



Problem Drinking Part 1 - Screening and Assessment

Effective Date: April 1, 2011

Revised Date: April 1, 2013

Scope

This guideline provides practitioners with practical information on how to conduct screening for problem drinking in adults aged ≥ 19 years.* Approximately 350,000 British Columbians are problem drinkers.¹ This means that in a typical family practice of 1,500 patients, 120-200 patients are at risk for alcohol abuse or dependence. Problem drinking affects the medical management of every chronic medical and mental health condition. Research has shown that many screened patients cut down on their drinking simply because they were asked about their alcohol use, and effective screening for problem drinking can be completed in as little as 5 minutes.² Although this document does not deal specifically with teenagers, screening for this age group is also recommended.

The following steps are outlined in this guideline:

- Screening - asking about alcohol use
- Assessment for at-risk drinking, alcohol abuse or dependence

► Diagnostic Code

303: Alcohol dependence syndrome

305: Non dependent use of drugs

Screening and Assessment

Screening identifies patients who need further assessment or treatment by determining their level of risk based on reported alcohol use and other relevant clinical information. Consider the following two screening questions during any patient interaction, when clinical triggers/red flags are observed (see Table 1) and/or when a patient fails to respond to appropriate management (see *Screening - Asking About Alcohol Use*).

Q1. Do you sometimes drink beer, wine or other alcoholic beverages?

**Q2. How many times in the past year have you had: 5 or more drinks in one day (men)?
4 or more drinks in one day (women)?**

Practitioners may wish to use the "Alcohol Screening Note" provided with this guideline.

Interventions should be selected based on the assessment completed during the screening. Although alcohol misuse is a spectrum disorder, positive screens will fall into one of three categories:

- 1. At-risk drinking:** Men - 5 or more drinks on one or more days in the last year.
Women - 4 or more drinks on one or more days in the last year.
- 2. Alcohol abuse:** Patient meets 1 or more Diagnostic and Statistical Manual of Mental Disorders (DSM) IV criteria for abuse in the last 12 months.
- 3. Alcohol dependence:** Patient meets 3 or more DSM IV criteria for dependence in the last 12 months.

* Significant portions of this guideline were adapted from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), "Helping Patients Who Drink Too Much", A Clinicians' Guide, Updated 2005 Edition, and should be fully acknowledged for developing this useful clinical tool. A full copy of their guideline and reference materials can be found on NIAAA's website at <http://pubs.niaaa.nih.gov>

► **Table 1: Clinical Triggers / Red Flags**

Medical	Mental	Psychosocial
<ul style="list-style-type: none"> • MCV > 96 • Elevated GGT, AST, ALT (esp. ↑ GGT or AST:ALT > 2:1) • GERD, hypertension, diabetes, pancreatitis • Chronic non-cancer pain • Alcohol on breath 	<ul style="list-style-type: none"> • Cognitive impairment or decline • Mood, anxiety or sleep disorder • Significant behavioural or academic change 	<ul style="list-style-type: none"> • Unexplained time off work/loss of employment • Frequent no show for appointments, • Poor medication compliance • Significant life event (e.g., divorce, loss of spouse, parent) • Recent or recurrent trauma or domestic violence • High-risk behaviours (e.g, problem gambling, DUI, STIs)

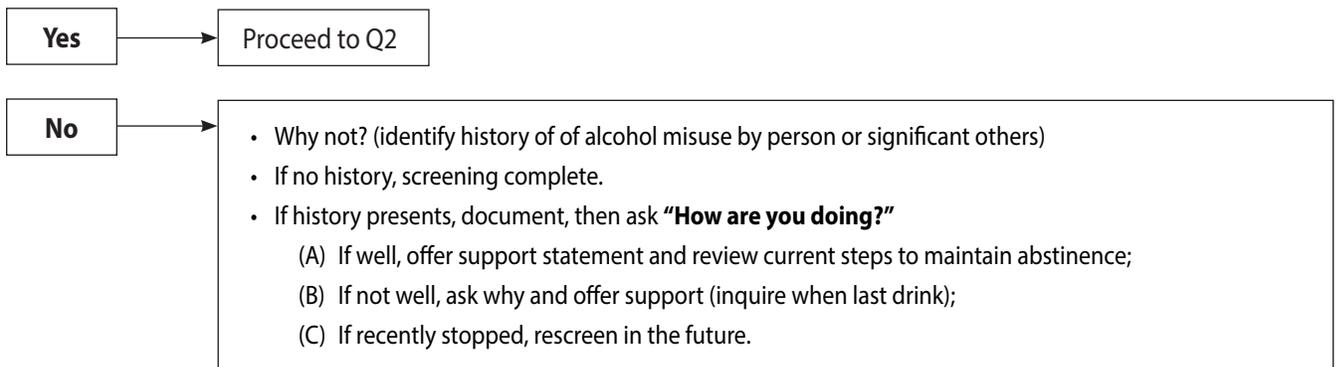
Note: Laboratory evaluation, including liver function tests, are not necessary unless clinically indicated and are not sensitive enough to be used alone as screening tests. Abbreviations: MCV, Mean cell volume; GGT, Gamma-glutamyl transpeptidase; AST, Aspartate aminotransferase; ALT, Alanine transaminase; GERD, Gastroesophageal reflux disease; DUI, Driving under the influence; STI, Sexually transmitted infection

