease, liver cirrhosis, and injury are the most important disease categories causally affected by alcohol.
- ▶ Overall, we conclude that alcohol consumption is one of the major avoidable risk factors, and actions to reduce burden and costs associated with alcohol should be urgently increased.

Molina PE, Nelson S. Binge Drinking's Effects on the Body. *Alcohol Res.* 2018; 39:99-109.

- ▶ Alcohol binge drinking prevalence continues to rise, particularly among individuals ages 18 to 24.
- ▶ High blood alcohol levels achieved with this pattern of alcohol consumption are of particular concern, as alcohol can permeate to virtually all tissues in the body, resulting in significant alterations in organ function, which leads to multisystemic pathophysiological consequences.

Bernardo S, et al. Outcomes of excessive alcohol drinkers without baseline evidence of chronic liver disease after 15 years follow-up: Heavy burden of cancer and liver disease mortality. *PLoS One*. 2021; 16(5):e0252218.

- ▶ Alcohol consumption is the third preventable cause of mortality, and the 7th cause of mortality, accounting for 5% of deaths worldwide.
- ▶ Any amount of alcohol intake is associated with increased mortality. Alcohol consumption is associated with more than 200 diseases.
- ▶ Alcohol intake is responsible for up to 50% of cases of liver cirrhosis worldwide, with geographical differences: alcohol contributes to 15% of cirrhosis-related admissions in Africa, 48% in the US, and 72% in Europe. However, only 15%-20% of heavy-drinkers will develop liver cirrhosis.
- ▶ Abstinence is known to decrease the risk for progression to cirrhosis, and to improve the prognosis of patients with cirrhosis.

- ▶ The amount of alcohol intake seems critical in inducing liver disease. Indeed, there seems to be a dose-dependent effect between the amount of alcohol intake and the risk of developing chronic liver disease (CLD), as well as, a threshold effect, with alcohol intake higher than 30g/day in men and 20g/day in women being considered potentially hepatotoxic.
- ▶ The duration of alcohol consumption necessary to develop liver cirrhosis is unknown, but there seems to be a linear increase with time. Development of liver cirrhosis has been described after just 4 years of alcohol consumption; however, the prevalence of cirrhosis increases exponentially after 8–12 years of consumption.
- ▶ Several known co-factors increase the risk for alcohol-associated liver cirrhosis, such as hepatitis C virus infection, obesity, diabetes-mellitus, genetic factors (for example, polymorphisms in the PNPLA3 and TM6SF2 genes), smoking, and low coffee intake.

- ▶ Cardiovascular disease
- ▶ Cancer
- ▶ Injuries
- ▶ Tobacco-related mortality among heavy drinkers and those with AUD

- ▶ Many articles in handout

- ▶ ALSO: J-shaped curve for effects of alcohol on the brain

Welch KA. Alcohol consumption and brain health. *BMJ*. 2017; 357:j2645

(Commentary on Topiwala A, et al. Moderate alcohol consumption as risk factor for adverse brain outcomes and cognitive decline: longitudinal cohort study. *BMJ* 2017;357:j2353.)

Burton R, Sheron N. No level of alcohol consumption improves health.

Lancet. 2018; 392(10152):987-988
Commentary on *Lancet*. 2018;
392(10152):1015-1035.

- ▶ Life expectancy in the United States declined between 2013–2017, before increasing by 0.1 years in 2018. [Tilstra et al., *Am J Epidemiol.* 2021;00(00):1–9.]
- ▶ Many attributed this to increased mortality attributable to so-called Deaths of Despair. Viewed as part of malaise and hopelessness associated with stagnant working-class incomes, high unemployment in former manufacturing towns, a sense of disenfranchisement by persons in rural America especially in the Midwest, Great Plains and mountain states (“fly-over states”).
- ▶ Triad of causes of early mortality comprise the Deaths of Despair: suicide, drug overdose deaths, alcohol liver disease.

Murphy SL, Xu JQ, Kochanek KD, et al. Mortality in the United States, 2017. Hyattsville, MD: National Center for Health Statistics. 2018. (NCHS Data Brief, no. 328.)

- ▶ In 2017, life expectancy at birth was 78.6 years for the total U.S. population—a decrease from 78.7 years in 2016. For males, life expectancy changed from 76.2 in 2016 to 76.1 in 2017. For females, life expectancy remained the same at 81.1.

- ▶ Life expectancy in the United States declined between 2013–2017, before increasing by 0.1 years in 2018. To date, explanations for recent trends in US life expectancy have largely focused on midlife deaths attributed to suicide and poisonings from drugs and alcohol, especially among the White population. These popularly proclaimed, “deaths of despair” (i.e., chronic liver disease, suicide, and drug overdoses) were believed to reflect cohort-based cumulative disadvantages related to rising distress, economic insecurity, and chronic pain in the White population.
- ▶ There has been less attention on Black mortality trends from these same causes

- ▶ We...contend that recent mortality trends in both the US Black and White populations most likely reflect period-based exposures to 1) the US opioid epidemic and 2) the Great Recession.
- ▶ Mortality trends from “deaths of despair” among Black Americans are both similar to and different from trends among White Americans. First, mortality rates from “deaths of despair” increased between 1990 and 2017 in all age groups and for all race-sex populations, except Black men and women aged 35–49 years. Among Black men aged 35– 49 years, “deaths of despair” mortality decreased by 36.2 deaths per 100,000 and decreased by 3.0 deaths for Black women. These declines in total “deaths of despair” mortality were overwhelmingly driven by substantial declines in death rates from alcohol use.

