

# SBI(R)T for Alcohol Use Disorder

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## Learning Objectives

1. Effectively and efficiently apply screening techniques for alcohol use disorder.
2. Provide feedback and information regarding alcohol use, respecting the patient's stage of change.
3. offer appropriate medical therapy for treatment of moderate to severe alcohol use disorder.

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## Kelly

**40 yo M new to your practice here for med refill.**

**PMHx: “panic attacks”**

**Current meds: lorazepam 1 mg qhs and 1mg q24h prn**

**“I think there’s something wrong with my heart. Sometimes, out of the blue, my heart races and I feel weak and shaky. It’s hard to breathe. The lorazepam helps, but I think my heart needs to be checked out.”**

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## It’s Just Alcohol!!!

- **In 2012, 3.3 million deaths, or 5.9 percent of all global deaths were attributable to alcohol.**
- **Globally, alcohol misuse is the fifth leading risk factor for premature death and disability; among people between the ages of 15 and 49, it is the first.**
- **In the age group 20–39 years, approximately 25 percent of the total deaths are alcohol attributable.**

### References:

- World Health Organization (WHO). *Global Status Report on Alcohol and Health*. 2014 ed
- Lim, S.S.; Vos, T.; Flaxman, A.D.; et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: A systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 380(9859):2224–2260, 2012.
- World Health Organization (WHO). *Alcohol*. 2015.

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Home » News & Events » News » NIH study shows steep increase in rate of alcohol-related ER visits

**NIH** National Institute on Alcohol Abuse and Alcoholism  
 www.niaaa.nih.gov

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**NEWS RELEASE**  
 FOR IMMEDIATE RELEASE  
 Friday, January 12, 2018

**NIH study shows steep increase in rate of alcohol-related ER visits**

*Increases were larger among females than males, providing more evidence of narrowing gender gaps in alcohol-related harms in the U.S.*

The rate of alcohol-related visits to U.S. emergency departments (ED) increased by nearly 50 percent between 2006 and 2014, especially among females and drinkers who are middle-aged or older, according to a new study conducted by researchers at the National Institute on Alcohol Abuse and Alcoholism (NIAAA), part of the National Institutes of Health. The study findings are available online in the journal *Alcoholism: Clinical and Experimental Research*.

"In just nine years, the number of people transported to the ED annually for medical emergencies caused or exacerbated by alcohol increased from about 3 million to 5 million," said NIAAA Director George F. Koob, Ph.D. "These findings are indicative of the detrimental effects that acute and chronic alcohol misuse have on public health, and the significant burden they place on our healthcare system."

Researchers led by Aaron White, Ph.D., senior scientific advisor to the NIAAA director, analyzed data from the Nationwide Emergency Department Sample (NEDS), the largest ED database in the United States, and part of the Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project. The research team assessed trends in ED visits between 2006 and 2014 involving acute and chronic alcohol consumption among individuals 12 and older. Visits related to acute alcohol consumption were classified by standard diagnostic codes related to alcohol misuse over a short period of time, such as acute alcohol intoxication and accidental alcohol poisoning, while visits involving chronic alcohol misuse were identified by diagnostic codes for conditions related to long-term drinking, such as alcohol withdrawal and alcohol...

The rate of alcohol-related visits to U.S. emergency departments increased by nearly 50 percent between 2006 and 2014

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# It's Just Alcohol!!!

