

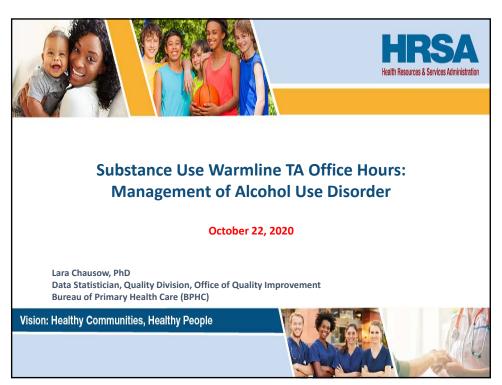
Management of Alcohol Use Disorder

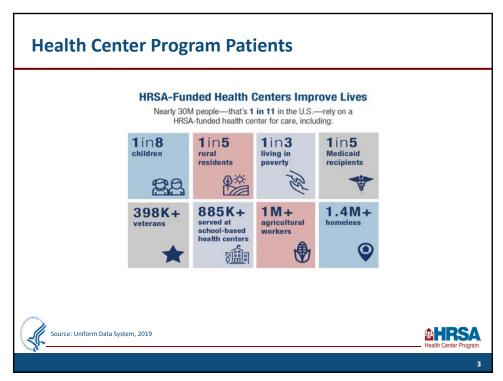
Triveni DeFries, MD MPH

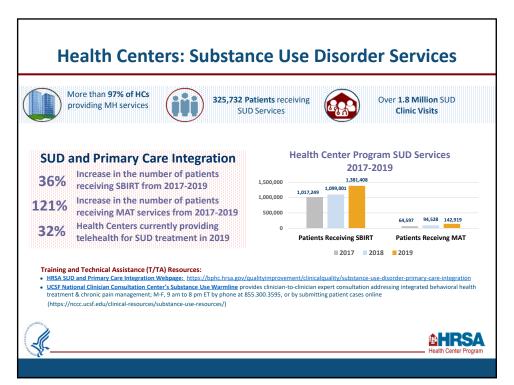
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SAFEST Choice Learning Collaborative





- Fetal Alcohol Spectrum Disorder (FASD) occurs in up to 5% of school-aged children
- Prevent FASD and care for children affected by it by joining the HRSA funded **SAFEST Choice Learning Collaborative** which will enroll Community Health Centers (CHC) in New England (MA, VT, ME, RI, NH, CT) & Upper Midwest (MN, ND, SD, WI, IA, MI) to participate in 10 free virtual Prenatal and/or Pediatric ECHO® sessions from 3/2021 2/2022.
 - Prenatal ECHO aims to reduce prenatal alcohol exposure by teaching healthcare teams how to screen for and counsel women about the risks of alcohol use during pregnancy
 - Pediatric ECHO aims to improve FASD outcomes by training healthcare teams how to identify and care for children and adolescents with suspected or diagnosed FASD
- CHCs will receive a stipend, technical assistance and free continuing education credits
- This is a partnership between Boston Medical Center and Minnesota-based Proof Alliance



For more information on how your CHC can be part of the **SAFEST Choice Learning Collaborative**, email Kendra Gludt at <u>kendra.gludt@proofalliance.org</u>

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Management of Alcohol Use Disorder

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Disclosures

I have no financial disclosures.

I will be discussing off-label use of some medications.

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Today's Content

Part I. Unhealthy alcohol use in public health and primary care

Part II. Treatment of alcohol use disorder

Part III. Ambulatory management of alcohol withdrawal

Part IV. Harm reduction approaches to alcohol use



Learning Objectives

- (a) Recognize the detection problem and treatment gap facing patients with alcohol use disorder (AUD)
- (b) Relate alcohol use as a critical and potentially modifiable risk factor for clinical outcomes
- (c) Expand the toolbox of evidence-based pharmacologic and psychosocial treatment strategies for alcohol use disorder
- (d) Describe outpatient withdrawal management and considerations that have been raised in response to an evolving care delivery landscape