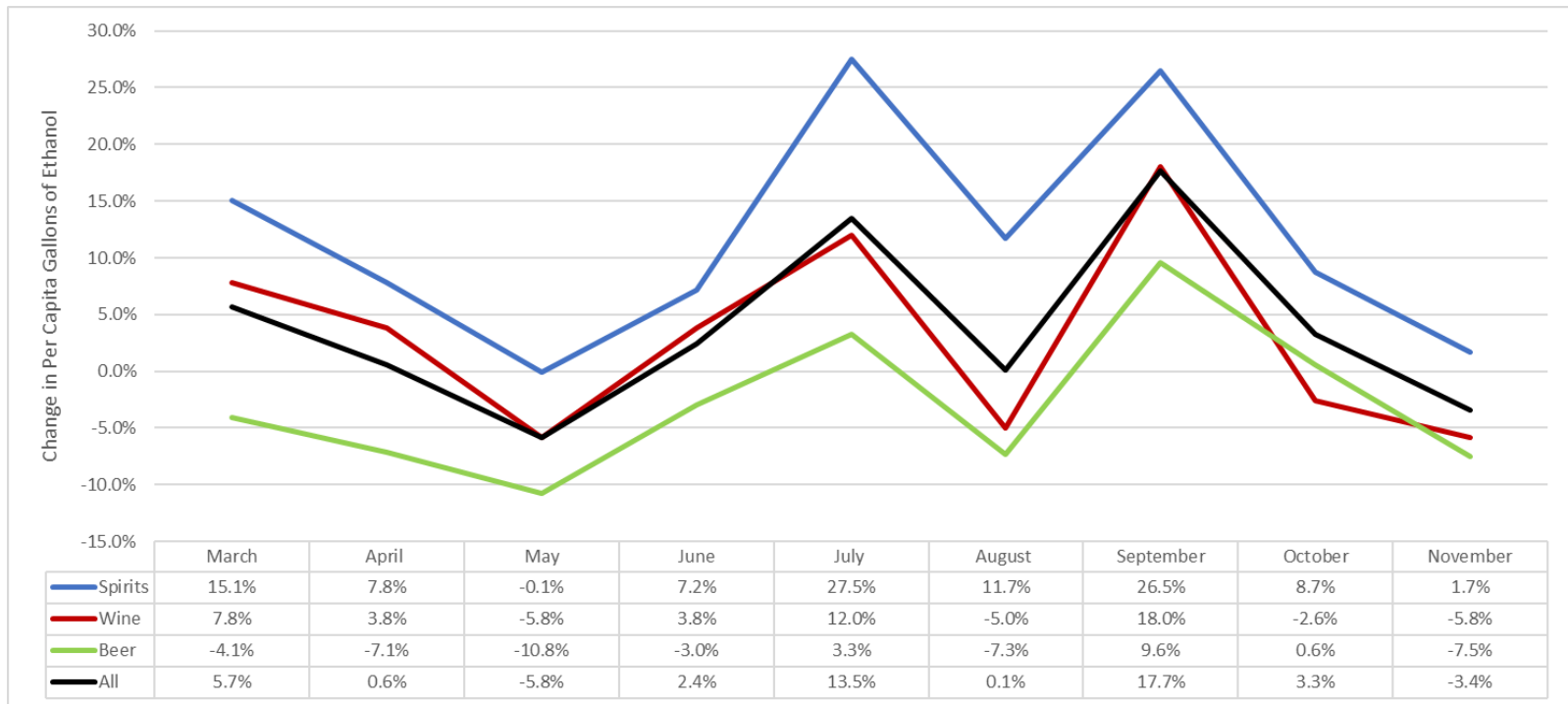
- ▶ Our medium estimate indicates a reduction in US life expectancy at birth of 1.13 y to 77.48 y, lower than any year since 2003. We also project a 0.87-y reduction in life expectancy at age 65 y.
- ▶ The Black and Latino populations are estimated to experience declines in life expectancy at birth of 2.10 and 3.05 y, respectively, both of which are several times the 0.68-y reduction for Whites. These projections imply an increase of nearly 40% in the Black–White life expectancy gap, from 3.6 y to over 5 y, thereby eliminating progress made in reducing this differential since 2006.

Andrasfay T, Goldman N. Reductions in 2020 US life expectancy due to COVID-19 and the disproportionate impact on the Black and Latino populations. *Proceedings of the National Academy of Sciences*. 2021;118:e2014746118. [written based on 210,000 deaths by mid-October 2020 with projection of 300,000 deaths due to COVID-19 in total; however, current deaths are over 600k with new wave just starting]

- ▶ How has alcohol-related morbidity and mortality changed during the pandemic?

Percentage changes in monthly per capita sales of alcoholic beverages (in gallons of ethanol) in 2020 compared to the prior 3-year average in 10 states (Alaska, Colorado, Florida, Illinois, Kentucky, Massachusetts, Minnesota, Missouri, North Dakota, and Tennessee).

<https://www.niaaa.nih.gov/research/surveillance-reports/alcohol-sales-during-covid-19-pandemic>



Barbosa C, Cowell AJ, Dowd WN. Alcohol Consumption in Response to the COVID-19 Pandemic in the United States. *J Addict Med*. 2020/ADM.0000000000000767. Online ahead of print.

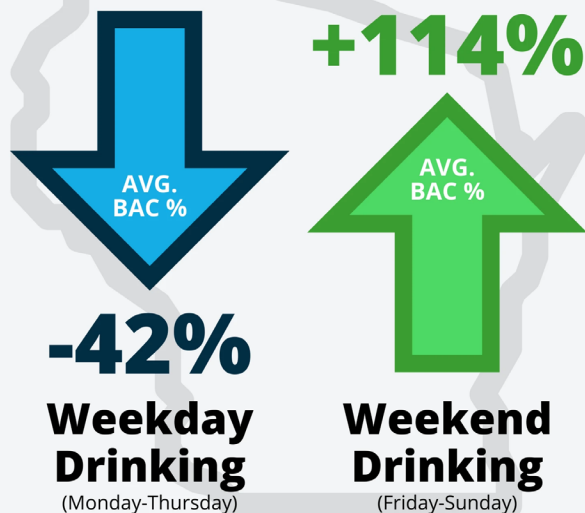
- ▶ **Conclusions:** There is an association among the COVID-19 pandemic, the public health response to it, changes in alcohol policy, and alcohol consumption. Public health monitoring of alcohol consumption during the pandemic is warranted.
- ▶ **Results:** Compared to February, respondents reported consuming more drinks per day in April ($\uparrow 29\%$, $P < 0.001$), and a greater proportion reported exceeding recommended drinking limits ($\uparrow 20\%$, $P < 0.001$) and binge drinking ($\uparrow 21\%$, $P = 0.001$) in April. These differences were found for all sociodemographic subgroups assessed. February to April differences in the proportion exceeding drinking limits were larger for women than men ($P = 0.026$) and for Black, non-Hispanic people than White, non-Hispanic people ($P = 0.028$).

Wisconsin Alcohol Sales Skyrocketed

- ▶ Alcohol beverage sales spiked 55% the week of March 21.
- ▶ Bud Light sales increased 44% in April and May 2020
- ▶ Ready-to-drink cocktails rose by 106%.
- ▶ Consumers purchased 90% more 24 and 30-packs of beer.
- ▶ Sales of 3-liter boxed wine and online alcohol sales also up substantially.
- ▶ Instacart measured 72% increase in alcohol sales in March 2020



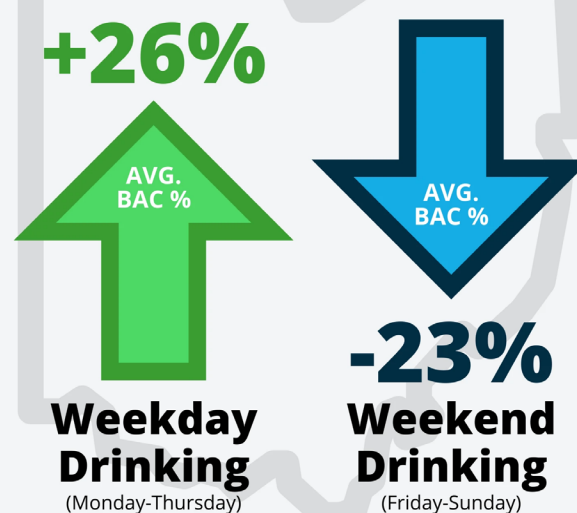
Drinking in Wisconsin Jumped 114% First Weekend After Quarantine



BAC data was collected anonymously from BACtrack App users in Wisconsin, between March 12th and April 1st, 2020. First day after "shelter in place" mandate was Thursday March 26th, 2020.

