



NAVIGATING THE TREATMENT OF ALCOHOL USE DISORDER IN YOUR PRACTICE

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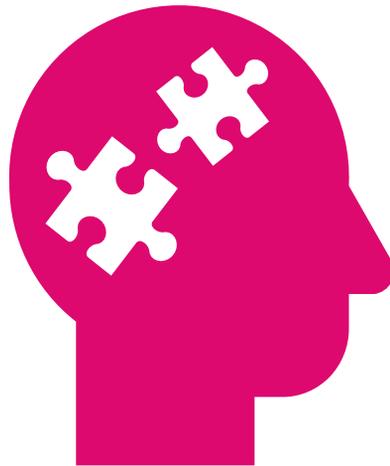
<http://vmdprimeau.com/files/CPA2022/vmdprimeau@gmail.com>

Full References Available Upon Request
Canadian Psychiatric Association 2022

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NO CONFLICT
OF INTEREST
TO DECLARE



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GUIDELINES & RESOURCES

Ontario Health Quality (previously HQO)

- <https://www.hqontario.ca/Portals/0/documents/evidence/quality-standards/qs-alcohol-use-disorder-quality-standard-en.pdf>
- Problematic Alcohol Use and Alcohol Use Disorder Quality Standards (2020)

Canadian Coalition for Seniors Mental Health (CCSMH)

- https://ccsmh.ca/wp-content/uploads/2019/12/Final_Alcohol_Use_DisorderV6.pdf
- Canadian Academy of Geriatric Psychiatry (CAGP)
- Canadian Guidelines on Alcohol Use Disorder Among Older Adults (2019)

American Psychiatric Association (APA)

- <https://psychiatryonline.org/doi/pdf/10.1176/appi.books.9781615371969>
- The APA Practice Guideline for the Pharmacological Treatment of Patients With Alcohol Use Disorder (2018)

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GUIDELINES & RESOURCES

British Columbia Centre on Substance Use (BCCSU)

- <https://www.bccsu.ca/>
- Great section on Substance Use and COVID-19
- Provincial guidelines for AUD

Addiction Care and Treatment Online Course (BCCSU and UBC collaboration)

- <https://ubccpd.ca/course/addiction-care-and-treatment>
- Now up to 20.0 Mainpro+/MOC Section 3 credits per their website

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OBJECTIVES

	At the end of this session participants will be able to:
Describe	Describe the different medications used to treat Alcohol Use Disorder (AUD)
Apply	Apply current principles for the management of Alcohol Withdrawal
Identify	Identify the importance of concurrent integrated treatment and recognize the impact of the COVID-19 pandemic on prevalence and treatment of AUD

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WHY ARE WE TALKING ABOUT THIS ON A FRIDAY AFTERNOON?

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Alcohol is by far the most common drug used by Canadians

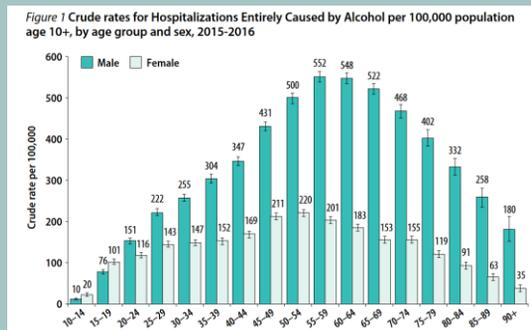
At least 20% of drinkers consume above Canada’s Low-Risk Alcohol Drinking Guidelines

In Canada, there were around 77,000 hospitalizations entirely caused by alcohol in 2015–2016, compared to 75,000 hospitalizations for heart attacks in the same year

In 2002, alcohol was responsible for 4,258 deaths in Canada, representing 1.9% of all deaths

Alcohol use disorder (AUD) is the most prevalent Substance Use Disorder with a lifetime prevalence of 18.1% in Canada

Canadian Centre on Substance Use and Addiction Alcohol Canadian Drug Summary, Fall 2017



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PREVALENCE IN YOUTH

By the time Canadian students are in the 12th grade, the majority of them are drinking alcohol

83% of 12th-grade students in Ontario admitted to drinking alcohol

49% confessing they binge drink



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ALCOHOL CONSUMPTION AND THE COVID-19 PANDEMIC

- As compared to before the COVID-19 pandemic, 23.3% of respondents reported drinking more alcohol compared to before the pandemic
 - 4.8% drank much more and 18.5% drank slightly more
- 25% of Canadians (aged 35–54) and 21% of Canadians (aged 18–34) say they have increased the amount of alcohol they drink while spending more time at home during the COVID-19 pandemic
- More than 1 in 10 women (11.7%) reported four or more drinks on the days on which they drank and more than 1 in 10 men (11.7%) reported drinking five or more drinks on the days on which they drank
- Analyses indicated that changes in alcohol use were associated with the following:
 - Age
 - Household income
 - A person's living situation
 - Anxiety
 - Feeling lonely or depressed

CIHR & CCSA 2020-2022

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CO-MORBIDITY WITH MENTAL ILLNESS

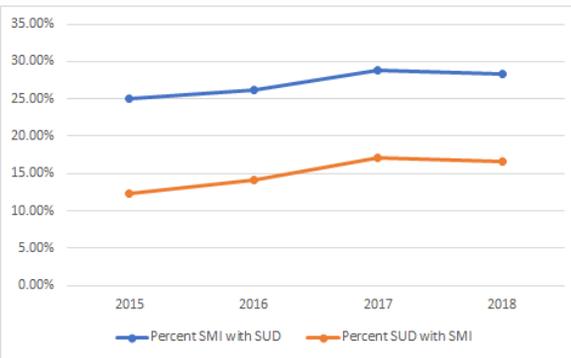
Substance Use Disorders are highly comorbid with virtually all categories of psychiatric disorders, especially psychotic, mood, anxiety, ADHD and personality disorders