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Part I. Unhealthy alcohol use

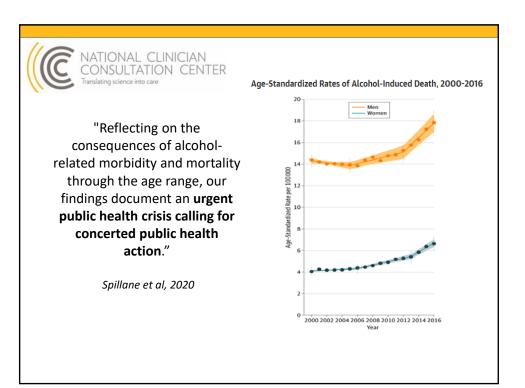


Unhealthy alcohol use

- 93,000 deaths (255 per day) and 2.7 million years of potential life lost (29 years lost per death, on average) in the United States each year to excessive alcohol use
- Exceeds deaths from opioid overdoses
- Prevalence and harms are on the rise, especially among certain groups

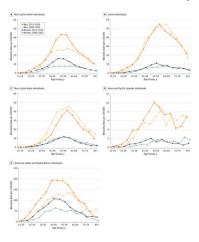
Esser et al, 2020; Grant BF et al, 2015; White et al, 2020; Katcher, Reiter, & Aragon., 2010

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Noteworthy increases in deaths among women, American Indian/Alaskan Native individuals, and younger age groups



Spillane et al., 2020

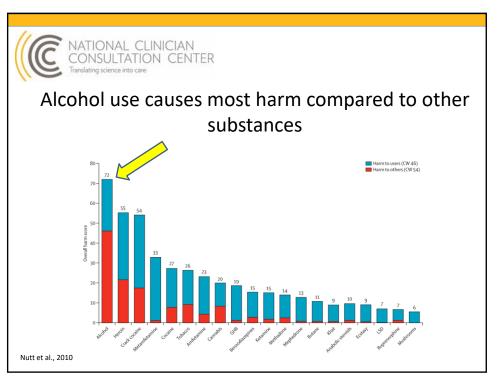
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People are experiencing increased stress due to the COVID-19 pandemic



Czeisler et al, 2020; Pollard et al, 2020



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Widespread physical and psychosocial problems



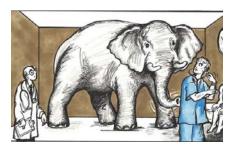
 ${\it US Burden of Disease Collaborators, 2013; Sterling et al, 2020}\\$

- Primary care issues
 - Hypertension
 - DiabetesDepression
- Cancer
- Early pregnancy loss
- Trauma
- Falls
- Motor vehicle accidents
- Risky sex
- Interpersonal Violence
- Poor nutrition
- Firearm violence
- Medication interactions
- Suicide
- Adverse childhood events



Unhealthy alcohol use goes undetected

- 1 in 6 patients reports being asked about drinking
- USPSTF recommends screenings in primary care settings in adults, and providing persons engaged in at risk or hazardous drinking with brief behavioral counseling interventions (B recommendation)



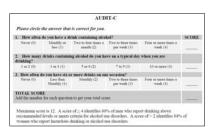
Bazzi & Saitz, 2018; US Preventive Task Force, 2018; Edelman & Tetrault, 2019

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Example screening questions

- "Do you sometimes drink beer, wine or other alcoholic beverages?"
- "How many times in the past year have you had 5 (for men) or 4 (for women) or more drinks in a day?"