► **AUDIT, CAGE and CRAFFT Tests**

- **AUDIT:** The Alcohol Use Disorders Identification Test (AUDIT), a 10 item questionnaire, can identify at-risk or problem drinking as well as dependence.³ The test can be used as a re-assessment tool by repeating it at a later time.
- **CAGE:** The CAGE questionnaire is a less sensitive tool at detecting alcohol abuse. This test can be used in addition to the screening provided in this guideline. However for primary screening it is recommended physicians use the two-question screen first.
- **CRAFFT:** The CRAFFT screen is specifically designed for use in adolescents.

Screening: Asking About Alcohol Use

► **Q1: Do you sometimes drink beer, wine or other alcoholic beverages?**



► **Q2: How many times in the past year have you had – 5 or more drinks in one day (men)?
4 or more drinks in one day (women)?**

See Appendix A for standard drink definition - one standard drink is equivalent to 1 can of 5% beer, a 140ml glass of 12% wine or 1.5 oz "shot" of 40% spirits.

Yes;
≥ 1 day

If yes to one or more days of heavy drinking your patient is an **at-risk drinker**.
Ask the following questions to determine the weekly average:

Q3: On average, how many days a week do you have an alcoholic drink?

Q4: On a typical drinking day, how many drinks do you have? X

= weekly average

Next steps:

- 1) Record heavy drinking days in the past year and the weekly average in the patient's chart or use alcohol screening notes provided in this guideline
- 2) Proceed to *Assessment for Alcohol Abuse or Dependence*

No;
0 days

A) State maximum drinking limits

For healthy men up to age 65:

- no more than 3 drinks in a day AND
- no more than 15 drinks in a week

For healthy women (and healthy men over 65):

- no more than 2 drinks in a day AND
- no more than 10 drinks in a week

B) Recommend lower limits or abstinence as medically indicated for patients:

- taking medications that interact with alcohol
- health condition exacerbated by alcohol
- pregnancy - advise abstinence from alcohol

C) Express openness to talking about alcohol use and any concerns it may raise

D) Rescreen annually

Assessment for Alcohol Abuse or Dependence

Assessment

- The following tables provide the DSM IV criteria and sample questions for determining alcohol abuse or dependence.
- Questions correspond with alcohol screening note criteria for abuse or dependence.
- First assess for alcohol abuse, then, if indicated, assess for dependence.

General questions

One of the following introductory questions can be used before asking about abuse or dependence:

- Q.** Has your life ever been affected by alcohol?
- Q.** Has your spouse or anyone said anything about your drinking?
- Q.** How long have you been drinking like this?

► Questions and Criteria for Assessing Abuse

In the past 12 months, has the patient's drinking caused or contributed to -	Sample questions	No	Yes
A1. Role failure	Q. Have you missed work or class because of your drinking?		
A2. Risk of bodily harm	Q. Do you sometimes drink and drive?		
A3. Run-ins with the law / legal issues	Q. Have you been charged with DUI or been given a road side suspension?		
A4. Relationship trouble	Q. Has your spouse or family complained about your drinking?		
Conclusion -	Yes ≥ 1 --- your patient has alcohol abuse. Proceed to the questions below. No --- proceed to Part 2 - Brief Intervention for At-Risk Drinking.		

► Questions and Criteria for Assessing Dependence

In the past 12 months, the patient has -	Sample questions	No	Yes
D1. Increased tolerance	Q. Do you need to drink more to get the same affect?		
D2. Experienced withdrawal	Q. When you stop drinking, have you ever experienced physical or emotional withdrawal? Have you had any of the following symptoms: irritability, anxiety, shakes, sweats, nausea, or vomiting?		
D3. Failed to stick to drinking limits	Q. Do you often drink more than you plan to?		
D4. Failed attempts to cut down or stop drinking	Q. Have you ever tried to cut down or stop drinking? How long did that last?		
D5. Spent a lot of time on drinking related activities	Q. Do you spend more time thinking about or recovering from alcohol than you used to? Have you ever thought of ways to avoid getting caught?		
D6. Spent less time on other matters	Q. Have you reduced family or recreational events because of alcohol use in the past year?		
D7. Kept drinking despite psychological or physical problems	Q. Do you think that drinking is causing problems for you? What keeps you drinking?		
Conclusion -	Yes ≥ 3 --- your patient has alcohol dependence. Proceed to Part 2 - Brief Intervention for Alcohol Dependence. No --- your patient still has alcohol abuse. Proceed to Part 2 - Brief Intervention for Alcohol Abuse.		