**Table 1. Percentage changes in risks for males and females of premature death from 12 alcohol-related illnesses according to typical daily alcohol intake**

Type of Illness or Disease	Proportion of All Deaths, 2002-2005	Percentage Increase/Decrease in Risk				
		1 Drink	2 Drinks	3-4 Drinks	5-6 Drinks	+ 6 Drinks
Tuberculosis	1 in 2,500	0	0	+194	+194	+194
Oral cavity & pharynx cancer	1 in 200	+42	+96	+197	+368	+697
Oral esophagus cancer	1 in 150	+20	+43	+87	+164	+367
Colon cancer	1 in 40	+3	+5	+9	+15	+26
Rectum cancer	1 in 200	+5	+10	+18	+30	+53
Liver cancer	1 in 200	+10	+21	+38	+60	+99
Larynx cancer	1 in 500	+21	+47	+95	+181	+399
Ischemic heart disease	1 in 13	-19	-19	-14	0	+31
Epilepsy	1 in 1,000	+19	+41	+81	+152	+353
Dysrhythmias	1 in 250	+8	+17	+32	+54	+102
Pancreatitis	1 in 750	+3	+12	+41	+133	+851
Low birth weight	1 in 1,000	0	+29	+84	+207	+685



References: <http://www.ccsa.ca/Resource%20Library/2012-Communicating-Alcohol-Related-Health-Risks-en.pdf>

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## Guidelines for Reducing Health Risks

### Women



0-2 standard drinks per day  
No more than 10 standard drinks per week

### Men



0-3 standard drinks per day  
No more than 15 standard drinks per week

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## Guidelines for Reducing Health Risks



**Beer**  
341 ml  
(12 oz.)  
5% alcohol content



**Cider/  
Cooler**  
341 ml  
(12 oz.)  
5% alcohol content



**Wine**  
142 ml (5 oz.)  
12% alcohol content

**Distilled Alcohol**  
(rye, gin, rum, etc.)  
43 ml (1.5 oz.)  
40% alcohol content



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## Guidelines for Reducing Health Risks

### Women



No more than  
3 drinks in one day

### Men



No more than  
4 drinks in one day

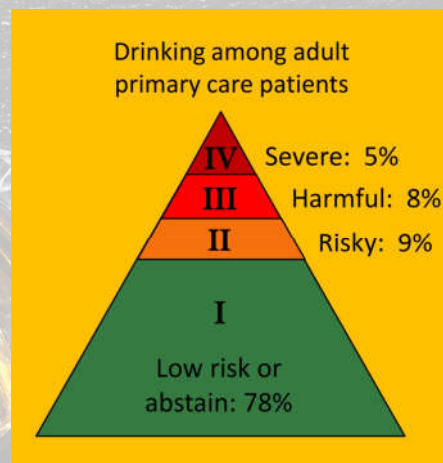
#### Advise patients:

- their risk of injury increases with each additional drink in many situations

If <25 or > 65, never go  
above upper limit  
guidelines from last slide

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## AUD exists along a spectrum



<http://www.sbirthoregon.org> Accessed June 3, 2017

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## What things can be forgotten from the alcohol history that will miss a diagnosis of alcohol use disorder?

- Not asking at all
- Not getting specific #/week in std drinks
- Not asking about binge drinking
- Not asking when c/o insomnia, anxiety, depression, PTSD, other drug use disorders
- Not asking when c/o gastritis, HTN, ED

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## Kelly

- this has been happening for about three years, but getting worse
- Associated with waking up in the middle of the night or first thing in the morning; not associated with activity
- Feels restless, tense, irritable and has difficulty concentrating by the end of the work day
- Sensations improve with lorazepam or having a beer
- No family hx cardiac disease
- No smoking/other drugs

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## Screening Alcohol Tools

### CAGE

- Have you ever felt you ought to **CUT DOWN** on your drinking?
- Have people **ANNOYED** you by criticizing your drinking?
- Have you ever felt bad or **GUILTY** about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (**EYE-OPENER**)?

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## Screening Alcohol Tools

### T-ACE – pregnancy screener

- How many drinks does it take to make you feel high? (less than or equal to 2 drinks, or more than 2 drinks)
- Have people **ANNOYED** you by criticizing your drinking?
- Have you felt you ought to cut down on your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (**EYE-OPENER**)?