BACtrack

Weekday Drinking in Ohio Jumped 26% First Week After Quarantine



BAC data was collected anonymously from BACtrack App users in Ohio, between March 10th and March 30th, 2020. First day after "shelter in place" mandate was Tuesday March 24th, 2020.

BACtrack

- ▶ the upper 5 to 10% of the drinkers increased their consumption and hence the prevalence of heavy drinkers increased.
- ▶ Teens: decreased binge drinking, but more drinking with their parents
- ▶ Calina D, et al. COVID-19 pandemic and alcohol consumption: Impacts and interconnections. *Toxicol Rep.* 2021; 8:529-35.

- During the lockdown, the children were more likely to see their parents drinking, due to the time spent together at home. Parental model regarding the drinking behaviors can play a major role in the intergenerational transmission of excessive alcohol consumption.
- In a study performed on 1,054 Canadian adolescents (Mean age = 16.7 +/- 0.8), in which they completed an online survey, they reported the frequency of alcohol use, binge drinking, cannabis use, and vaping in the 3 weeks before and directly after social distancing. The results showed a decrease in binge drinking and vaping, but over 93 % declared that they were drinking at home with their parents, seen as more acceptable behavior.

► Calvey et al. The Changing Landscape of Alcohol Use and Alcohol Use Disorder During the COVID-19 Pandemic -- Perspectives of Early Career Professionals in 16 Countries. *J Addict Med.* 2020; 14:e284-e286.

- In Ireland, the media reported a 58% increase in alcohol sales compared to last year. ...Following national lockdown, 22% of respondents increased alcohol consumption (particularly in the age range of 18–44), 17% decreased alcohol consumption (predominantly males), while older individuals and those living in rural areas were less likely to change their alcohol consumption patterns.
- The majority of the population in New Zealand has limited access to hard liquors but wine and beer are available. The outcome of a population survey (n 1/4 1190) in April 2020, indicates that 47% of respondents reported drinking the same amount as usual during the lockdown, 34% reported drinking less than usual and 20% reported drinking more than usual.
- In France, a population survey (n 1/4 1344) reported that 11% of respondents increased their alcohol consumption during lockdown, 65% consumed the same amount of alcohol and 25% decreased their alcohol consumption.

Young KN, et al. Drug and Alcohol Positivity of Traumatically Injured Patients Related to COVID-19 Stay-at-Home Orders. *Amer J of Drug Alc Abuse*. Published online June 4, 2021, p 1-7.

- ▶ This retrospective multicenter study across Southern California (11 Level I and II trauma centers) demonstrated an increase in ‘any drug,’ amphetamine, MDMA, and THC positivity, but no difference in alcohol positivity (or opioid positivity) in trauma patients after SAH orders.

DSM–5 Substance Use Disorder ("Addiction")

- ▶ Tolerance
 - ▶ Withdrawal
- } **Physical Dependence ≠ Use Disorder**

- ▶ Larger amts/longer periods than intended
- ▶ Persistent desire/failed attempts to quit/control use
- ▶ Much time obtaining/using/recovering
- ▶ Important activities sacrificed
- ▶ Continued use despite known adverse effects
- ▶ Failure to fulfill major obligations
- ▶ Recurrent hazardous use
- ▶ Craving
- ▶ Ongoing use despite interpersonal problems

2–3 = mild

4–5 = moderate

≥ 6 = severe

Post-COVID and Other Recent Trends in Drinking in the US and Wisconsin and the Impact of Heavy Drinking on Health. UW DFMCH ACCEPT ECHO. Michael M Miller, MD, DFASAM, DLFAPA, Adjunct Professor, Clinical Faculty

1. Impact of Heavy Drinking on Health/how heavy drinking isn't 'addiction'

Scott S, Kaner E. (Guest Editorial) *J Public Health (Oxf)*. 2014; 36:396-98. Alcohol and public health: heavy drinking is a heavy price to pay for populations.

Alcohol consumption contributes to over 60 diseases and is responsible for 2.74 million deaths annually (4% of the world-wide total), as well as being the fifth leading risk factor for the global disease. In the UK alone, alcohol-related hospital admissions increased by 41% between 2003 and 2013 and this increased impact on health systems is mirrored in other countries across the world. In addition to acute and chronic physical health problems, excessive drinking is linked to poor mental health, crime and disorder, domestic violence, unprotected sex, and unintended pregnancy. Given this wide array of harm, the total cost to the UK economy has been estimated to be £25.1 (\$40.2) billion.

Rehm J, et al. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*. 2009; 373:2223-33.

Alcohol has been identified as an important risk factor for chronic disease and injury. The net effect of alcohol consumption on health is detrimental, with an estimated 3.8% of all global deaths and 4.6% of global disability-adjusted life-years (DALYs) attributable to alcohol. The costs associated with alcohol amount to more than 1% of the gross national product in high-income and middle-income countries, with the costs of social harm constituting a major proportion in addition to health costs.

Overall, our analysis shows that alcohol consumption is a major risk factor for burden of disease. The average volume of alcohol consumption and patterns of drinking, especially heavy drinking occasions, contribute to this disease burden. Alcohol is linked to many disease categories, but alcohol-use disorders, cancer, cardiovascular disease, liver cirrhosis, and injury are the most important disease categories causally affected by alcohol.

Overall, we conclude that alcohol consumption is one of the major avoidable risk factors, and actions to reduce burden and costs associated with alcohol should be urgently increased.

Molina PE, Nelson S. Binge Drinking's Effects on the Body. *Alcohol Res.* 2018; 39:99-109.

Studies have focused on the effects of chronic alcohol consumption and the mechanisms of tissue injury underlying alcoholic hepatitis and cirrhosis, with less focus on the pathophysiological consequences of binge alcohol consumption. Alcohol binge drinking prevalence continues to rise, particularly among individuals ages 18 to 24. However, it is also frequent in individuals ages 65 and older. High blood alcohol levels achieved with this pattern of alcohol consumption are of particular concern, as alcohol can permeate to virtually all tissues in the body, resulting in significant alterations in organ function, which leads to multisystemic pathophysiological consequences. Preclinical and translational research strategies are needed to enhance our understanding of the effects of binge alcohol drinking, particularly for individuals with a history of chronic alcohol consumption.

Bernardo S, et al. Outcomes of excessive alcohol drinkers without baseline evidence of chronic liver disease after 15 years follow-up: Heavy burden of cancer and liver disease mortality. *PLoS One.* 2021; 16(5):e0252218.

Alcohol consumption is the third preventable cause of mortality, and the 7th cause of mortality, accounting for 5% of deaths worldwide. Any amount of alcohol intake is associated with increased mortality. Alcohol consumption is associated with more than 200 diseases, being [that] the liver [is] the single organ most commonly affected by excessive drinking. Alcohol intake is responsible for up to 50% of cases of liver cirrhosis worldwide, with geographical differences: alcohol contributes to 15% of cirrhosis-related admissions in Africa, 48% in the US, and 72% in Europe. However, only 15%-20% of heavy-drinkers will develop liver cirrhosis.