Lifetime prevalence of addictive disorder 29% (OR 2.7), 15% for drug disorder

Odds are 7 times greater of developing both alcohol and drug disorders

53% of people with drug disorder have a mental disorder (OR 4.5)

ECA study, 1988



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, Mental Health, Detailed Tables available at: <https://www.samhsa.gov/data/population-data-nsduh>

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SCREENING

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SCREENING

Most common screening errors in our practice:

Not asking about alcohol use

Accepting vague answers (e.g., "I just drink socially")

Not converting to standard drinks (most people pour large drinks at home)

Missing binge consumption (many patients do not mention periodic heavy consumption when asked about "average" or "typical" drinking)

Not using a clinical scale to measure the impact of the drinking or to measure the cravings

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For these guidelines, "a drink" means:



Your limits

Reduce your long-term health risks by drinking no more than:



- 10 drinks a week for women, with no more than 2 drinks a day most days
- 15 drinks a week for men, with no more than 3 drinks a day most days

Plan non-drinking days every week to avoid developing a habit.

Special occasions

Reduce your risk of injury and harm by drinking no more than 3 drinks (for women) or 4 drinks (for men) on any single occasion.

Plan to drink in a safe environment. Stay within the weekly limits outlined above in **Your limits**.

When zero's the limit

Do not drink when you are:

- driving a vehicle or using machinery and tools
- taking medicine or other drugs that interact with alcohol
- doing any kind of dangerous physical activity
- living with mental or physical health problems
- living with alcohol dependence
- pregnant or planning to be pregnant
- responsible for the safety of others
- making important decisions

Pregnant? Zero is safest

If you are pregnant or planning to become pregnant, or about to breastfeed, the safest choice is to drink no alcohol at all.



Delay your drinking

Alcohol can harm the way the body and brain develop. Teens should speak with their parents about drinking. If they choose to drink, they should do so under parental guidance; never more than 1–2 drinks at a time, and never more than 1–2 times per week. They should plan ahead, follow local alcohol laws and consider the **Safer drinking tips** listed in this brochure.

Youth in their late teens to age 24 years should never exceed the daily and weekly limits outlined in **Your limits**.

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www.ccsa.ca • www.ccdus.ca

Update of Canada's Low-Risk Alcohol Drinking Guidelines: Final Report for Public Consultation

August 2022

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LOW-RISK DRINKING GUIDELINES PROPOSED UPDATE (11/2022)

Canada's Guidance on Alcohol and Health consists of seven key takeaways:

1. All levels of alcohol consumption are associated with some risk, so drinking less is better for everyone.
2. Among healthy individuals, there is a continuum of risk for alcohol-related harms where the risk is:
 - Negligible to low for individuals who consume two standard drinks or less per week;
 - Moderate for those who consume between three and six standard drinks per week; and
 - Increasingly high for those who consume more than six standard drinks per week.
3. On any occasion, any level of consumption has risks, and with more than two standard drinks, most individuals will have an increased risk of injuries or other problems.
4. Disproportionately more injuries, violence and deaths result from men's drinking.
5. Above low levels of alcohol consumption, the health risks increase more steeply for women than for men.
6. It is safest not to drink while pregnant and during the pre-conception period.
7. For women who are breastfeeding, it is safest not to use alcohol.

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LOW-RISK DRINKING GUIDELINES – PROPOSED UPDATE (11/2022)

The consequences of drinking:

- **Having 2 drinks or fewer per week** should allow you to avoid negative alcohol consequences
- **If you have 3 to 6 drinks per week**, you are increasing your risk of developing certain cancers, including breast and colon cancer
- **If you have 7 drinks or more per week**, you are actually increasing your risk of developing a heart disease or having a stroke
- **And with each additional drink**, your risk of having these health problem and many other diseases and injuries, exponentially increases

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GERIATRIC LOW-RISK DRINKING GUIDELINES

For women 65 years of age or older, no more than 1 standard drink per day with no more than 5 alcoholic drinks per week is recommended; for men 65 years of age or older, no more than 1–2 standard drinks per day, with no more than 7 per week in total is recommended. Non-drinking days are recommended every week.

[GRADE: Evidence: Moderate; Strength: Strong]

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SUBSTANCE USE DISORDER

Substance Use Disorder (SUD) DSM-5 criteria (replaces "abuse" and "dependence")

- 1) Substance taken in larger amounts or over a longer period of time than intended
- 2) Repeated unsuccessful efforts to reduce use
- 3) Great deal of time spent obtaining or using the substance, or recovering from its effects
- 4) Strong cravings or urges to use the substance (new to DSM-5)
- 5) Recurrent use resulting in a failure to fulfill major responsibilities
- 6) Continued use despite substance-related social or interpersonal problems
- 7) Reduction of major activities because of the substance
- 8) Repeatedly using in situations or activities where intoxication is dangerous
- 9) Continued use despite knowledge of alcohol-related physical or psychological problems
- 10) Tolerance
- 11) Withdrawal

Mild = 2-3 criteria

Moderate = 4-5 criteria

Severe = 6 or more criteria

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SCREENING

CAGE Questionnaire

Have you ever felt you needed to **C**ut down on your drinking?

Have people **A**nnoyed you by criticizing your drinking?

Have you ever felt **G**uilty about drinking?

Have you ever felt you needed a drink first thing in the morning (**E**ye-opener) to steady your nerves or to get rid of a hangover?