AUD treatment gap is massive

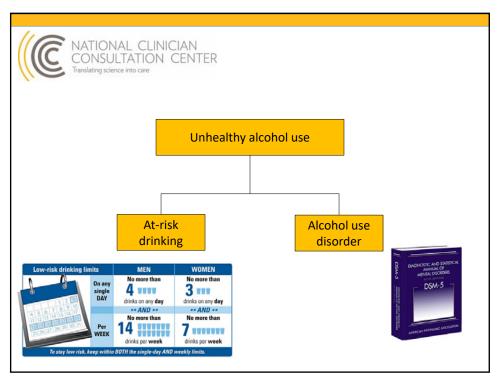
- <10% of patients with unhealthy alcohol use receive treatment
- Of those, only about 50% receive pharmacotherapy

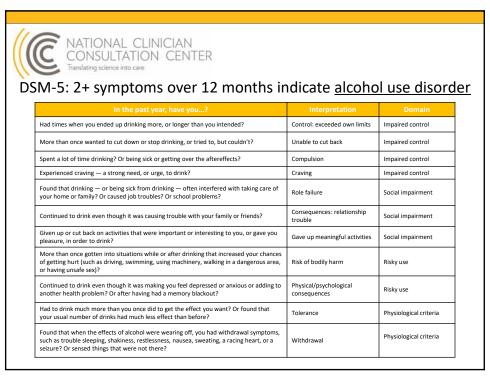
Substance Abuse and Mental Health Services Administration, 2010; Cohen E et al, 2007; Wililams et al, 2017

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Part II. Treatment of Alcohol Use Disorder







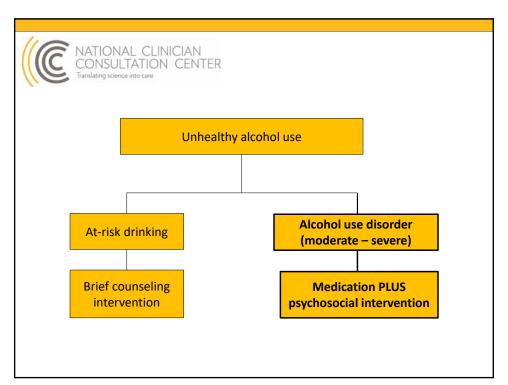
Brief counseling intervention is effective for <u>at-risk drinking</u>

10-15 minutes of counseling:

- Ask permission to raise the subject
- Relate drinking behavior to problems
- Elicit motivations for change
- Set a drinking goal
- Support efforts
- Refer to cognitive behavioral therapy or a mutual help group
- Arrange close follow-up

National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2005

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FDA-approved medications for AUD: Naltrexone

Dosage	Oral 50 mg/day Intramuscular 380 mg/month		
Mechanism	Opioid receptor antagonist that reduces rewarding effects of alcohol		
	Number Needed to Treat (NNT) = 20 to prevent return to any drinking NNT = 12 to prevent return to heavy drinking		
Pros	 OK to use if actively drinking Daily oral AND long-acting injectable options Cheap and available 		
Cons	Gastrointestinal effects, headache Liver concerns Avoid if Child-Pugh C or greater, or alanine aminotransferase (AST)/aspartate aminotransferase (ALT) >5x upper limit of normal Monitor live function tests baseline, 6 mo, annually Abstinence from opioids prior to initiation Opioids not as effective for emergency analgesia		

Jonas, JAMA, 2014; Rosner et al, 2010

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FDA-approved medications for AUD: Acamprosate

Dosage	666 mg orally three times a day	
Mechanism	Modulates glutamate neurotransmission	
	Maintains abstinence, NNT = 9 to prevent return to any drinking in 8-24 weeks	
Pros	Safe for the liver Can use in setting of opioid use	
Cons	TID adherence Requires renal dosing 50% reduction for moderate renal impairment Contraindicated if CrCl<30 Diarrhea Takes 5-8 days for full effect For patients with goal of abstinence	

Rosner et al, Cochrane Database Syst Rev, 2010



FDA-approved medications for AUD: Disulfiram

Dosage	250-500 mg by mouth daily	
Mechanism	Inhibits aldehyde dehydrogenase Causes aversive alcohol-disulfiram reaction	
Pros	Use in highly structured environment (e.g. opioid treatment program) or for patients with history of success with disulfiram	
Cons	 Very unpleasant Adherence critical Must have goal of abstinence Concerning in setting of pregnancy, CAD, severe mental illness Liver concerns 	