Rationale

Every health care practitioner will encounter patients with alcohol problems in their practice. It is therefore important that all adolescent and adult patients be screened for problem drinking at some time. In BC as many as one in 10 visits to Vancouver General Hospital Emergency Room was for substance abuse.⁴ As well, the number of patients staying at Vancouver General and University of British Columbia Hospitals due to substance abuse increased by 44% between 2005 and 2008 (from 1,317 to 1,896).⁵ Screening and brief intervention are effective ways to reduce alcohol use as well as reduce acute care utilization. Research shows:

- Screening, Brief Intervention and Referral to Treatment (SBIRT) can cut hospitalization costs by \$1,000 per person screened and save \$4 for every \$1 invested in trauma center and emergency department screening.^{6,7,8}

- Comparing the results of those who received brief counseling with those who did not, researchers found that counseling resulted in a 40 to 50% decrease in alcohol consumption, a 42% drop in emergency room visits, a 55% decline in motor vehicle crashes, and a 100% reduction in arrests for alcohol or other substance violations.²

Research has also shown that many screened patients cut down on their drinking simply because they were asked about their alcohol use; likewise, brief interventions have been shown to effectively reduce alcohol and other drug use.⁹

Resources

► References

- 1 BC Ministry of Health. Every door is the right door: A British Columbia planning framework to address problematic substance use and addiction. May 2004.
- 2 Grossberg PM, Brown DD, Fleming MF. Brief physician advice for high-risk drinking young adults. *Ann Fam Med.* 2004; 2:474-480.
- 3 Babor TF, De La Fuente, JR, Saunders, et al. (1992). AUDIT: The Alcohol Use Disorder Identification Test. Guidelines for use in primary health care. Geneva, Switzerland: World Health Organization.
- 4 Brubacher JR, Mabie A, Ngo M, et al. Substance-related problems in patients visiting an urban Canadian emergency department. *Can J Emerg Med.* 2008;10:198-204.
- 5 Vancouver Coastal Health Authority. Acute inpatients for Vancouver General Hospital and University of BC Hospital data for fiscal years 2005/2006, 2006/2007, and 2007/2008, mental and behavioural disorders due to psychoactive substance use (F10-F16, F18-F19) diagnosis types: most responsible diagnosis (type M) and pre-admit comorbidity diagnosis (type1).
- 6 Richard Brown, M.D., associate professor at the University of Wisconsin School of Medicine and Public Health. "Taking Burden Off Physicians Key to SBI Growth" Join Together Project, Boston School of Public Health.
- 7 Gentilello LM, Ebel BE, Wickizer TM, et al. Alcohol interventions for trauma patients treated in emergency departments and hospitals. A cost benefit analysis. *Ann Surg.* 2005 April; 241(4): 541-550.
- 8 Longnecker MP, MacMahon B. Associations between alcoholic beverage consumption and hospitalization, 1983 National Health Interview Survey. *Am J of Public Health.* 1988 Feb;78(2):153-6.
- 9 Anderson P, Aromaa S, Rosenbloom D, et al. Screening and brief intervention: Making a public health difference. Published 2008 by Join Together with support from the Robert Wood Johnson Foundation.

► Resources

• BC Health Authority Websites - search under mental health and substance use

- Fraser Health Authority: www.fraserhealth.ca
- Interior Health Authority: www.interiorhealth.ca
- Northern Health Authority: www.northernhealth.ca
- Provincial Health Services Authority: www.phsa.ca
- Vancouver Coastal Health Authority: www.vch.eduhealth.ca, www.vch.ca
- Vancouver Island Health Authority: www.viha.ca

• British Columbia Resources

- Centre for Addictions Research of BC: www.carbc.ca
- Centre for Applied Research in Mental Health and Addiction: www.carmha.ca
- Community Health and Resource Directory (CHARD) - Alcohol and drug information and referral service: Toll-free 1-800-603-1441 or Lower Mainland 604-660-9382.

• Canadian Centre on Substance Abuse: www.ccsa.ca

• Centre for Addiction and Mental Health: www.camh.net

• Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar): www.chce.research.va.gov

• CRAFFT: www.projectcork.org

• Here to Help: www.heretohelp.ca

- **National Institute on Alcohol Abuse and Alcoholism (NIAAA)**

For examples on conducting screening and interventions, please visit:
www.niaaa.nih.gov/Publications/EducationTrainingMaterials/guide.htm

Physicians are strongly recommended to complete the NIAAA case examples (and CME credits) as it will assist them in using the guideline.