The amount of alcohol intake seems critical in inducing liver disease. Indeed, there seems to be a dose-dependent effect between the amount of alcohol intake and the risk of developing chronic liver disease (CLD), as well as, a threshold effect, with alcohol intake higher than 30g/day in men and 20g/day in women being considered potentially hepatotoxic. The duration of alcohol consumption necessary to develop liver cirrhosis is unknown, but there seems to be a linear increase with time. Development of liver cirrhosis has been described after just 4 years of alcohol consumption; however, the prevalence of cirrhosis increases exponentially after 8–12 years of consumption. Several known co-factors increase the risk for alcohol-associated liver cirrhosis, such as hepatitis C virus infection, obesity, diabetes-mellitus, genetic factors (for example, polymorphisms in the PNPLA3 and TM6SF2 genes), smoking, and low coffee intake [3]. On the other hand, abstinence is known to decrease the risk for progression to cirrhosis, and to improve the prognosis of patients with cirrhosis.

Fernández-Solà J. Cardiovascular risks and benefits of moderate and heavy alcohol consumption. *Nat Rev Cardiol.* 2015; 12:576-87.

At present, a number of diseases involving the heart and cardiovascular system are known to be associated with either acute or chronic alcohol misuse. Alcohol-induced organ damage is dose-dependent, and effects of high-dose and binge intake are clearly worse than those of low-dose or social alcohol consumption.

The heart and vascular system are susceptible to the harmful effects of alcohol. Alcohol is an active toxin that undergoes widespread diffusion throughout the body, causing multiple synchronous and synergistic effects. Alcohol consumption decreases myocardial contractility and induces arrhythmias and dilated cardiomyopathy, resulting in progressive cardiovascular dysfunction and structural damage. Alcohol, whether at binge doses or a high cumulative lifetime consumption—both of which should be discouraged—is clearly deleterious for the cardiovascular system, increasing the incidence of total and cardiovascular mortality, coronary and peripheral artery disease, heart failure, stroke, hypertension, dyslipidemia, and diabetes mellitus. However, epidemiological, case-control studies and meta-analyses have shown a U-type bimodal relationship so that low-to-moderate alcohol consumption (particularly of wine or beer) is associated with a decrease in cardiovascular events and mortality, compared with abstinence. Potential confounding influences—alcohol-dose quantification, tobacco use, diet, exercise, lifestyle, cancer risk, accidents, and dependence—can affect the results of studies of both low-dose and high-dose alcohol consumption. Mendelian methodological approaches have led to doubts regarding the beneficial cardiovascular effects of alcohol, and the overall balance of beneficial and detrimental effects should be considered when making individual and population-wide recommendations, as reductions in alcohol consumption should provide overall health benefits.

Bares CB, Kennedy A. Alcohol use among older adults and health care utilization. *Aging Ment Health.* 2020; Aug 6:1-7.

Sensitivity to alcohol increases with age, which can lead to increased medical problems related to drinking (Choi et al., 2015). Decreases in lean body mass, volume of body water, blood flow, and liver function are observed with age (Klotz, 2009) and lead to an increased blood alcohol concentration and higher sensitivity to the effects of alcohol consumption. Alcohol use can also increase mortality risks in older adults, particularly males, and especially those diagnosed with certain physical and psychological comorbidities, such as gout or anxiety, for which they may be taking medications that mix poorly with alcohol (Moore et al., 2006).

Additionally, frequent alcohol use is associated with numerous health problems, including liver disease, heart disease, memory problems, cancers, and falls (CDC, 2010) that may require increased utilization of health care services.

Roerecke M, Rehm J. Alcohol consumption, drinking patterns, and ischemic heart disease: a narrative review of meta-analyses and a systematic review and meta-analysis of the impact of heavy drinking occasions on risk for moderate drinkers. *BMC Med.* 2014; 12:182-86.

Methods: We conducted a systematic search of the literature up to August 2014 to identify meta-analyses and observational studies examining the relationship between alcohol drinking, drinking patterns, and IHD risk, in comparison to lifetime abstainers. In a narrative review we have summarized the many meta-analyses published in the last 10 years, discussing the role of confounding and experimental evidence. We also conducted meta-analyses examining episodic heavy drinking among on average moderate drinkers.

Results: The narrative review showed that the use of current abstainers as the reference group leads to systematic bias. With regard to average alcohol consumption in relation to lifetime abstainers, the relationship is clearly J-shaped, supported by short-term experimental evidence and similar associations within strata of potential confounders. Women experience slightly stronger beneficial associations and also a quicker upturn to a detrimental effect at lower levels of average alcohol consumption compared to men. There was no evidence that chronic or episodic heavy drinking confers a beneficial effect on IHD risk. People with alcohol use disorder have an elevated risk of IHD (1.5- to 2-fold). Results from our quantitative meta-analysis showed that drinkers with average intake of <30 g/day and no episodic heavy drinking had the lowest IHD risk (relative risk = 0.64, 95% confidence interval 0.53 to 0.71).

Conclusions: Epidemiological evidence for a beneficial effect of low alcohol consumption without heavy drinking episodes is strong, corroborated by experimental evidence. However, episodic and chronic heavy drinking do not provide any beneficial effect on IHD. Thus, average alcohol consumption is not sufficient to describe the risk relation between alcohol consumption and IHD. Alcohol policy should try to reduce heavy drinking patterns.

Goel S, Sharma A, Garg A. Effect of Alcohol Consumption on Cardiovascular Health. *Curr Cardiol Rep.* 2018; 20:19 Published online Mar 8, 2018, p 1-10.

There is substantial and consistent evidence from observational and short-term experimental studies that having one to two drinks per day without episodic heavy drinking have a beneficial effect on the development of coronary artery disease as compared to lifetime abstainers. However, these studies suffer from either methodological issues, confounding biases, misclassification of alcohol consumption, excluding drinking patterns, the inclusion of sick quitters in reference groups and ethnicity differences. Therefore, it is impossible to determine causality of a protective effect of moderate alcohol consumption on ischemic heart disease by itself.

In our view, physicians should inform patients that low to moderate alcohol consumption (one drink/day for women or up to two drinks/day for men) should not be dangerous to their health. However, life-long abstaining individuals should not be encouraged to start drinking; owing to the fact that scenario has not been assessed even in observational studies and there is no way to predict if a person would consume only in moderation after starting drinking. Heavy or binge drinking can have adverse health outcomes

and should be strongly discouraged. The physician should be aware that regular, moderate alcohol consumption, in the context of a healthy lifestyle, good dietary habits, and adequate drug therapy would substantially lower their cardiovascular or mortality risk than either abstainers or heavy/binge drinkers. The cardiovascular benefit of moderate alcohol intake must be balanced in the individual against the adverse effects of alcohol. Furthermore, the net risk-benefit balance associated with moderate alcohol consumption differs in various age groups and populations. The American Heart Association (AHA) actually recommends against advising people who do not currently drink to initiate light alcohol use.

O'Keefe JH, et al. Alcohol and cardiovascular health: the dose makes the poison...or the remedy. *Mayo Clin Proc.* 2014; 89:382-93.