Score of 2 or more is considered high risk for damage to the fetus

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## Screening Alcohol Tools

- Binge drinking question –

How many times in the past year have you had five (men) / four (women) or more drinks in one day?

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## Screening Alcohol Tools

### AUDIT (10 Q) and AUDIT-C (3 Q)

1. How often did you have a drink containing alcohol in the past year?
2. How many drinks did you have on a typical day when you were drinking in the past year?
3. How often did you have six or more drinks on one occasion in the past year?

**Positive for Men if 4 or more, Women 3 or more**

Bradley, K. A., DeBenedetti, A. F., Volk, R. J., Williams, E. C., Frank, D. and Kivlahan, D. R. (2007), AUDIT-C as a Brief Screen for Alcohol Misuse in Primary Care. *Alcoholism: Clinical and Experimental Research*, 31: 1208–1217. doi:10.1111/j.1530-0277.2007.00403.x

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## Substance Use Disorder - DSMV

- **C**raving
- Loss of **C**ontrol
- Use despite **C**onsequences
- Unable to **C**ut down



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## Alcohol Use Disorder - DSMV

### 1. Craving



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## Alcohol Use Disorder - DSMV

2. Use over longer periods or in larger amounts than desired
3. Great deal of time spent getting, using or recovering from use
4. Recurrent use in physically hazardous situations
5. Impaired social, recreational, or work duties reduced due to alcohol use

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## Alcohol Use Disorder - DSMV

6. Withdrawal – characteristic syndrome
7. Tolerance – more alcohol required for same effect
8. Recurrent use results in failure to fulfill major role obligations (home/work)
9. Continued use despite social consequences
10. Continued use despite knowledge of physical/psychological problems caused by alcohol

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## Alcohol Use Disorder - DSMV

11. Persistent desire or unsuccessful attempts to cut down



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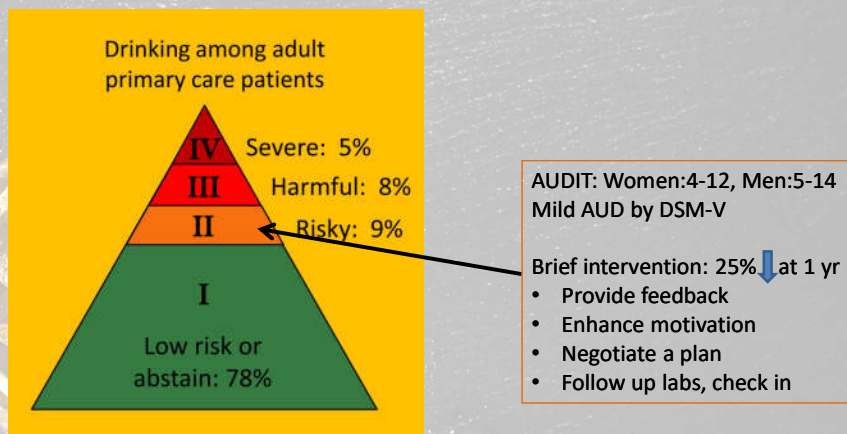
## Alcohol Use Disorder – DSMV