Materials on the website also include:

- Physician education and video case examples
- Sample forms for your office
- Medication information
- Patient education
- Online CME/CE Credits

► **Appendices and Associated Documents**

Appendix A - Standard Drink Size Illustration

Alcohol Screening Note (HLTH 2824)

This guideline is based on scientific evidence current as of the Effective Date.

This guideline was developed by the Guidelines and Protocols Advisory Committee, approved by the British Columbia Medical Association, and adopted by the Medical Services Commission.

THE GUIDELINES AND PROTOCOLS ADVISORY COMMITTEE

The principles of the Guidelines and Protocols Advisory Committee are to:

- encourage appropriate responses to common medical situations
- recommend actions that are sufficient and efficient, neither excessive nor deficient
- permit exceptions when justified by clinical circumstances

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Disclaimer

The Clinical Practice Guidelines (the "Guidelines") have been developed by the Guidelines and Protocols Advisory Committee on behalf of the Medical Services Commission. The Guidelines are intended to give an understanding of a clinical problem, and outline one or more preferred approaches to the investigation and management of the problem. The Guidelines are not intended as a substitute for the advice or professional judgment of a health care professional, nor are they intended to be the only approach to the management of clinical problem.



DATE	NAME OF PATIENT	TIME SPENT
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Screening questions:

Q2. Heavy drinking days in the past year (≥ 5 drinks for men / ≥ 4 for women)

	days (positive ≥ 1)
If screen is positive determine weekly	drinks per week (drinking days per week x typical number of drinks)

Criteria for abuse or dependence (based on DSM-IV)

Abuse - In the last 12 months has the patient's drinking caused or contributed to:

No	Yes		No	Yes	
		A1) Role failure			A3) Run-ins with the law / legal issues
		A2) Risk of bodily harm			A4) Relationship trouble
If yes to one or more positive patient has alcohol abuse					

Dependence - In the last 12 months the patient has:

No	Yes		No	Yes	
		D1) Increased tolerance			D5) Spent a lot of time on drinking related activities
		D2) Experienced withdrawal			D6) Spent less time on other matters
		D3) Failed to stick to drinking limits			D7) Kept drinking despite psychological or physical problems
		D4) Failed attempts to cut down or stop drinking			
If yes to three or more, patient has alcohol dependence					

Additional history: _____

Physical examination and laboratory: _____

Assessment:

Negative alcohol screen	Alcohol abuse	Alcohol withdrawal
At-risk drinking	Alcohol dependence	

Plan:

Repeat screening as needed	Patient education about drinking limits	Community Support
Recommend drinking within limits	Did the patient agree?	No Yes
Recommend abstinence	Did the patient agree?	No Yes
Naltrexone 50 mg daily	Acamprosate 666 mg 3 times daily	Disulfiram 250 mg daily
Thiamine 100 mg IM/PO (daily x 5)	Acamprosate 333 mg 3 times daily (for moderate renal impairment) (CrCl 30-50mL/min)	
Other medication/dosage:	Referral (specify):	
Other plan (specify):		

Followup: _____

BILLING CODE:

DIAGNOSTIC CODE:

BILLING:

DATE:

DATE:

Appendix A: **Standard drink size illustration** (Actual size)



Beer (can)

12 oz
341 ml
5% alcohol



Wine

5 oz
142 ml
12% alcohol

Wine
5oz (12%)

Fortified wine
3oz (18%)

Fortified wine

3 oz
85 ml
18% alcohol

Maximum recommended limits:

Men	3 per day
	15 in a week
Women	2 per day
	10 in a week

SPIRITS

1.5oz

65 calories



Spirits

1.5 oz
43 ml
40% alcohol

Source: Canadian Centre on Substance Abuse. Developed on behalf of the National Alcohol Strategy Advisory Committee. Canada's low-risk alcohol drinking guidelines. 2012. A Management of Alcohol, Tobacco and Other Drug Problems: A Physician's Manual, Centre for Addiction and Mental Health, 2000, p. 72.* Average calories per type of drink. Note: All of these drinks contain 13.6 grams of alcohol.