Habitual light to moderate alcohol intake (up to 1 drink per day for women and 1 or 2 drinks per day for men) is associated with decreased risks for total mortality, coronary artery disease, diabetes mellitus, congestive heart failure, and stroke. However, higher levels of alcohol consumption are associated with increased cardiovascular risk. Indeed, behind only smoking and obesity, excessive alcohol consumption is the third leading cause of premature death in the United States. Heavy alcohol use (1) is one of the most common causes of reversible hypertension, (2) accounts for about one-third of all cases of nonischemic dilated cardiomyopathy, (3) is a frequent cause of atrial fibrillation, and (4) markedly increases risks of stroke-both ischemic and hemorrhagic. The risk-to-benefit ratio of drinking appears higher in younger individuals, who also have higher rates of excessive or binge drinking and more frequently have adverse consequences of acute intoxication (for example, accidents, violence, and social strife). In fact, among males aged 15 to 59 years, alcohol abuse is the leading risk factor for premature death. Of the various drinking patterns, daily low- to moderate-dose alcohol intake, ideally red wine before or during the evening meal, is associated with the strongest reduction in adverse cardiovascular outcomes. Health care professionals should not recommend alcohol to nondrinkers because of the paucity of randomized outcome data and the potential for problem drinking even among individuals at apparently low risk.

Welch KA. Alcohol consumption and brain health. *BMJ.* 2017; 357:j2645

(Commentary on Topiwala A, et al. Moderate alcohol consumption as risk factor for adverse brain outcomes and cognitive decline: longitudinal cohort study. *BMJ* 2017; 357:j2353.)

Epidemiological studies often report better health in moderate drinkers compared with abstainers. Observed first in studies of incidence of myocardial infarction, the "J shaped curve" (describing the graphical appearance of health measures plotted against consumption) reappears in studies of diabetes, stroke, and even chronic widespread pain. As methods of investigating the association between alcohol and health are refined, however, the size of the apparent benefits reduces substantially. Studies using "Mendelian randomisation," purportedly impervious to confounding or reverse causality, do not support the original claim that moderate drinking improves cardiovascular health. Regarded as a further example of the J shaped curve, a protective effect of moderate alcohol consumption against "all cause"

dementia has been reported. This has not been underpinned by a convincing neural correlate, however, and it is here that the linked study by Topiwala and colleagues (doi:10.1136/bmj.j2353) is particularly ambitious.

In their prospective cohort of 550 civil servants, none of whom were alcohol dependent, the authors repeatedly assessed alcohol consumption and cognition over 30 years. Participants underwent brain imaging at the most recent review, enabling examination of relations between average alcohol use, cognition, and brain structure. After adjustment for numerous potential confounders, alcohol use was associated with reduced right hippocampal volume in a dose dependent manner; even moderate drinkers (classified as up to 21 units a week for men at the time of the study) were three times more likely to have hippocampal atrophy than abstainers, and very light drinking (1-6 units a week) conferred no protection relative to abstinence. Higher alcohol consumption was also associated with reduced white matter integrity and faster decline in lexical fluency, a test of “executive function.”

With increasing longevity, maintenance of brain health into older age is the key priority of our time. Leaving aside the human cost of dementia, care of cognitively impaired older people is a looming financial crisis, prompting politicians to consider controversial and deeply unpopular policy decisions. Alcohol dependence is already established as a major cause of dementia, alcohol related brain damage (ARBD) accounts for possibly 10% of early onset dementia and potentially 10-24% of dementia cases in nursing homes. Existing on a spectrum of severity, alcohol related brain damage typically involves relatively young people, often in their 40s or 50s, meaning the more severely affected require decades of institutional care. While alcohol related brain damage generally afflicts malnourished drinkers consuming very high levels of alcohol, some degree of potentially reversible cognitive impairment is detectable in most people starting treatment for alcohol dependence. Alcohol can be the primary cause of cognitive impairment in some individuals, but it is a likely contributor to cognitive decline in many more.

The chief medical officer recently changed guidance for low-risk drinking in men, reducing the recommended maximum intake from 21 to 14 units a week. This was because of accumulating evidence that even light drinking increases the risk of various malignancies. The relation between alcohol and brain health is more complex than the relation between alcohol and cancer. While there is almost universal agreement that heavy drinking is associated with cognitive impairment, numerous observational studies do report that light to moderate consumption is associated with a reduced risk of all cause dementia.

While concerns about confounding and inconsistencies between studies make it difficult to define what level of intake is “optimal” for cognition, it seems to be low; in these studies around a unit a day is associated with the lowest risk of dementia, with risk for drinkers clearly exceeding abstainers by 4 units a day.¹³ Topiwala and colleagues’ report of adverse effects at even lower levels of intake, coupled with the finding that drinking more than 14 units a week was associated with both brain pathology and cognitive decline, provides further support for the chief medical officer’s recent decision. How should this paper inform discussions with patients? It certainly strengthens the view that if alcohol does confer beneficial effects on health, the link is probably confined to low intakes of no more than a unit a day. Even this level of consumption carries risk relative to abstinence for conditions.

While concerns about confounding and inconsistencies between studies make it difficult to define what level of intake is “optimal” for cognition, it seems to be low; in these studies, around a unit a day is

associated with the lowest risk of dementia, with risk for drinkers clearly exceeding abstainers by 4 units a day. Topiwala and colleagues' report of adverse effects at even lower levels of intake, coupled with the finding that drinking more than 14 units a week was associated with both brain pathology and cognitive decline, provides further support for the chief medical officer's recent decision.

How should this paper inform discussions with patients? It certainly strengthens the view that if alcohol does confer beneficial effects on health, the link is probably confined to low intakes of no more than a unit a day. Even this level of consumption carries risk relative to abstinence for conditions such as breast cancer, and the evidence of benefit is certainly not strong enough to justify advising abstainers to drink.

As intake increases, so does the risk to health, probably in a dose dependent manner. Heavy consumption is associated with potentially severe impairments in memory and executive function, even when other obvious risk factors are absent. Topiwala and colleagues' findings strengthen the argument that drinking habits many regard as normal have adverse consequences for health. This is important. We all use rationalisations to justify persistence with behaviours not in our long-term interest. With publication of this paper, justification of "moderate" drinking on the grounds of brain health becomes a little harder.

Tebeka S, et al. Changes in alcohol use and heavy episodic drinking in U.S. Women of childbearing-age and peripartum between 2001-2002 and 2012-2013. *Addict Behav.* 2020; 107:106389. Epub 2020 Mar 9.

Heavy episodic drinking (HED) is a frequent pattern of alcohol use in women of childbearing age with severe consequences for both women and child, making it a major public health issue. Some states in the US have reported laws that target the use of alcohol during pregnancy. Our aim was to examine the evolution of 12-month alcohol use and 12-month HED prevalence in childbearing age, pregnant and postpartum women between 2001 and 2002 and 2012–2013.

Our data were drawn from the National Epidemiologic Study of Alcohol and Related Conditions (NESARC) conducted in 2001–2002 and NESARC-III conducted in 2012–2013, two independent, representative samples of U.S. population. Past-year alcohol use and HED was evaluated according face-to-face interview for all participants.