Two "yes" responses indicate that the possibility of alcoholism should be investigated further

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SCREENING

Alcohol Use Disorders Identification Test (AUDIT) developed by WHO

- 3 subsections comprising: hazardous alcohol use (3 questions), symptoms of dependence (3 questions), and harmful alcohol use (4 questions)
- Each question is scored on a 4-point scale, for a total of 40 points, with higher ratings related to higher risk for alcohol related problems
- Scores ranging between 8 and 15 (medium risk for alcohol related problems) are usually targeted by a brief intervention
- Scores of 16 to 19 may be indicative of hazardous use of alcohol, while scores above 20 are concerning for alcohol dependence

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Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	

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CRAVING SCALES

Assessing Alcohol Problems: A Guide for Clinicians and Researchers

Penn Alcohol Craving Scale (PACS)

PLEASE READ EACH ITEM CAREFULLY AND CIRCLE THE NUMBER THAT BEST DESCRIBES YOUR CRAVING DURING THE PAST WEEK

1. During the past week *how often* have you thought about drinking or about how good a drink would make you feel?
 - 0 Never (0 times during the past week)
 - 1 Rarely (1 to 2 times during the past week)
 - 2 Occasionally (3 to 4 times during the past week)
 - 3 Sometimes (5 to 10 times during the past week or 1 to 2 times per day)
 - 4 Often (11 to 20 times during the past week or 2 to 3 times per day)
 - 5 Most of the time (20 to 40 times during the past week or 3 to 6 times per day)
 - 6 Nearly all of the time (more than 40 times during the past week or more than 6 times per day)

2. At its most severe point, *how strong* was your craving during the past week?
 - 0 None at all
 - 1 Slight, that is a very mild urge
 - 2 Mild urge
 - 3 Moderate urge
 - 4 Strong urge, but easily controlled
 - 5 Strong urge and difficult to control
 - 6 Strong urge and would have drunk alcohol if it were available

3. During the past week *how much time* have you spent thinking about drinking or about how good a drink would make you feel?
 - 0 None at all
 - 1 Less than 20 minutes
 - 2 21 to 45 minutes
 - 3 46 to 90 minutes
 - 4 90 minutes to 3 hours
 - 5 Between 3 to 6 hours
 - 6 More than 6 hours

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ALCOHOL WITHDRAWAL MANAGEMENT

You assess Mr. Smith, a 46-year-old male who endorses a history of daily alcohol usage, up to a “mickey” of vodka per day.

Currently he is experiencing “shaking”, sweating and anxiety. He states he last drank 3 hours ago. He endorses a history of a seizure in the context of alcohol withdrawal 5 years ago.

He denies any past history of “DTs” (Delirium Tremens). When you ask him about hallucinations, he laughs and states he has never seen any “pink elephants”.

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ALCOHOL/SEDATIVE WITHDRAWAL

Withdrawal within several hours to a few days after cessation or reduction of use that has been heavy/prolonged with two or more of the following:

Autonomic hyperactivity (e.g. sweating, pulse greater than 100)

Increased hand tremor

Insomnia

Nausea or vomiting

Transient visual, tactile, or auditory hallucinations or illusions

Psychomotor agitation

Anxiety

Generalized tonic-clonic seizures (3% in alcohol, 20-30% in sedatives)

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WITHDRAWAL SCALES

Clinical Institute Withdrawal Assessment for Alcohol (CIWA)

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- 1 mild nausea with no vomiting
- 2
- 3
- 4 intermittent nausea with dry heaves
- 5
- 6
- 7 constant nausea, frequent dry heaves and vomiting

TREMOR—Arms extended and fingers spread apart. Observation.

- 0 no tremor
- 1 not visible, but can be felt fingertip to fingertip
- 2
- 3
- 4 moderate, with patient's arms extended
- 5
- 6
- 7 severe, even with arms not extended

PAROXYSMAL SWEATS—Observation.

- 0 no sweat visible
- 1 barely perceptible sweating, palms moist
- 2
- 3
- 4 beads of sweat obvious on forehead
- 5
- 6
- 7 drenching sweats

ANXIETY—Ask "Do you feel nervous?" Observation.

- 0 no anxiety, at ease
- 1 mildly anxious
- 2
- 3
- 4 moderately anxious, or guarded, so anxiety is inferred
- 5
- 6
- 7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

AGITATION—Observation.

- 0 normal activity
- 1 somewhat more than normal activity
- 2
- 3

- 0 none
- 1 very mild itching, pins and needles, burning or numbness
- 2 mild itching, pins and needles, burning or numbness
- 3 moderate itching, pins and needles, burning or numbness
- 4 moderately severe hallucinations
- 5 severe hallucinations
- 6 extremely severe hallucinations
- 7 continuous hallucinations

AUDITORY DISTURBANCES—Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.

- 0 not present
- 1 very mild harshness or ability to frighten
- 2 mild harshness or ability to frighten
- 3 moderate harshness or ability to frighten
- 4 moderately severe hallucinations
- 5 severe hallucinations
- 6 extremely severe hallucinations
- 7 continuous hallucinations

VISUAL DISTURBANCES—Ask "Does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation.