Skinner et al, 2014

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Non-FDA approved for AUD: Topiramate

- Titrate up to 300mg/day over 8 weeks: Wk1 25 mg qhs, Wk2 25 mg
 BID, Wk3 50 mg BID, Wk4 75 mg BID, Wk5 100 mg BID, Wk6 150 BID
- Beneficial for people with seizures, insomnia
- Significant adverse effects of cognitive impairment, paresthesia, sedation, appetite suppression
- Cannot abruptly discontinue
- May combine with Naltrexone

Guglielmo et al, 2015; Blodgett et al, 2014



Non-FDA approved for AUD: Gabapentin

- Studied at 900-1800 mg/day with mixed evidence
- May be useful for people with h/o withdrawal
- Can also use for non-severe alcohol withdrawal
- · Dose adjust for CKD
- May combine with Naltrexone
- May be helpful with neuropathic pain, insomnia
- Misuse potential?

Johnson et al., JAMA, 2006; Mason et al.; Falk et al., 2019; Anton et al., 2020

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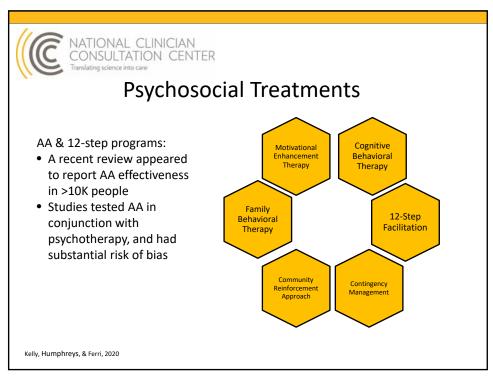


Non-FDA approached for AUD: Baclofen

- Safe for use in liver failure, but mixed evidence
- In 165K patients in France treated with meds for AUD, baclofen was associated with hospitalization (HR 1.1) and mortality (HR 1.3) in dose response relationship
- Concern for very significant harms

Ciagnot et al, 2018







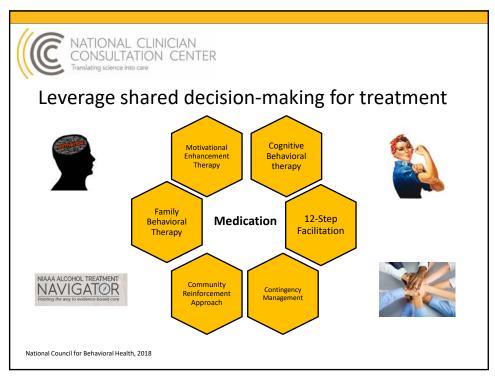
Virtual recovery resources

- Online support groups
 - 12-step, e.g. AA
 - SMART Recovery
 - LifeRing
 - Moderation Management
 - Women for Sobriety
 - And more
- Apps
- Podcasts

Links to more resources:

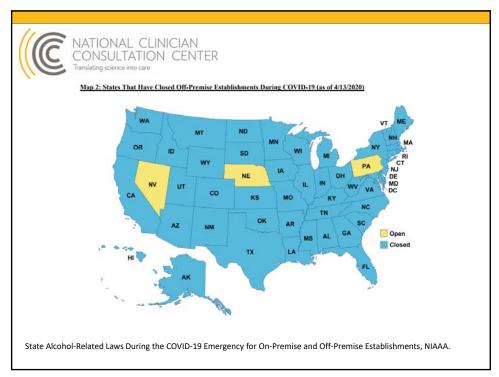
- American Society for Addiction Medicine's guidance on promoting support group attendance during Covid-19
- Accessing treatment through telehealth by National Institute on Alcohol Abuse and Alcoholism

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Part III. Ambulatory management of alcohol withdrawal





Assessing safety of ambulatory withdrawal management

Can the patient be safely monitored in an ambulatory care setting or at home?

Does the patient need inpatient care?