Results: Our sample consisted of 24,536 women of childbearing age, including 2846 pregnant and postpartum women. Prevalence of 12-month alcohol use increased from 2001 to 2002 to 2012–2013, in both childbearing-aged women (66.14% to 75.48%; aOR = 1.62, 95%CI = 1.46–1.80) and pregnant and postpartum women (57.81% to 66.19%; aOR = 1.56, 95%CI = 1.25–1.94). Prevalence of 12-month HED increased from 2001 to 2002 to 2012–2013, in both childbearing-aged women (22.57% to 36.34%; aOR = 1.97, 95%CI = 1.79–2.16) and pregnant and postpartum women (17.85% to 28.21%; aOR = 1.84, 95%CI = 1.47–2.30).

Conclusions: Alcohol use and HED increased in last 10 years in both childbearing age and pregnant and post-partum US women.

Burton R, Sheron N.

No level of alcohol
consumption
improves health.

Lancet. 2018; 392(10152):987-988
Commentary on *Lancet*. 2018;
392(10152):1015-1035.

Alcohol Use Adult Population (18+)

	Alcohol Use in the Past Month	Binge Drinking in the Past Month	Perceive Great Risk from Weekly Binge Drinking
Wisconsin	64.8%	21.9%	37.9%
U.S.	55.1%	16.1%	45.0%

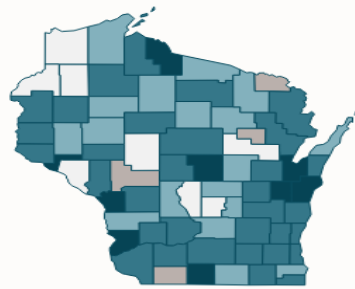
Overview:

This dashboard displays estimates of adult alcohol consumption from two national health surveys, the Behavioral Risk Factor Survey and the National Survey on Drug Use and Health. These surveys present a picture of alcohol consumption in Wisconsin and the nation.

Binge Drinking

22.9%

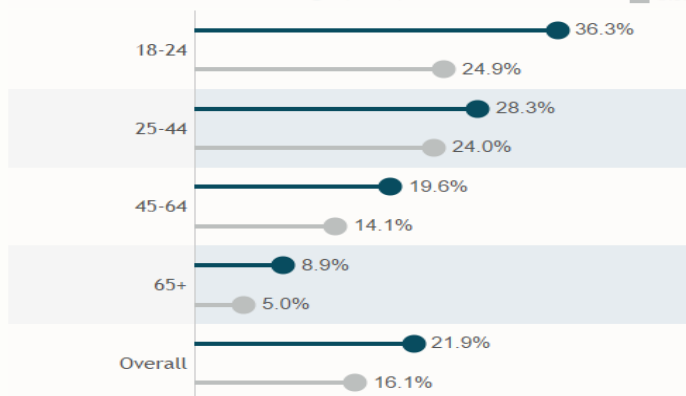
Statewide Estimate
(2014 - 2019)



Binge Drinking
Rates by County

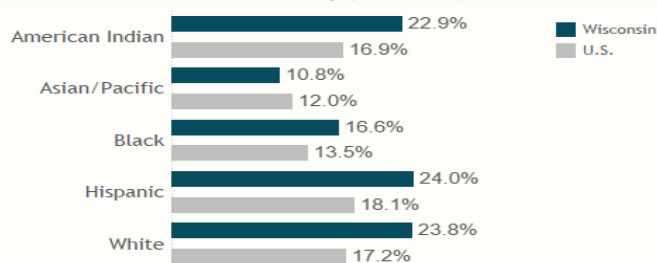
- 13-16%
- 17-21%
- 22-26%
- 27-31%
- Insufficient data

Percentage who Engaged in Binge Drinking in the Past Month by Age (2019)



Wisconsinites in every age group engaged in more binge drinking than the U.S. median for that age group. Wisconsinites ages 18 to 24 had the highest proportion of binge drinkers.

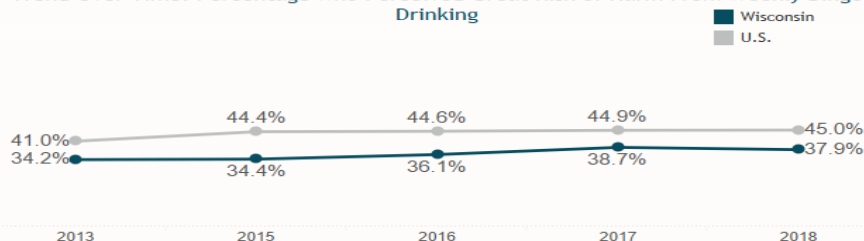
Percentage who Engaged in Binge Drinking in the Past Month, by Race/Ethnicity (2014-2019)



With the exception of Asians, Wisconsinites of all races and ethnicities engaged in binge drinking at higher rates than the U.S. median.

Select a question to see trend over time:
Perception of Great Risk from Weekly Binge Drinking

Trend Over Time: Percentage who Perceived Great Risk of Harm From Weekly Binge Drinking



Recommended Citation: Wisconsin Department of Health Services. DHS Interactive Dashboards, Alcohol Adult Consumption Module [web query].

Filters

Select a Demographic:
Age

Technical Notes

Email Us!

Wisconsin's Estimated Alcohol-Attributable Deaths

All Alcohol Deaths

45

per 100,000 residents

Chronic Deaths

20

per 100,000 residents

Acute Deaths

25

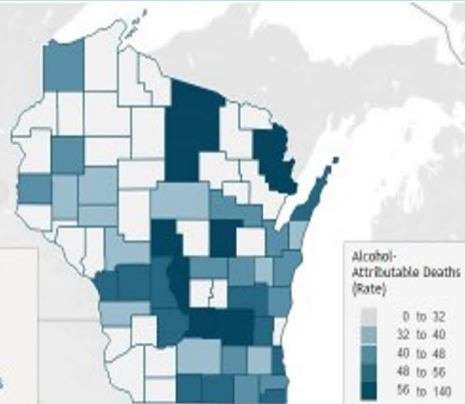
per 100,000 residents

Click on a county to filter the dashboard. Ctrl-click to select multiple counties.

Statewide Rate of All Alcohol-Attributable Deaths

45

per 100,000 residents



Filters

Cause of Death
All Alcohol-Attributable Deaths

Rate or Count
Rate

Year

- ☐ 2014
☐ 2015
☐ 2016
☐ 2017
☐ 2018
☒ 2019
☐ 2020

Age

All

Ethnicity

All

Race

All

Sex

All

Click on a demographic group in the bar chart (e.g., "Female") to filter the rest of the dashboard.

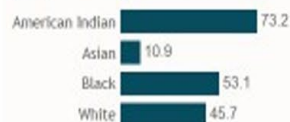
All Alcohol-Attributable Deaths by Sex (2019)



All Alcohol-Attributable Deaths by Age (2019)



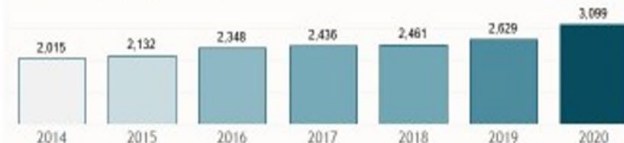
All Alcohol-Attributable Deaths by Race (2019)



All Alcohol-Attributable Deaths by Ethnicity (2019)



All Alcohol-Attributable Deaths Over Time



Technical Notes

Email Us!