Problem Drinking Part 2 - Brief Intervention

Effective Date: April 1, 2011

Revised Date: April 1, 2013

Scope

This guideline provides practitioners with practical information on how to conduct brief intervention for problem drinking in adults aged \geq years and can be used after a positive screen occurs when using the BC Guideline "Screening for Problem Drinking".* Once screening is complete and a patient is deemed at-risk, physicians may perform a brief intervention. Problem drinking is a behaviour that can be changed through intervention, and physicians in primary and hospital based care are in a key position to make a difference.¹⁻⁵ A study of two minute brief intervention screenings concluded that "self reported patient status at 6 months indicated significant improvements over baseline for illicit drug use and heavy alcohol use."⁶

Brief interventions motivate patients to lower their risk for alcohol related problems and are often successful in addressing other medical issues including medication adherence, weight loss, smoking cessation and dietary habits. If your patient is seeing you for another problem, it may be necessary for screening to be done at the first appointment and intervention done at a follow up appointment.

The following steps are outlined in this guideline:

- Brief intervention
- Follow-up and support

► Diagnostic Code

- 303: Alcohol dependence syndrome
- 305: Non dependent use of drugs

Intervention Selection

Selected interventions should be based on the assessment completed during the screening (See *Problem Drinking Part 1 - Screening and Assessment*). Although alcohol misuse is a spectrum disorder, positive screens will fall into one of three categories.

- 1. At-risk drinking:** Men - 5 or more drinks on one or more days in the last year.
Women - 4 or more drinks on one or more days in the last year.
- 2. Alcohol abuse:** Patient meets 1 or more Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria for abuse in the last 12 months.
- 3. Alcohol dependence:** Patient meets 3 or more DSM IV criteria for dependence in the last 12 months.

Practitioners may wish to use the "Brief Intervention Follow-up Note" provided with this guideline.

* Significant portions of this guideline were adapted from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), "Helping Patients Who Drink Too Much", A Clinicians' Guide, Updated 2005 Edition, and should be fully acknowledged for developing this useful clinical tool. A full copy of their guideline and reference materials can be found on NIAAA's website at <http://pubs.niaaa.nih.gov>

Brief Intervention for At-Risk Drinking (no abuse or dependence)

► First – state your conclusion and recommendations clearly:

1. **“You are drinking more than is medically safe. I think your drinking is putting your health at risk and is not good for you.”** Relate to patient’s concerns and medical findings (e.g., anxiety, gastroesophageal reflux disease (GERD)).

2. **“I strongly recommend that you cut down or quit.”**

(Note: Only about 20% of alcohol dependent drinkers require medically managed withdrawal.¹⁴ See *Problem Drinking Part 3 - Office Based Management of Alcohol Withdrawal and Prescribing Medications for Alcohol Dependence.*)

► Second – gauge readiness to change drinking habits by asking one of the following:

Q: “Are you willing to consider making changes in your drinking?”

Q: “Do you want to do anything about your drinking?”

Q: “How do you feel about my recommendation? Do you have any questions?”

Q: “What do you think? Would that work for you? Does that make sense?”

Is the patient ready to commit to change at this time?

Yes

No

• **Help set a goal**

Cut down to within maximum drinking limits or abstain.

• **Agree on a plan**

- specific steps.
- how drinking will be tracked (e.g., diary, kitchen calendar).
- how the patient will manage high-risk situations (e.g., social events).
- who might be willing to help, such as a spouse or non-drinking friends.

• **Provide educational materials**

See Resource section in *Problem Drinking Part 1 - Screening and Assessment.*

A. Repeat screen regularly (annually / semi-annually).

B. Link related health concerns to alcohol use.

• **Do not be discouraged**

Ambivalence is common. Your advice has likely prompted a change in your patient’s thinking, a positive change in itself. With continued reinforcement, your patient may decide to take action. For now:

- **Restate your concern** about his or her health.
- **Encourage reflection:** Ask patients to think about it. Assess the major barriers to change.
- **Reaffirm your willingness to help** when he or she is ready.
- **Follow-up and support.**

Intervention for Alcohol Abuse

Physicians are advised to take the following steps when conducting an intervention:

▶ **1. State your conclusion and recommendation clearly:**

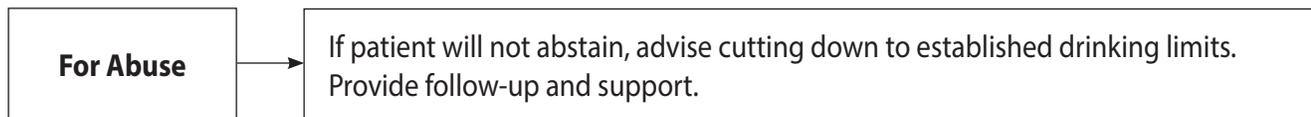
- “I believe that you have an alcohol use disorder. I strongly recommend that you stop drinking and I’m willing to help.”
- Relate to the patient’s concerns and medical findings if present.

▶ **2. Negotiate a goal and develop a plan:**

- Abstaining is the safest course for most patients with alcohol use disorders.
- Patients who have milder forms of abuse or dependence and are unwilling to abstain may be successful at cutting down.