- 0 not present
- 1 very mild sensitivity
- 2 mild sensitivity
- 3 moderate sensitivity
- 4 moderately severe hallucinations
- 5 severe hallucinations
- 6 extremely severe hallucinations
- 7 continuous hallucinations

HEADACHE, FULLNESS IN HEAD—Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity

- 0 not present
- 1 very mild
- 2 mild
- 3

WITHDRAWAL SCALES

Prediction of Alcohol Withdrawal Severity Scale (PAWSS)

Maldonado et al., 2014

Part A: Threshold Criteria: ("+" or "-", no point)

Have you consumed any amount of alcohol (i.e., been drinking) within the last 30 d? OR did the patient have a "+" BAL upon admission? _____

IF the answer to either is YES, proceed with test:

Part B: Based on patient interview: (1 point each)

1. Have you ever experienced previous episodes of alcohol withdrawal? _____
2. Have you ever experienced alcohol withdrawal seizures? _____
3. Have you ever experienced delirium tremens or DT's? _____
4. Have you ever undergone alcohol rehabilitation treatment? _____
(i.e., in-patient or out-patient treatment programs or AA attendance)
5. Have you ever experienced blackouts? _____
6. Have you combined alcohol with other "downers" like benzodiazepines or barbiturates during the last 90 d? _____
7. Have you combined alcohol with any other substance of abuse during the last 90 d? _____
8. Have you been recently intoxicated/drank within the last 30 d? _____

Part C: Based on clinical evidence: (1 point each)

9. Was the patient's blood alcohol level (BAL) on presentation >200? _____
10. Is there evidence of increased autonomic activity? _____
(e.g., HR >120 bpm, tremor, sweating, agitation, nausea)

Total Score: _____

Notes: Maximum score = 10. This instrument is intended as a **SCREENING TOOL**. The greater the number of positive findings, the higher the risk for the development of alcohol withdrawal syndromes. A score of ≥4 suggests **HIGH RISK** for moderate to severe AWS; prophylaxis and/or treatment may be indicated.

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CBC

Electrolytes

Liver profile
(AST, ALT, GGT, Bilirubin, Albumin, INR)

Renal profile

TSH

B12

Metabolic workup
(fasting glucose or HbA1c, lipid profile)

Urine analysis, urine BHCg and urine drug screen

ECG

INITIAL INVESTIGATIONS

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ALCOHOL WITHDRAWAL

Indications for outpatient management of alcohol withdrawal:

- Committed to abstinence, willing to start treatment and agrees to not drink while being treated for alcohol withdrawal
- No history of severe withdrawal (seizures, delirium tremens, hospital admissions)
- Not on high doses of opioids or sedating medications, no history of misuse
- Has good supports at home and spouse, relative, or friend agrees to dispense the medication
- Age < 65
- No hepatic decompensation (ascites, encephalopathy), no cirrhosis with liver dysfunction

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GERIATRIC CONSIDERATIONS

Use the Prediction of Alcohol Withdrawal Severity Scale (PAWSS) to screen for those requiring medical withdrawal management (prior delirium, seizures, or protracted withdrawal). Patients who are in poor general health, acutely suicidal, have dementia, are medically unstable, or who need constant one-on-one monitoring should receive 24-hour medical, psychiatric, and/or nursing inpatient care in medically-managed and monitored intensive treatment or hospital settings. [GRADE: Evidence: High; Strength: Strong]

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ALCOHOL WITHDRAWAL

Clinical Institute Withdrawal Assessment for Alcohol, Revised (CIWA-Ar) is the standard monitoring scale with strong evidence of validity

Diazepam remains the first-line medication, given its long half-life and liposoluble properties (great for loading)

Chlordiazepoxide works similarly but is harder to find in hospital formularies today

Use lorazepam instead if patient is 60 or older, is on opioids or other sedating medications, has low serum albumin from any cause, or has significant liver dysfunction (signs of cirrhosis such as low albumin, high bilirubin/INR)

Other medications have been explored (valproic acid, carbamazepine, clonidine) although there is no major advantage over benzodiazepines

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ALCOHOL WITHDRAWAL

Gabapentin (Neurontin) is an off-label alternative (not approved by Health Canada) for mild-moderate alcohol withdrawal, especially in a community setting:

300 mg q6h = 1200 mg/d – days 1-3

300 mg q8h = 900 mg/d – day 4

300 mg q12h = 600 mg/d – day 5

300 mg HS = 300 mg/d – day 6

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ALCOHOL WITHDRAWAL

Do not forget about thiamine supplementation (100 mg IM x 3 days then 100 mg PO; some experts suggest 250-500 mg daily)

If cannot given IM (ex: outpatient setting), thiamine 100 mg PO TID is recommended as it will help increase likelihood of adequate dose

Geriatric guidelines:

- As a harm reduction strategy for chronic heavy drinkers, it is recommended that at least 50 mg of thiamine supplementation daily be used to prevent Wernicke-Korsakoff syndrome, progressive cognitive decline and increased frailty. [GRADE: Evidence: Low; Strength: Strong]
- To prevent the development of Wernicke's encephalopathy during withdrawal in older adults, at least 200 mg of parenteral thiamine (IM or IV) should be administered daily for 3–5 days. [GRADE: Evidence: Low; Strength: Strong]

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ALCOHOL WITHDRAWAL

If discontinuation is not advisable and/or the patient prefers to avoid medical withdrawal management, a gradual taper (example 25% decrease every week) can be done in the community

As a harm reduction strategy for older adults in controlled environments, where medical withdrawal is not available or deemed appropriate, it is recommended that a managed alcohol taper be considered. Individualize the taper by 1 standard drink every 3 days (aggressive tapering), weekly (moderate tapering), or every 2–3 weeks (mild tapering) with CIWA-Ar monitoring to keep the withdrawal symptom score < 10. The approach should be individualized, incremental, and with an indeterminate timeline.