Recommended Citation:

Wisconsin Department of Health Services. DHS Interactive Dashboard: Alcohol Death Module. Last Updated: 7/9/2021 8:00:35 PM.

2. Impacts on US Life Expectancy: COVID-19 and “Deaths of Despair.”

Woolf SH, Masters RK, Aron LY. Effect of the covid-19 pandemic in 2020 on life expectancy across populations in the USA and other high income countries: simulations of provisional mortality data. *BMJ* 2021; 373:n1343.

In 2020, covid-19 became the third leading cause of death in the United States and was thus expected to substantially lower life expectancy for that year. The US had more deaths from covid-19 than any other country in the world and among the highest per capita mortality rates.

CONCLUSIONS: The US had a much larger decrease in life expectancy between 2018 and 2020 than other high income nations, with pronounced losses among the Hispanic and non-Hispanic Black populations. A longstanding and widening US health disadvantage, high death rates in 2020, and continued inequitable effects on racial and ethnic minority groups are likely the products of longstanding policy choices and systemic racism.

RESULTS: Between 2010 and 2018, the gap in life expectancy between the US and the peer country average increased from 1.88 years (78.66 v 80.54 years, respectively) to 3.05 years (78.74 v 81.78 years). Between 2018 and 2020, life expectancy in the US decreased by 1.87 years (to 76.87 years), 8.5 times the average decrease in peer countries (0.22 years), widening the gap to 4.69 years. Life expectancy in the US decreased disproportionately among racial and ethnic minority groups between 2018 and 2020, declining by 3.88, 3.25, and 1.36 years in Hispanic, non-Hispanic Black, and non-Hispanic White populations, respectively. In Hispanic and non-Hispanic Black populations, reductions in life expectancy were 18 and 15 times the average in peer countries, respectively. Progress since 2010 in reducing the gap in life expectancy in the US between Black and White people was erased in 2018-20; life expectancy in Black men reached its lowest level since 1998 (67.73 years), and the longstanding Hispanic life expectancy advantage almost disappeared.

Andrasfay T, Goldman N. Reductions in 2020 US life expectancy due to COVID-19 and the disproportionate impact on the Black and Latino populations.

Proceedings of the National Academy of Sciences. 2021; 118:e2014746118

The number of deaths from COVID-19 in the United States is staggering: As of mid-October 2020, more than 215,000 COVID-19 deaths had occurred, and over 100,000 additional deaths were projected by the end of year

Of the deaths for which race and ethnicity have been reported to the National Center for Health Statistics (NCHS), 21% were Black and 22% were Latino.

Our medium estimate indicates a reduction in US life expectancy at birth of 1.13 y to 77.48 y, lower than any year since 2003. We also project a 0.87-y reduction in life expectancy at age 65 y. The Black and Latino populations are estimated to experience declines in life expectancy at birth of 2.10 and 3.05 y, respectively, both of which are several times the 0.68-y reduction for Whites. These projections imply an increase of nearly 40% in the Black-White life expectancy gap, from 3.6 y to over 5 y, thereby

eliminating progress made in reducing this differential since 2006. Latinos, who have consistently experienced lower mortality than Whites (a phenomenon known as the Latino or Hispanic paradox), would see their more than 3-y survival advantage reduced to less than 1 y.

Tilstra AM, Simon DH, Masters RK. Trends in “Deaths of Despair” Among Working-Aged White and Black Americans, 1990–2017. *Am J Epidemiol.* 2021;00(00):1–9.

Life expectancy in the United States declined between 2013–2017, before increasing by 0.1 years in 2018. To date, explanations for recent trends in US life expectancy have largely focused on midlife deaths attributed to suicide and poisonings from drugs and alcohol, especially among the White population. These popularly proclaimed, “deaths of despair” (i.e., chronic liver disease, suicide, and drug overdoses) were believed to reflect cohort-based cumulative disadvantages related to rising distress, economic insecurity, and chronic pain in the White population.

There has been less attention on Black mortality trends from these same causes, and whether the trends are similar or different by cohort and period. We analyzed cause-specific mortality trends in the United States for deaths from suicide, drug use, and alcohol use among non-Hispanic Black and non-Hispanic White Americans, aged 20–64 years, over 1990–2017. Results indicate that rising “deaths of despair” for both Black and White Americans are overwhelmingly driven by period-based increases in drug-related deaths since the late 1990s.

We...contend that recent mortality trends in both the US Black and White populations most likely reflect period-based exposures to 1) the US opioid epidemic and 2) the Great Recession.

Mortality trends from “deaths of despair” among Black Americans are both similar to and different from trends among White Americans. First, mortality rates from “deaths of despair” increased between 1990 and 2017 in all age groups and for all race-sex populations, except Black men and women aged 35–49 years. Among Black men aged 35–49 years, “deaths of despair” mortality decreased by 36.2 deaths per 100,000 and decreased by 3.0 deaths for Black women. These declines in total “deaths of despair” mortality were overwhelmingly driven by substantial declines in death rates from alcohol use.

Casey B. Mulligan, CB. Deaths of Despair and the Incidence of Excess Mortality in 2020. *NBER Working Paper Series, No. 28303*. December 2020. Cambridge, MA: National Bureau of Economic Research.
<http://www.nber.org/papers/w28303>

Deaths of despair (drug overdose, suicide, alcohol) in 2017 and 2018 are good predictors of the demographic groups with non-COVID excess deaths (NCEDs) in 2020. The NCEDs are disproportionately experienced by men aged 15–55, including men aged 15–25. Local data on opioid overdoses further support the hypothesis that the pandemic and recession were associated with a 10 to 60 percent increase in deaths of despair above already high pre-pandemic levels.

3. Changes in alcohol use linked to COVID-19

Barbosa C, Cowell AJ, Dowd WN. Alcohol Consumption in Response to the COVID-19 Pandemic in the United States. *J Addict Med*. 2020/ADM.0000000000000767. Online ahead of print.

Conclusions: There is an association among the COVID-19 pandemic, the public health response to it, changes in alcohol policy, and alcohol consumption. Public health monitoring of alcohol consumption during the pandemic is warranted.

Results: Compared to February, respondents reported consuming more drinks per day in April ($\uparrow 29\%$, $P < 0.001$), and a greater proportion reported exceeding recommended drinking limits ($\uparrow 20\%$, $P < 0.001$) and binge drinking ($\uparrow 21\%$, $P = 0.001$) in April. These differences were found for all sociodemographic subgroups assessed. February to April differences in the proportion exceeding drinking limits were larger for women than men ($P = 0.026$) and for Black, non-Hispanic people than White, non-Hispanic people ($P = 0.028$).

Rossow I (et al.) Changes in Alcohol Consumption during the COVID-19 Pandemic--Small Change in Total Consumption, but Increase in Proportion of Heavy Drinkers. *Int J Environ Res Public Health*. 2021; 18:4231.