▶ **3. Consider referring to external or community resources:**

- Alcohol and drug counselor, addiction medicine physician.
- Community groups such as Alcoholics Anonymous (AA).
- See Community Health and Resource Directory (CHARD).



Intervention for Alcohol Dependence

For dependence, complete the following in addition to steps 1-3 above:

▶ **4. For patients who have dependence:**

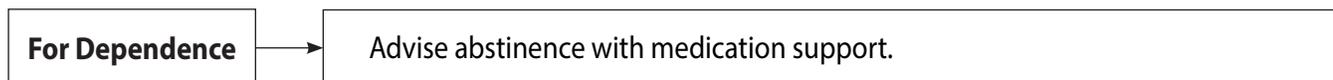
Monitor for withdrawal - Only about 20% of alcohol dependent drinkers require medically managed withdrawal.¹⁴ Refer to *Problem Drinking Part 3 - Office Based Management of Alcohol Withdrawal and Prescribing Medications for Alcohol Dependence*.

▶ **5. Prescribing medications for alcohol dependence:**

Medication, in conjunction with psychosocial interventions, can play a valuable part in the management of alcohol dependence. See *Part 3 - Office Based Management of Alcohol Withdrawal and Prescribing Medications for Alcohol Dependence* for more information on prescribing medications.

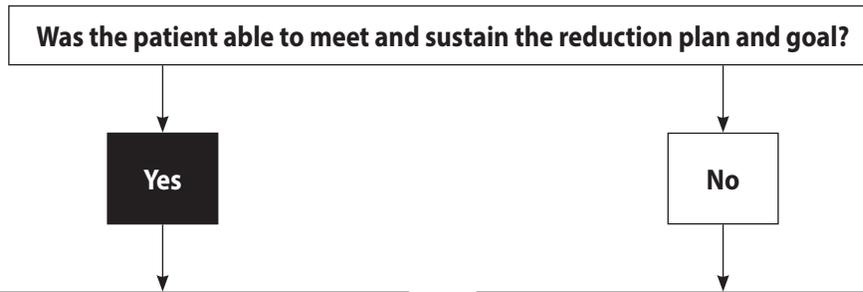
▶ **6. Arrange follow-up:**

Arrange follow-up appointments, including medication management support if needed. See *Problem Drinking Part 3 - Office Based Management of Alcohol Withdrawal and Prescribing Medications for Alcohol Dependence*. To support behaviour change, consider seeing patient at least once every 14 days in initial period.



Follow-up and Support

REMINDER: Document alcohol use and review goals at each visit (use *Brief Intervention Follow-up Note*). If the patient is receiving a medication for alcohol dependence, medication management support should be provided.



- **Congratulate, reinforce and support continued adherence** to recommendations.
- **Coordinate care** with a specialist if the patient has accepted referral. Communicate with external/ community agencies on patient progress.
- **Maintain medications** for alcohol dependence for at least 6 months and as clinically indicated thereafter.
- **Continue to address coexisting medical disorders and psychiatric symptoms** (e.g., insomnia, anxiety). Pharmacological management of depression and anxiety is more effective for patients that abstain from alcohol.
- **Renegotiate goals.**

- **Acknowledge that change is difficult.**
- **Support efforts** to cut down or abstain, while making it clear that your recommendation is to abstain.
- **Relate drinking to patient's problems** (e.g., health, psychological or social) as appropriate.
- If the following measures aren't already being taken, consider:
 - Refer or consult with an addiction medicine physician. Recommend external or community resources (AA or Employment Assistance Program).
 - Ask patient to engage significant others.
 - Initiate a medication for alcohol-dependent patients who endorse a goal of abstinence
 - Refer to community counselor or resource. See CHARD.
- **Continue to address coexisting medical disorders and psychiatric symptoms** (e.g., insomnia, anxiety)
 - Pharmacological management of depression and anxiety is less effective while the patient continues to misuse alcohol. Use extreme caution with the prescribing of tricyclic antidepressants.

Rationale

Every health care practitioner will encounter patients with alcohol problems in their practice. It is therefore important that all adolescent and adult patients be screened for problem drinking at some time. In BC as many as one in 10 visits to Vancouver General Hospital Emergency Room was for substance abuse.⁷ As well, the number of patients staying at Vancouver General and University of British Columbia Hospitals due to substance abuse increased by 44% between 2005 and 2008 (from 1,317 to 1,896).⁸ Screening and brief intervention are effective ways to reduce alcohol use as well as reduce acute care utilization. Research shows:

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Research has also shown that many screened patients cut down on their drinking simply because they were asked about their alcohol use; likewise, brief interventions have been shown to effectively reduce alcohol and other drug use.¹³