- Does the patient have safe housing and support?
- Can the patient maintain telephonebased contact?
- Can the patient follow medication instructions? Take orally?
- Does your clinic have the capacity to provide remote monitoring and/or accessibility for patients with alcohol withdrawal syndrome?
- Are they at risk of severe or complicated withdrawal?
- Does the patient have a history of seizures or delirium tremens?
- How severe are their symptoms?
- Does the patient have acute illness, medical co-morbidities or co-occurring substance use likely to complicate their withdrawal treatment?
- Age 65 or over?
- Pregnant?

American Society of Addiction Medicine, 2020

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Who will develop severe withdrawal?

- History of delirium tremens (DT) most predictive in hospitalized patients
- Prediction of Alcohol Withdrawal Severity (PAWSS) is a screening tool to predict severe withdrawal in a medically ill patient
- PAWSS Scores ≥4 suggest high risk.
 Prophylaxis and/or treatment may be indicated

(PAWSS)	
1180-01111-01-01	Maldonado et al. 20
Part A: Threshold Criteria: Have you consumed any amount of alcohol (i.e., been	("Y" or "W", on pair
drinking) within the last 30 days? OR did the patient have "+" BAL on admission?	_
JF the answer to either is YES, proceed with test:	
Part B: Based on patient interview:	(1 point eac
 Have you been recently <u>intoxicated/drunk</u>, within the last days? 	30
Have you ever undergone alcohol use disorder rehabilita treatment or treatment for alcoholism?	tion
(i.e., in-patient or out-patient treatment programs or AA attend	ance)
Have you <u>ever</u> experienced any previous spisodes of alcohol withdrawal, regardless of severity?	
4. Have you gyer experienced blackouts?	
5. Have you gygr experienced alcohol withdrawal seizures?	-
6. Have you <u>ever</u> experienced delirium tremens or DT's?	_
 Have you combined alcohol with other "downers" like benzodiazepines or barbiturates, during the last 99 days. 	_
 Have you combined alcohol with any other substance of abuse, during the lest 50 days? 	
Part C: Based on clinical evidence:	(1 point eac
9. Was the patient's blood alcohol level (EAL) on presentation	2 2007
10. Is there evidence of increased autonomic activity? (e.g., HR > 120 bpm, fremor, sweating, agitation, nauses)	
51	otal Score:
Make: Maximum score = 10. This instrument is intended as a SCREEN member of positive findings, the higher the risk for the development of A score of 2.4 suggests (SCR ISSE for moderate in severe (complicate	2005

Wood et al, 2018; Maldonado et al, 2014



Medications for outpatient withdrawal management

• Benzodiazepines

- Prevent seizures so generally considered 1st line
- Consider reserving for patients with history or risk of severe withdrawal
- Significant concerns for delirium, CNS depression and misuse
- Longer-acting (chlordiazepoxide) preferred
- Shorter-acting without active metabolites (lorazepam) preferred for impaired liver function or risk of oversedation

Gabapentin

- As effective as benzodiazepines in treating symptoms other than seizures and DT
- Best as adjunct or for mild-moderate alcohol withdrawal symptoms in low risk patients
- Can continue for maintenance treatment of AUD
- 1200mg/day in divided doses tapered over 4-6 days

Carbamazepine

- As adjunct or for lower risk patients who do not tolerate gabapentin
- More side effects, e.g. dizziness, drowsiness, nausea, drug interactions
- 800mg/day in divided doses tapered over 5-9 days

Gasper & DiPaula, 2020

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Example protocols

Outpatient Fixed Schedule Benzodiazepine Dosing Protocol ¹¹			
	Chlordiazepoxide	Lorazepam	
Day 1	25-50mg every 6 hours	2mg every 8 hours	
Day 2	25-50mg every 8 hours	2mg every 8 hours	
Day 3	25-50mg every 12 hours	1mg every 8 hours	
Day 4	25-50mg at bedtime	1mg every 12 hours	
Day 5	25-50mg at bedtime	1mg at bedtime	

Gasper & DiPaula, 2020; Muncie et al, 2013



Example protocols

Gabapentin is dosed as 600mg PO TID plus an additional 600mg prn once daily for the first week, followed by a 300mg taper after the first week