(Norwegian study). During the pandemic, we found a small increase (Survey 1) or no change (Survey 2) in estimated mean alcohol consumption (which parallels to total consumption). However, in both surveys, the dispersion of the distribution increased significantly ($p < 0.001$). For most respondents, an average modest decline in consumption was found. However, the small fraction with the highest baseline consumption increased their consumption substantially, and in effect, the proportion of heavy drinkers increased markedly ($p < 0.001$). In conclusion, quantifications of reported changes in alcohol consumption during the pandemic suggest that the upper 5 to 10% of the drinkers increased their consumption and hence the prevalence of heavy drinkers increased.

Reynolds CME, et al. Factors associated with changes in consumption among smokers and alcohol drinkers during the COVID-19 'lockdown' period. *Eur J Public Health* 2021. ckab050. doi: 10.1093/eurpub/ckab050. Online ahead of print.

(Irish study). Of the 1362 (33.8%) individuals that responded to the survey, 80.6% were current drinkers and 26.0% were smokers. The majority of smokers (60.9%) and drinkers (60.6%) reported no change in consumption. However, 30.5% of smokers and 22.2% of drinkers reported increased consumption. Being concerned about household stress from confinement [adjusted odds ratio (aOR) 1.9, 95% confidence

interval (CI) 1.3–2.9, $P = 0.002$], working from home (aOR 2.1, 95 CI 1.4–3.3, $P < 0.001$) and urban living (aOR 2.0, 95 CI 1.5–2.9, $P < 0.001$) were associated with increases in alcohol consumption.

Conclusion: A mixed picture was evident in terms of changes in consumption among current smokers and drinkers. Increased consumption was more commonly reported than reductions. Increased consumption was associated with psychological distress and socio-economic factors.

Calina D, et al. COVID-19 pandemic and alcohol consumption: Impacts and interconnections. *Toxicol Rep.* 2021; 8:529-35.

(Romanian authors). In recent years, conclusive evidence has been gathered that alcohol increases the risk of infectious diseases, especially HIV infection, tuberculosis, pneumonia with germs resistant to treatment and difficult to eradicate. The explanation consists, on the one hand, in the effect of alcohol to reduce immunity: the consumption of over 40 g of alcohol/day increases the rate of illness through infections in consumers versus non-consumers, under the conditions of the same exposure to infection. In addition, there are social factors associated with problematic alcohol consumption: low income or lack of income, reduced access to care, lack of medical support. Chronic ethanol abuse almost doubles the risk of developing acute respiratory distress syndrome. The association between bacterial and viral lung infections and ethanol dependence is supported by multiple pathophysiological mechanisms.

One of these topics is related to the way in which parental drinking is influencing the next generations. During the lockdown, the children were more likely to see their parents drinking, due to the time spent together at home. Parental model regarding the drinking behaviors can play a major role in the intergenerational transmission of excessive alcohol consumption.

In a study performed on 1,054 Canadian adolescents (M age = 16.7 +/- 0.8), in which they completed an online survey, they reported the frequency of alcohol use, binge drinking, cannabis use, and vaping in the 3 weeks before and directly after social distancing. The results showed a decrease in binge drinking and vaping, but over 93 % declared that they were drinking at home with their parents, seen as more acceptable behavior.

Boschuetz N, Cheng S, Mei L, Loy VM. Changes in Alcohol Use Patterns in the United States During COVID-19 Pandemic. *WMJ.* 2020; 119:171-76.

Methods: A single online survey was sent to a convenience sample of adults through social media. Self-reported demographics and alcohol use patterns before and during social distancing were obtained. Four hundred seventeen subjects completed the survey; 83% were women, 77% were married, 44% were between ages 35 and 44 years

Results: Alcohol Use Disorders Identification Test (AUDIT-C) scores increased from median value of 3 to 4 ($P < 0.0001$); the increase was statistically significant only in women ($P < 0.0001$). Fewer people use alcohol during social distancing; however, in those who use alcohol, the frequency and quantity ingested increased, as well as the frequency of alcohol use prior to 5 pm.

Calvey et al. The Changing Landscape of Alcohol Use and Alcohol Use Disorder During the COVID-19 Pandemic -- Perspectives of Early Career Professionals in 16 Countries. *J Addict Med.* 2020; 14:e284-e286.

Members of the network reported their observations on the situation in 16 countries: India, Nepal, Thailand, Indonesia, Malaysia, Japan, Slovenia, Italy, Ireland, France, Uganda, Egypt, Morocco, South Africa, New Zealand, Australia.

All above countries imposed national lockdown and physical distancing measures. South Africa, India, Nepal, Slovenia, and Thailand implemented pandemic-associated alcohol prohibition and restrictions regarding sale, transporting and dispensing of alcohol.

Following pandemic-associated alcohol prohibition and restriction, it is likely that many individuals with severe AUD will be at risk of developing alcohol withdrawal syndrome (AWS) due to abrupt discontinuation or reduction in alcohol use requiring treatment by emergency health care centers. At the same time, access to health services might be limited due to the lockdown and other actions in place to control the infection spread. Our members from Nepal, Slovenia, Thailand, and India reported increases in cases of complicated alcohol withdrawal seizures and delirium tremens coming to their attention.

India, Nepal, and South Africa saw an increase in home-brewing of alcohol with rises in illegal alcohol sales as well as looting of alcohol stores. India and Nepal saw an increase in consumption of iso-propyl alcohol and alcohol-based sanitizers and the media reported increased cases of death due to the consumption of toxic alcohol.

In Ireland, the media reported a 58% increase in alcohol sales compared to last year. The results of an Irish social impact survey (n 1/4 4033) indicate that following national lockdown, 22% of respondents increased alcohol consumption (particularly in the age range of 18–44), 17% decreased alcohol consumption (predominantly males), while older individuals and those living in rural areas were less likely to change their alcohol consumption patterns.

The majority of the population in New Zealand has limited access to hard liquors but wine and beer are available. The outcome of a population survey (n 1/4 1190) in April 2020, indicates that 47% of respondents reported drinking the same amount as usual during the lockdown, 34% reported drinking less than usual and 20% reported drinking more than usual.

In France, a population survey (n 1/4 1344) reported that 11% of respondents increased their alcohol consumption during lockdown, 65% consumed the same amount of alcohol and 25% decreased their alcohol consumption.

Young KN, et al. Drug and Alcohol Positivity of Traumatically Injured Patients Related to COVID-19 Stay-at-Home Orders. *Amer J of Drug Alc Abuse*. Published online June 4, 2021, pg. 1-7.

A post-hoc multicenter retrospective analysis involving trauma patients presenting to 11 ACS Level I and II trauma centers across 7 counties in Southern California. A total of 20,448 trauma patients were identified across three time periods: 7707 in the CONTROL group, 6022 in the PRE-SAH group, and 6719 patients in the POST-SAH group.

Results (paraphrased): alcohol positive rates did not differ among the three groups.

The POST-SAH group showed significantly higher rates of amphetamine or any drug positivity compared to the pre-SAH group. The post-SAH group had higher rates of amphetamine, THC, MDMA, cocaine, PCP or any drug positivity but lower opioid positivity rates compared with the CONTROL group.