[Consensus]

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ANTI-CRAVING THERAPY

Anti-craving medications have strong evidence in Alcohol Use Disorder (Number Needed to Treat 9-10)

Anti-craving is strongly recommended for at least 6-12 months initially, although anti-craving medication may be prescribed for many years and patients can have intermittent periods of therapy

Anti-craving therapy may be safely discontinued when the patient:

- no longer has cravings
- is confident that relapse will not happen if the medication is stopped
- has strong supports in place
- no longer has contact with people who misuse alcohol
- has learned alternative and more adaptive coping strategies

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ANTI-CRAVING SELECTION

Health Canada Indication:

Naltrexone (Revia) – suggested in harm reduction (APA recommended) H

Acamprosate (Campral) – suggested in abstinence (APA recommended) R

Disulfiram (Antabuse) – abstinence with good supervision (APA suggested) H

Preferred Off Label Options:

Topiramate (Topamax) – off label (APA suggested) R

Gabapentin (Neurontin) – off label (APA suggested) R

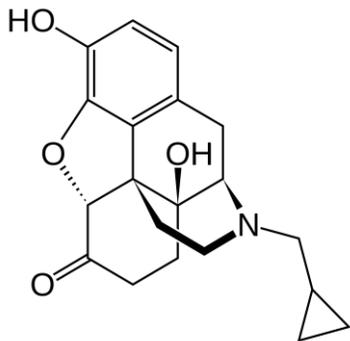
H = Mainly metabolized by the hepatic system

R = Mainly metabolized by the renal system

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NALTREXONE (LU 532)



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Brand name: Revia

Availability: PO in Canada, monthly IM in US

Dosage: 25 mg daily for 2 days then 50 mg daily, please increase to 100-150 mg daily if no response and well tolerated

Metabolism: mainly hepatic; no meal required

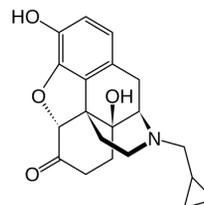
Mechanism of action: competitive opioid antagonist, blocks the pleasurable effects of alcohol

Pregnancy category: C

Important drug-drug interactions: no opioid for 1-3 days (monograph says 7-10 days) before initiation as it will block the analgesic effects and can precipitate withdrawal

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NALTREXONE (LU 532)



Potential adverse effects:

- Nausea (10%)
- Depression (5 to 7%)
- Fatigue (4%)
- Anxiety (2%)
- Eosinophilic pneumonia
- Reversible elevation in transaminases (contraindicated in acute hepatitis and liver failure)
- Headache (7%)
- Dizziness (4%)
- Insomnia (3%)
- Sleepiness (2%)

Monitoring:

- Pre-initiation liver panel (at minimum AST, ALT and bilirubin) and urine drug screen
- Start naltrexone if transaminases are not more than 5 times the normal level or GGT > 500, caution is warranted if transaminases are 3 – 5 times normal or GGT 300 – 500 (it is agreed among AUD experts that the risk of ongoing drinking far outweighs theoretical risk of further liver damage in patients with cirrhosis)
- Repeat liver panel at 3 months (some say 1 month)

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ACAMPROSATE (LU 531)

Brand name: Campral

Availability: PO

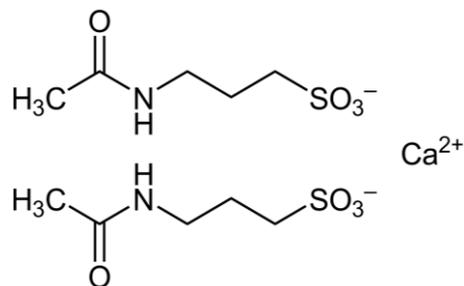
Dosage: 333 mg TID for 2 days then 666 mg TID

Metabolism: mainly renal; no meal required

Mechanism of action: by modulating glutamate and increasing GABA, which has been disturbed by regular, heavy drinking (this imbalance and discomfort makes some people return to drinking); it can mitigate alcohol withdrawal symptoms

Pregnancy category: C

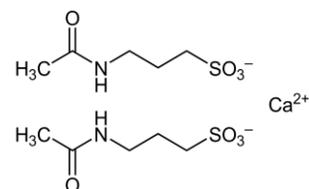
Important drug-drug interactions: none



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ACAMPROSATE (LU 531)



Potential adverse effects:

- Mild diarrhea or loose stools
- Nausea
- Anxiety
- Depression

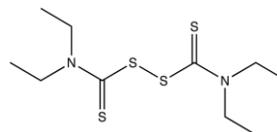
Monitoring:

- Pre-initiation renal panel (if moderate renal impairment, use 333 mg TID only, contraindicated in severe renal impairment)
- No other tests required although consider monitoring renal function over time

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DISULFIRAM



Brand name: Antabuse

Availability: PO at compounding pharmacies

Dosage: Classical regimen is 500 mg for 2 weeks then 250 mg daily although most clinicians start at 125 mg daily (range 125-500 mg daily)

Metabolism: mainly hepatic; no meal required

Mechanism of action: deters alcohol use by inhibiting the enzyme acetaldehyde dehydrogenase and making the person sick when they drink; need to wait 24-48 hours after last alcohol use before starting

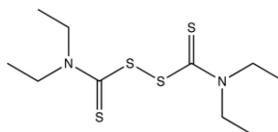
Pregnancy category: C

Important drug-drug interactions: patient should wear a medical alert bracelet as medications can contain alcohol; disulfiram is a 2C9 inhibitor

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DISULFIRAM



Potential adverse effects:

- Drowsiness
- Headache
- Garlic-like smell
- Anxiety
- Hepatotoxicity
- You can explain that if the person drinks, he or she might become warm and red, and experience dizziness, a throbbing headache, nausea and a pounding heart
- You can instruct them to avoid anything with alcohol (many vitamin tonics, cough and cold remedies, mouthwashes and some candies contain alcohol)
- It is generally OK to use cosmetic preparations that contain alcohol, such as aftershave lotions on the face, but test a small area beforehand
- Metallic taste
- Fatigue
- Rash, acne
- Depression, psychosis (rare)
- Peripheral neuropathy (prolonged use)

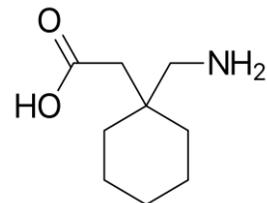
Monitoring:

- Pre-initiation liver panel, renal panel, CBC and electrolytes
- Repeat liver panel after 2 weeks and periodically thereafter

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GABAPENTIN



Brand name: Neurontin

Availability: PO

Dosage: Start at 300 mg BID or TID, can go to 600 mg TID or higher based on response and tolerability

Metabolism: renal; no meal required

Mechanism of action: by increasing GABA biosynthesis and by modulating dopamine, can be used to manage alcohol withdrawal as well as cravings

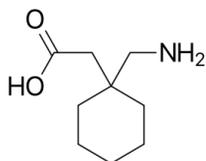
Pregnancy category: C

Important drug-drug interactions: avoid with other CNS depressants

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GABAPENTIN



Potential adverse effects:

- Dizziness
- Sedation
- Weight gain
- Nausea and vomiting
- Peripheral edema
- Rash (including risk of SJS)
- Withdrawal symptoms if abrupt discontinuation
- Ataxia
- Nervousness
- Depression
- Nystagmus
- Tremor
- Rhabdomyolysis

Monitoring:

- Pre-initiation renal panel
- Consider repeating renal panel periodically
- Cut dose if renal impairment

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TOPIRAMATE

Brand name: Topamax

Availability: PO

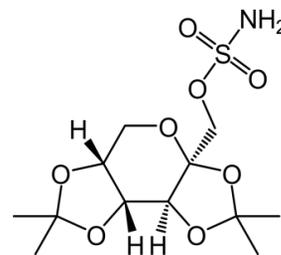
Dosage: 25 mg – 150 mg BID (increase by 25 mg increments every 3-7 days)

Metabolism: major renal and minor hepatic; no meal required

Mechanism of action: unknown, likely by inhibiting the release of glutamate and potentiating the activity of GABA, also may improve mood and sleep

Pregnancy category: D

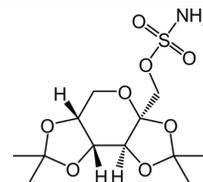
Important drug-drug interactions: weak 3A4 inducer and can decrease oral contraceptive levels



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TOPIRAMATE



Potential adverse effects:

- Skin numbness or tingling (51%)
- Taste disturbance (23%)
- Loss of appetite (20%)
- Difficulty with concentration (15%)
- Difficulty with memory (13%)
- Diarrhea (12%)
- Itching (10%)
- Indigestion (9%)
- Sinusitis (8%)
- Metabolic acidosis
- Secondary narrow angle-closure glaucoma
- Headache (24%)
- Fatigue (22%)
- Insomnia (19%)
- Nervousness (14%)
- Drowsiness (12%)
- Dizziness (12%)
- Nausea (10%)
- Flu-like symptoms (9%)
- Muscle pain (8%)
- Kidney stones

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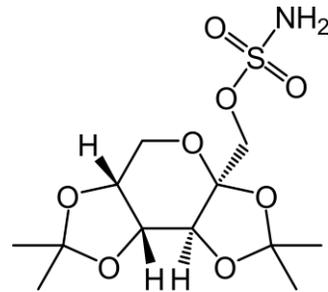
TOPIRAMATE

Monitoring:

Pre-initiation electrolytes with serum bicarbonate, liver panel and renal panel

Cut dose in half in renal impairment

Ongoing monitoring of electrolytes and serum bicarbonate recommended



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ANTI-CRAVING SELECTION

Ondansetron (off-label)	<ul style="list-style-type: none"> • May be useful for early-onset AUD (< 25 years), patients having a severe, destructive history of AUD, ?related to deficiency of serotonin transport system
Varenicline (off-label)	<ul style="list-style-type: none"> • Controlled trials suggest varenicline reduces drinking when given to cigarette smokers who also drink heavily
Baclofen (off-label)	<ul style="list-style-type: none"> • High-dose baclofen not found to be effective in large RCT
Medication combinations	<ul style="list-style-type: none"> • Controlled trials indicate combinations may work better than monotherapy (example: naltrexone + gabapentin)

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COMORBID AUD + OUD

Preferred option is likely buprenorphine (over naltrexone)

Some patients drink alcohol in part for relief of opioid withdrawal symptoms

Relieving opioid withdrawal will reduce alcohol consumption

Gabapentin is another option however gabapentin increases risk of opioid overdose

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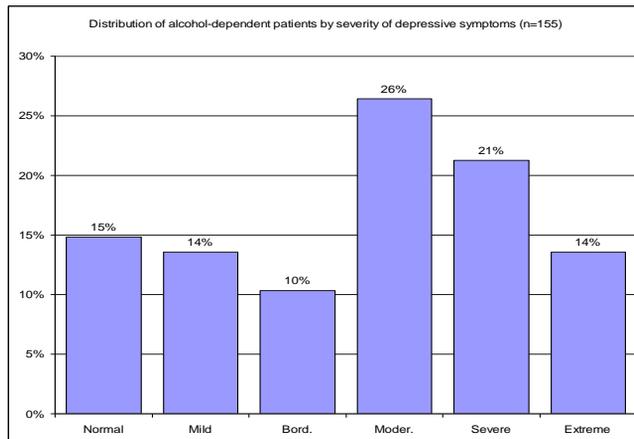
CONCURRENT TREATMENT