Taper schedule:

Days	Gabapentin Monotherapy (fixed schedule dosing)
1	1,200mg BID plus 1,200mg x1 prn
2-7	600mg TID plus 600mg x1 prn
8	300mg TID
9	300mg BID
10	300mg qday

How to write the prescription:

Rx: Gabapentin 600mg tabs, take as directed, #30, NR

Verbalized or printed instructions for the patient:

Day 1: Take 2 tabs twice daily plus an additional 2 tabs if needed the first day Days 2-7: Take 1 tab three times daily plus an additional 1 tabs if needed

Day 8: Take ½ tab three times daily

Day 9: Take ½ tab twice daily

Day 10: Take ½ tab once at bedtime

Sample protocol courtesy of ASAM and Dr. Brian Hurley, disclaimer

*Consider 1200mg/day in divided doses tapered over 4-6 days, e.g. 600mg TID or 300mg QID

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Example protocols

Carbamazepine is dosed 200mg PO QID x 72º followed by a 200mg reduction q72º

Taper schedule:

Days	Carbamazepine Monotherapy	
	(fixed schedule dosing)	
1-3	200mg QID	
4-6	200mg TID	
7-9	200mg BID	
10-11	200mg qHS	

How to write the prescription:

Rx Carbamazepine 200mg tabs, take 1 QID x3d, then 1 TIDx3d, then 1 BID x3d, then 1 qHS x3d, #30, NR

Verbalized or printed instructions for the patient: Days 1-3: Take 1 four times throughout the day

Days 4-6: Take 1 three times throughout the day Days 7-9: Take 1 twice a day

Days 10-11: Take 1 at bedtime

Sample protocol courtesy of ASAM and Dr. Brian Hurley, disclaimer $\,$



Monitoring considerations

- Reassess patient frequently, ideally daily, for symptoms and medication reconciliation
- Family member or close contact can help monitor patient and dose medications
- If patient not at risk for severe withdrawal, may not need medications if > 24 hours with no or mild symptoms
- Consider dispensing limited supply q24-72 hours depending on patient risks and adherence

Severity Category	Associated CIWA-Ar Range	Symptom Description
Mild	CIWA-Ar < 10	Mild or moderate anxiety, sweating and insomnia, but no tremor
Moderate	CIWA-Ar 10-18	Moderate anxiety, sweating, insomnia, and mild tremor
Severe Complicated	CIWA-Ar ≥19 CIWA-Ar ≥19	Severe anxiety and moderate to severe tremor, but not confusion, hallucinations, or seizur Seizure or signs and symptoms indicative of delirium – such as an inability to fully comprehend instructions, clouding of the sensorium or confusion – or new onset of hallucinations

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Short Alcohol Withdrawal Scale (SAWS)

- Patient-administered tool to assess the severity of alcohol withdrawal.
- Patients indicate how they have felt in the previous 24 hours.
 Moderate to severe withdrawal ≥ 12 points.
- Clinicians can also use Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar)

ltem	None (0 points)	Mild (1 point)	Moderate (2 points)	Severe (3 points,
Anxious				
Feeling confused				
Restless				
Miserable				
Problems with memory				
Tremor (shakes)				
Nausea				
Heart pounding				
Sleep disturbance				
Sweating				

Elholm et al, 2010



Ambulatory management of alcohol withdrawal

- Transition to higher level of care if any escalating symptoms, CIWA>20, SAWS>16, distress, altered mental status or seizure
- Duration of treatment may last between 1-7 days
- Recommend regular diet, hydration, safe and relaxing environment, and consider multivitamin containing thiamine and folate
- Don't forget medications for AUD!