- 2-3 = mild AUD
- 4-5 = moderate AUD
- 6 and up = severe AUD



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## Treatment Intervention

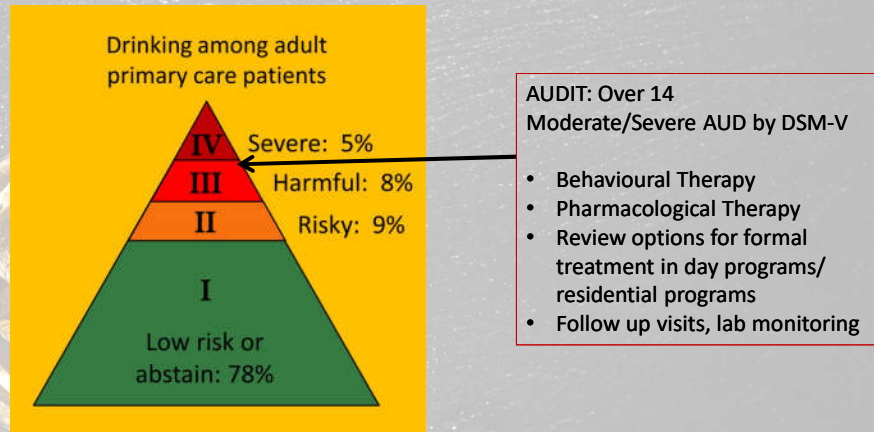


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- <http://www.sbirtoregon.org/video-demonstrations/#steve>

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## Treatment Intervention



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## Kelly

- AUDIT: 20
- WD, tolerance, wife is irritated with him, often craves a beer about 4 PM, doesn't spend time with the kids at night anymore b/c of alcohol
- Surprised what low risk drinking guidelines are
- Surprised that his alcohol may be making his anxiety worse, and it might be WD causing the panic attacks

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## Kelly

- Agreeable to trying to cut down on weekends
- Agreeable to lab check
- Holter monitor, echo, EKG
- Return after investigations

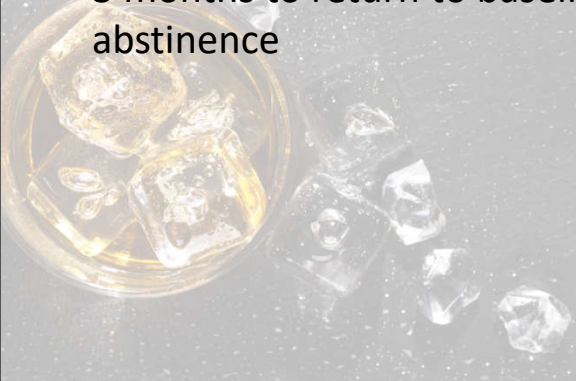
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## Lab Monitoring

- GGT – most sensitive biomarker
- Increased in 75% of severe AUD and 30% of heavy drinkers (5 drinks/day over several weeks)
- Most useful over 30 yoa
- not specific
- Back to normal after 2-8 weeks of abstinence
- Normals → F – 4-18 M – 6 - 28

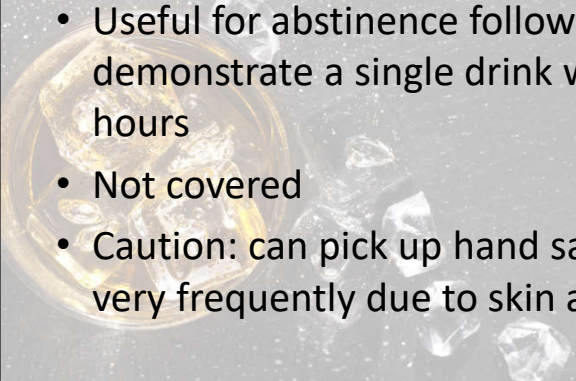
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## Lab Monitoring

- MCV – elevation
  - Non specific – b12, thyroid, megaloblastic d/o
  - 3 months to return to baseline with abstinence
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## Lab Monitoring

- Ethyl glucuronide
  - Metabolite found in urine
  - Useful for abstinence follow up as it may demonstrate a single drink within the past 72 hours
  - Not covered
  - Caution: can pick up hand sanitizer if used very frequently due to skin absorption
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## Kelly

- cardiac testing all normal
- Hb 156            GGT 224
- AST 89            ALT 46
- Platelets 200
- MCV 95
- Liver ultrasound – fatty liver

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## Naltrexone – level 1

- Opioid antagonist
- Less alcohol craving and less heavy drinking days than placebo by reducing euphoria
- Blocks opioidergic effects
- dosing: 25 mg/day x 3 days, then 50 mg/day – can go up to 150 mg/day using craving as guide
- Transient s/e: h/a, GI upset, dizziness, BB warning
- Caution: 3 X ULN liver enzymes
- Contraindications: on chronic opioids, pregnancy