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Majority (85%) of alcohol-dependent patients have depressive symptoms

Severity of depressive symptoms in 61% of alcohol-dependent patients is moderate or higher



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DA VINCI (DEPRESSION AND ALCOHOLISM – VALIDATION OF AN INTEGRATED CARE INITIATIVE)

Rationale for the integrated pathway:

- High prevalence of both disorders
- High comorbidity between two conditions
- Established causal links between MDD and AUD
- Undertreatment of MDD in patients with AUD and AUD in patients with MDD
- Low treatment retention and poor treatment outcomes

DA VINCI demonstrated:

- Effectiveness of combined use of anti-craving medications and antidepressants
- Effectiveness of combined psychotherapy (CBT in DA VINCI) and pharmacotherapy

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CHOOSING WISELY CANADA

“Don’t routinely prescribe antidepressants as first-line treatment for depression comorbid with an active alcohol use disorder without first considering the possibility of a period of sobriety and subsequent reassessment for the persistence of depressive symptoms.”

“The concurrent management of psychiatric illness and alcohol use disorders requires evaluation of the role alcohol plays as a causative factor for depressive symptoms. Studies have found that response rates to antidepressants are higher when antidepressants are reserved for persistence of symptoms after a period of sobriety lasting from two to four weeks. Additionally, studies have demonstrated remission from depressive symptoms with sobriety in the absence of antidepressant treatment in a significant percentage of cases. Management of comorbid psychiatric illness and substance use disorders including alcohol dependence involves assessment and treatment delivered in a concurrent manner.”

(One of their references is research from the DA VINCI project where integrated antidepressant and anti-craving therapy was used)

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SCREENING

Major Depressive Disorder

Patient Health Questionnaire (PHQ-9) is great for screening

Quick Inventory of Depressive Symptomatology (QIDS) is great for monitoring and is free to use

Hamilton Depression Rating Scale (HAM-D) and Montgomery and Asberg Depression Rating Scale (MADRS) are often used in studies but need to be purchased

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ANTIDEPRESSANT

Antidepressant medication dosing can be adjusted based on an objective scale

For example, I use the QIDS score for MDD monitoring as the QIDS can be completed by the patient and is available to use without associated costs or training

- QIDS ≤ 5 is considered remission
- QIDS 6-8 is considered partial response
- QIDS ≥ 9 is considered non-response



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CHECK THE ONE RESPONSE TO EACH ITEM THAT BEST DESCRIBES YOU FOR THE PAST SEVEN DAYS.

During the past seven days...

1. Falling Asleep:

- 0 I never take longer than 30 minutes to fall asleep.
- 1 I take at least 30 minutes to fall asleep, less than half the time.
- 2 I take at least 30 minutes to fall asleep, more than half the time.
- 3 I take more than 60 minutes to fall asleep, more than half the time.

2. Sleep During the Night

- 0 I do not wake up at night.
- 1 I have a restless, light sleep with a few brief awakenings each night.
- 2 I wake up at least once a night, but I go back to sleep easily.
- 3 I awaken more than once a night and stay awake for 20 minutes or more, more than half the time.

3. Waking Up Too Early:

- 0 Most of the time, I awaken no more than 30 minutes before I need to get up.
- 1 More than half the time, I awaken more than 30 minutes before I need to get up.
-

During the past seven days...

5. Feeling Sad:

- 0 I do not feel sad.
- 1 I feel sad less than half the time.
- 2 I feel sad more than half the time.
- 3 I feel sad nearly all of the time.

Please complete either 6 or 7 (not both)

6. Decreased Appetite:

- 0 There is no change in my usual appetite.
- 1 I eat somewhat less often or lesser amounts of food than usual.
- 2 I eat much less than usual and only with personal effort.
- 3 I rarely eat within a 24-hour period, and only with extreme personal effort or when others persuade me to eat.

- OR -

7. Increased Appetite:

- 0 There is no change from my usual appetite.
- 1 I feel a need to eat more frequently than usual.
- 2 I regularly eat more often and/or greater amounts of food than usual.

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AUD + MDD

First-line for Major Depressive Disorder (MDD)

Sertraline (Zoloft) 25 – 200 mg AM

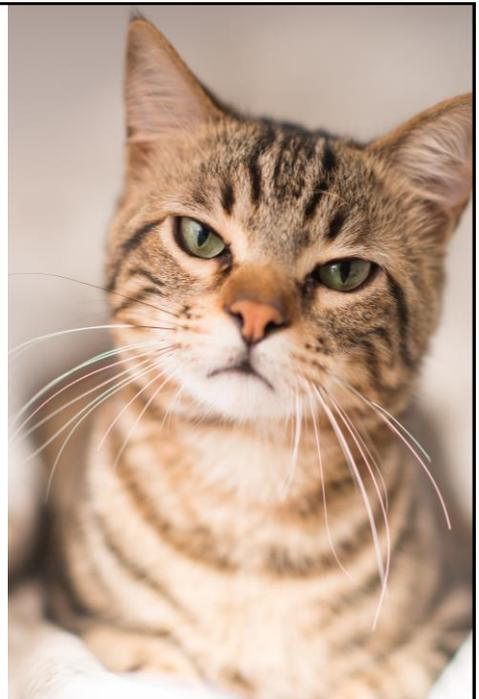
Venlafaxine XR (Effexor XR) 37.5 – 375 mg AM