Resource: ASAM Clinical Practice Guideline on Alcohol Withdrawal Management, 2020

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Part IV. Harm Reduction Approaches



Harm reduction techniques

- Avoid mixing alcohol with other substances, especially CNS depressants
- Pre-plan intoxication periods and the circumstances: Plan ride, bring condoms, log out of internet
- Count # of drinks and pay attention to the size of drink
- Spread out drinks over time
- Use pocket breathalyzer to monitor self, especially before driving
- Alternate drinks with non-alcoholic ones
- Eat before and during drinking
- Add ice to drink
- OK to continue most prescribed medications, except sedatives and disulfiram

Comprehensive primary care for people who use drugs and alcohol. California Society of Addiction Medicine Workshop, September 2020.

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Primary care for people who drink alcohol

- · Up to date cancer screening
- Screening: IPV, Falls, Cognitive, Depression, CV Risk
- Heavy alcohol prompts osteoporosis screening before age 65
- Vaccines: PPV-23 x 1 19-64yo and x2 >65yo, Tdap, HAV, HBV, Tetanus, HPV
- Consider TB risk
- Assess nutritional status
- Review medications for interactions with alcohol
- Assess for other substance use including tobacco
- Offer family planning

California Society for Addiction Medicine, 2020



Words matter in order to reduce stigma

Use person-first language	Use clinically-accurate language
"Person who drinks alcohol" rather than "alcoholic" or "drunk"	 "Alcohol use disorder," "unhealthy alcohol use," or "high-risk alcohol use" rather than "alcohol abuse" "Remission" rather than "sober" "Recurrence" rather than "relapse"

Kelly & Westerhoff, 2010; National Institute on Drug Abuse, 2020

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Summary Points: Management of Alcohol Use Disorder

- 1. Screen all adults for unhealthy alcohol use
- 2. Use brief counseling for at-risk drinking AND prescribe medications for alcohol use disorder
- 3. Apply a patient-centered approach to medical and psychosocial treatment selection based on goals and co-morbidities
- 4. Consider outpatient withdrawal management for patients without history and symptoms of severe withdrawal
- 5. Treat alcohol use disorder even when abstinence is not the goal



Our services are accessible via phone or website

Substance Use

Evaluation and managemen

National Warmline: (855) 300-3595

Perinatal HIV Hotline

Pregnant women with HIV or at-risk for HIV & their infants

(888) 448-8765

Hepatitis C Warmline
HCV testing, staging, monitoring, & treatment

(844) 437-4636 or (844) HEP-INFO

HIV/AIDS Warmline

HIV testing, ARV decisions, complications, &

(800) 933-3413

PrEPline

Pre-exposure prophylaxis for persons at-risk for HIV

(855) HIV-PrEP

PEPline

Occupation & non-occupational exposure management

(888) 448-4911

Questions can also be submitted securely via nccc.ucsf.edu

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Thank you!

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Reduction of drinking: An appropriate clinical outcome

- Reductions in drinking levels (grams of ethanol per day) associated with decreased SBP, LFT improvements, better QOL and medication effects
- Reductions may align more with patient's goals, recognize more people as being successfully treated, encourage more clinician confidence and encourage future medication development
- Other studies prioritize reduction in alcohol-related harm over abstinence or use reduction

Witkiewitz et al., 2018; Witkiewitz et al., 2019; Falk et al., 2019

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What is an optimal outcome in alcohol use disorder treatment?

- Total abstinence is a high standard for evaluating success
- Decrease the number of days drinking
- · Decrease the number of days with heavy drinking
- Decrease the number of drinks per day
- Minimize physical, psychological, financial, and social harm



Updated definitions for research are nonabstinence based

Remission from alcohol use disorder as defined by DSM-5 criteria

Requires that the individual not meet any AUD criteria (excluding craving). Remission from AUD is categorized based on its duration: initial (up to 3 months), early (3 months to 1 year), sustained (1 to 5 years), and stable (greater than 5 years).

Recovery from alcohol use disorder

Recovery is a process, achieved if both remission from AUD and cessation from heavy drinking are maintained over time. Recovery is often marked by the fulfillment of basic needs, enhancements in social support and spirituality, and improvements in physical and mental health, quality of life, and other dimensions of well-being.