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## Acamprosate – level 1

- Amino acid derivative that increases GABA neurotransmission/complex effects on GLU transmission
- Decreased frequency and quantity of drinking
- Dosing 666 mg po tid
- Need to be abstinent for few days first for it to work
- s/e: GI, pruritus - transient
- Contraindications: pregnancy, renal insufficiency

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## Disulfiram

- Irreversibly inhibits acetaldehyde dehydrogenase, resulting in build up of acetaldehyde and DER ← adverse event to keep people from drinking
- s/e: drowsiness, lethargy; rare: optic neuritis, liver toxicity and peripheral neuropathy
- Best in very motivated individuals with strong support system providing DOT

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## Topiramate

- Stabilizes glutamate and GABA pathways
- May improve sleep and mood in early abstinence
- s/e: fatigue, dizziness, ataxia, tingling, memory issues, weight loss; rarely kidney stones, acute glaucoma
- Dose: 50 mg po qd, increase gradually over 8 weeks to a of max 300 mg daily

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## Gabapentin

- Affects GABA and dopamine
- s/e: drowsiness, dizziness; rare: depression with SI
- Dose 600 mg tid – can start lower initially

Mason, .B, Quello, S., BA, Goodell, V., Shadan, F., Kyle, M., and Begovic, A. Gabapentin Treatment for Alcohol Dependence: A Randomized Controlled Trial *JAMA Intern Med.* 2014 174: 70. doi:10.1001/jamainternmed.2013.11950.

Kahan, M. Safe prescribing practices for addictive medications and management of substance use disorders in primary care: A pocket reference for family physicians. Women's College Hospital

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## Baclofen

- GABA receptor agonist
- S/e: drowsiness, weakness, can worsen depression
- Safe in liver disease
- Lower renal dosing, caution with TCAs
- 5 mg po tid → 10 mg po tid, max 80 mg qd
- Evidence of misuse, overdose, withdrawal

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## 12 Step Approaches

- AA – attendance correlates with lower levels of drinking and long term abstinence
  - Around since 1935, worldwide
  - Based on mutual support/higher power
  - SOS (secular) and CR (Christian)
  - Project MATCH – TSF/AA higher abstinence rates compared to CBT or MET at 1 and 3 years out
- TSF – manualized group therapy which points patients towards 12 step participation

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## Kelly

- Alcohol: MET, Naltrexone, discussed triggers
- Anxiety/insomnia: decr alcohol; mirtazapine
- Behavioural therapy: AA meetings or addictions counselor
- BZDs: taper plan
- MOT: no reason to notify at this time
- f/u: bw in 4 weeks, visit in 6 weeks, now every 12 weeks

looking for more?

1. <http://www.metaphi.ca/provider-tools.html> has all the links and tools you need for dealing with alcohol related issues in the office or in the emergency department.
2. Ontario mentoring network – free CME - <https://ocfp.on.ca/cpd/collaborative-networks>
3. Atlantic provinces mentoring network for pain and addiction - <https://www.atlanticmentorship.com/>
4. BC - **Rapid Access to Consultative Expertise (RACELine)—Addiction Specialists – phone line is for physicians only** - Monday to Friday 0800-1700  
1 (877) 696-2131 or (604) 696-2131

NIHB – Jan 2019 – naltrexone and acamprosate are both listed in drug benefits.

for patients:

<http://www.metaphi.ca/patient-resources.html> - resources for patients on alcohol and opiates

app for the phone: Saying When – from CAMH – available for iphone and android

<http://camh.alcoholhelpcenter.net/> - anonymous website to use to help cut back drinking and to get more information

podcast: The Bubble Hour – radio show on blog talk radio “dedicated to breaking down the walls of stigma and denial surrounding the disease of alcoholism