Resources

► References

- 1 Fleming MF, Manwell LB, Barry KL, et al. Brief physician advice for alcohol problems in older adults: a randomized community-based trial. *J Family Pract.* 1999 May; 48(5):378-84.
- 2 Wood MD, Fairlie AM, Fernandez AC, et al. Brief motivational and parent interventions for college students: a randomized factorial study. *J Consult Clin Psychol.* 2010 June;78(3):349-61.
- 3 Hermansson U, Helander A, Brandt L, et al. Screening and brief intervention for risky alcohol consumption in the workplace: results of a 1-year randomized controlled study. *Alcohol Alcohol.* 2010 May-June;45(3):252-7.
- 4 Kaner EF, Dickinson HO, Beyer FR, et al. Effectiveness of brief alcohol interventions in primary care populations (Review). *The Cochrane Collaboration* 2009, Issue 3.
- 5 Henry-Edwards S, Humeniuk R, Ali R, et al. Brief intervention for substance use: A manual for use in primary care. (Draft version 1.1 for field testing). Geneva, World Health Organization, 2003.
- 6 Madras BK, Compton WM, Avula D, et al. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: comparison at intake and 6 months later. *Drug Alcohol Depend.* 2009 Jan 1;99(1-3):280-95. Epub 2008 Oct 16.
- 7 Brubacher JR, Mabie A, Ngo M, et al. Substance-related problems in patients visiting an urban Canadian emergency department. *Can J Emerg Med.* 2008;10:198-204.
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- 13 Anderson P, Aromaa S, Rosenbloom D, et al. Screening and Brief Intervention: Making a Public Health Difference. Published 2008 by Join Together with support from the Robert Wood Johnson Foundation.
- 14 Bayard M, McIntyre J, Hill KR, et al. Alcohol withdrawal syndrome. *Am Fam Physician.* 2004 Mar 15;69(6):1443-1450.

► Associated Documents

Brief Intervention Follow-up Note (HLTH 2825)

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DATE	NAME OF PATIENT	TIME SPENT
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Q2. Heavy drinking days in the past month: (≥ 5 drinks for men / ≥ 4 for women)

	days (positive ≥ 1)
If screen is positive determine weekly	drinks per week (drinking days per week x typical number of drinks)

Working diagnosis:	At-risk drinking	Alcohol abuse	Alcohol dependence
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Goal:	Drinking within limits	Abstinence
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Current medications:	Naltrexone	Acamprosate	Disulfiram
	Other (specify):		

Interval history and progress:

Physical examination and laboratory:

Current Assessment:

At-risk drinking	Goals fully met
Alcohol abuse	Goals partially met
Alcohol dependence	Goals not met

Plan:

Repeat screening as needed	Patient education about drinking limits	
Recommend drinking within limits	Did the patient agree? No Yes	
Recommend abstinence	Did the patient agree? No Yes	
Naltrexone 50 mg daily	Acamprosate 666 mg 3 times daily	Disulfiram 250 mg daily
Thiamine 100 mg IM/PO * (daily x 5)	Acamprosate 333 mg 3 times daily (for moderate renal impairment) (CrCl 30-50 mL/min)	
Other medication/dosage:		
Referral (specify):		

* Continue thiamine while patient is drinking and continue for 1 week after patient stops

Followup:

Additional plan (withdrawal treatment, coexisting conditions, etc) :

BILLING CODE:

DIAGNOSTIC CODE:

BILLING:

DATE:

DATE:



Problem Drinking Part 3 - Office Based Management of Alcohol Withdrawal and Prescribing Medications for Alcohol Dependence

Effective Date: April 1, 2011

Revised Date: April 1, 2013

Scope

This guideline provides practitioners with practical information on how to conduct office based management of withdrawal and medication management for adults aged ≥ 19 years with alcohol dependence.*

The following are outlined in this guideline:

- Office based management of alcohol withdrawal
- Prescribing medications for alcohol dependence

► Diagnostic Code

303: Alcohol dependence syndrome

305: Non dependent use of drugs

Family physicians with a supportive, nonjudgmental, yet assertive attitude can be a great asset in confronting and treating patients with alcohol and other substance abuse problems. With the right attitude and the right tools, primary care physicians can manage most patients through the withdrawal phase of their illness and be a powerful influence in their ongoing struggle for recovery.¹

Section 1 - Office Based Management of Alcohol Withdrawal

► Contraindications to Outpatient Withdrawal Management

- History of withdrawal seizure or withdrawal delirium.
- Multiple failed attempts at outpatient withdrawal.
- Unstable associated medical conditions: Coronary Artery Disease (CAD), Insulin-Dependent Diabetes Mellitus (IDDM).
- Unstable psychiatric disorders: psychosis, suicidal ideation, cognitive deficits, delusions or hallucinations.
- Additional sedative dependence syndromes (e.g., benzodiazepines, gamma-hydroxy butyric acid, barbituates and opiates).
- Signs of liver compromise (e.g., jaundice, ascites).
- Failure to respond to medications after 24-48 hours.
- Pregnancy.
- Advanced withdrawal state (e.g., delirium, hallucinations, temperature $> 38.5^{\circ}$).
- Lack of a safe, stable, substance-free setting and care giver to dispense medications.