Fluoxetine (Prozac) 10 – 80 mg AM

Mirtazapine (Remeron) 15 – 60 mg HS

*Bupropion (Wellbutrin) is usually not recommended due to the seizure risk

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Antidepressant therapy should be continued up to 12 months post-remission

Some patients may require indefinite antidepressant therapy

If possible refrain from combining antidepressants or augmenting with other agents in AUD unless they have maintained abstinence for 3-6 months and have ongoing significant depressive symptoms

Avoid the use of benzodiazepines for treating anxiety or depression in patients with AUD, due to the risk of misuse and respiratory depression

In the case of non-restorative sleep where other causes (such as sleep apnea) have been ruled out, melatonin 6 mg HS or trazodone 50-100 mg HS can be used first

AUD + MDD

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CONCURRENT TREATMENT

Antidepressant therapy should be continued up to 12 months post-remission

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AUD + ANXIETY DISORDER

Three combinations have more evidence of benefit for improving anxiety and drinking outcomes:

Naltrexone + sertraline

- Improves both outcomes
- Sertraline is a well tolerated SSRI overall (low risk of weight gain, sedation or sexual dysfunction)

Gabapentinoids (pregabalin, gabapentin)

- Pregabalin may work faster for anxiety (3-4 days) and is First-line for Social Anxiety Disorder (SAD) and Generalized Anxiety Disorder (GAD)
- Gabapentin has greater evidence of benefit for AUD

Buspirone

- Although evidence is more limited than the first two options

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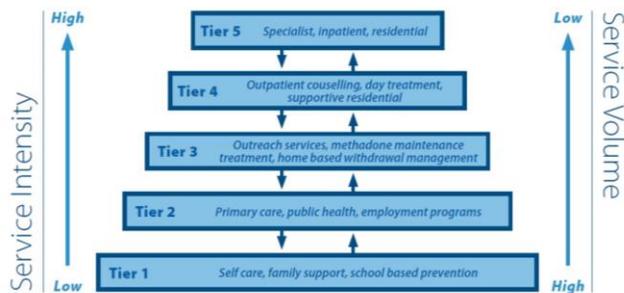


PSYCHOSOCIAL INTERVENTIONS

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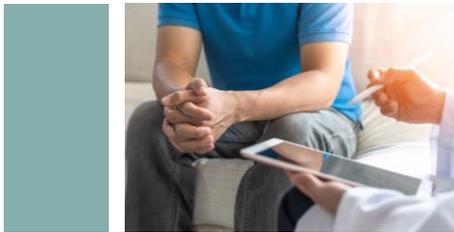
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Figure 1: A Tiered Model for Addictions Continuum of Services; adapted from Smith, P. (n.d.). B.C. Tiered Model Adapted from the National Treatment Strategy.⁸



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PSYCHOTHERAPY

12-step Model

Motivational Interviewing and Relapse Prevention

Cognitive Behavioural Therapy

Trauma-informed, Seeking Safety

Concurrent Disorders programming

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DISCUSSIONS/QUESTIONS

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ADDITIONAL CONTENT

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ALCOHOL USE DISORDER AND DRIVING

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AUD AND DRIVING

Suggested criteria to report to the Ministry of Transportation (MTO):

- Patient admits to drinking and driving
- Family member informs you that patient is drinking and driving
- Patient drinks steadily throughout the day and regularly drives
- Patient drove to your clinic while intoxicated
- Patient regularly drives and has recently experienced severe withdrawal or complication of withdrawal (e.g., seizure)
- Patient has frequent blackouts caused by alcohol consumption
- Patient has other alcohol-related complications that impair driving ability (e.g., cerebellar ataxia, recurrent trauma, sleep apnea, on high doses of opioids or benzodiazepines, hepatic encephalopathy)

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AUD AND DRIVING

Explain to the patient that you have a legal obligation to report (I try to tell my patient at the beginning of the assessment that I may breach confidentiality if there is a risk towards others)

Patients may ask you to give them a chance to abstain and attend treatment before deciding to report them

However, trusting the patient to comply with your instructions is not considered an adequate reason for failing to report

If you delay reporting, the following is strongly recommended:

- Inform the patient that you will report if the patient misses follow-up appointments or if monitoring or history suggests ongoing drinking
- Order GGT and MCV regularly
- Consider urine ethyl glucuronide every 1–2 weeks as EG detects alcohol consumption for several days after last drink
- Check urine creatinine to detect tampering

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AUD AND DRIVING

To lift a driving suspension, the patient must have attended treatment and maintained abstinence or low-risk drinking guidelines for a specified number of months (usually 6-12 months)

Monthly appointments are recommended to monitor the patient's progress

At each appointment:

- Ask about alcohol consumption and attendance at AA and treatment programs
- Order GGT and MCV
- With the patient's permission, ask the spouse/partner or close family member to corroborate the patient's reported alcohol consumption
- Write a follow-up letter to the Ministry if the patient is abstinent at 6 months and at 12 months

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NEW REPORTING FORM IN ONTARIO — 2020 (FEE CODE K035)

Substance Use Disorder

A diagnosis of an uncontrolled substance use disorder, excluding caffeine and nicotine, and patient is non-compliant with treatment recommendations.

Alcohol Other Substances (Specify) _____

Psychiatric Illness

A condition or disorder currently involving any of the following: acute psychosis, severe abnormalities of perception, or patient has a suicidal plan involving a vehicle or an intent to use a vehicle to harm others.

Due to: _____

Part 4. Discretionary report of Medical Condition or Impairment

Please describe condition(s) or impairment

5108E (2020/07)

Save Form

Print Form

Clear Form

Page 2 of 2

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