Benzodiazepines are considered the treatment of choice for the management of alcohol withdrawal symptoms. Benzodiazepines reduce the signs and symptoms of alcohol withdrawal, incidence of delirium, and seizures. Based on indirect comparisons there is currently no strong evidence that particular benzodiazepines are more effective than others and selection should be made on an individual basis.^{2,3} Alprazolam and triazolam are not recommended.

* Significant portions of this guideline were adapted from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), "Helping Patients Who Drink Too Much", A Clinicians' Guide, Updated 2005 Edition, and should be fully acknowledged for developing this useful clinical tool. A full copy of their guideline and reference materials can be found on NIAAA's website at <http://pubs.niaaa.nih.gov>

Diazepam (Valium®) is recommended because of its efficacy profile, wide therapeutic window and “self tapering” effect due to its long half life. Other benzodiazepines can be considered such as: clonazepam, lorazepam and oxazepam. In the case of intolerance to benzodiazepines, physicians may wish to consider using a different class of medications (e.g., anticonvulsants). It is recommended that physicians with less experience with diazepam follow the rigid schedule. Physicians with experience using diazepam for alcohol withdrawal can consider front loading. Three medication protocols are provided (see Table 1).

► **When Conducting Outpatient Withdrawal, do the following:**

- Start on a Monday or Tuesday unless weekend coverage is available.
- See the patient daily for the first three to four days and be available for phone contact.
- Have the patient brought to the office by a reliable family member or caregiver.
- Prescribe thiamine (Vitamin B₁) 100 mg daily for five days.
- Encourage fluids with electrolytes, mild foods and minimal exercise.
- Avoid natural remedies, caffeine or any activity that increases sweating (e.g., hot baths, showers and saunas/sweat lodges).
- Assess vital signs, withdrawal symptoms, hydration, emotional status, orientation, general physical condition and sleep at each visit.
- Encourage patient to call local (including health authority/municipal) Alcohol and Drug or Employee Assistance Programs and attend Alcoholics Anonymous (AA) meeting on day 3.
- Monitor for relapse, explore cause, and correct if possible. If unable to address cause, refer to inpatient detox.

► **Table 1: Treating Alcohol Withdrawal with Diazepam (Valium) ^{1,2}**

Schedule	Day 1	Day 2	Day 3	Day 4
Rigid	10 mg four times daily	10 mg three times daily	10 mg twice daily	10 mg at bedtime
Flexible	10 mg every 4 to 6 hours as needed based on symptoms *	10 mg every 6 to 8 hours as needed	10 mg every 12 hours as needed	10 mg at bedtime as needed
Front loading **	20 mg every 2 to 4 hours until sedation is achieved; then 10 mg every 4 to 6 hours as needed. Max 60 mg/day	10 mg every 4 to 6 hours as needed. Max 40 mg/day	10 mg every 4 to 6 hours as needed. Max 40 mg/day	None

* Pulse rate >100 per minute, diastolic BP > 90 mm Hg or signs of withdrawal.

** Frequently, very little additional medication is necessary after initial loading.

Note: Benzodiazepines should be discontinued after withdrawal symptoms resolved (5-7 days).

Section 2: Prescribing Medications for Alcohol Dependence

► **Three Medications Are Currently Available:**

Naltrexone: Blocks euphoria associated with alcohol use. CONTRAINDICATED in patients taking opiates.

Acamprosate: Reduces chronic withdrawal symptoms.

Disulfiram: Adversive agent, causes nausea, vomiting, dysphoria with alcohol use and requires abstinence and counselling before initiation. Disulfiram should be used with caution.

► **Why Should Medications be Considered for Treating an Alcohol Use Disorder?**

Consider pharmacotherapy for all patients with alcohol dependency. Patients who fail to respond to psychosocial approaches and/or addiction counselling are particularly strong candidates. The above medications can be used immediately following withdrawal or any time thereafter; however, these medications should be used in conjunction with addiction counselling and other psychosocial supports.

► **Must Patients Agree to Abstain?**

No matter which alcohol dependence medication is used, patients who have a goal of abstinence, or who can abstain even for a few days prior to starting the medication, are likely to have better outcomes. Still, it is best to determine individual goals with each patient. Some patients may not be willing to endorse abstinence as a goal, especially at first. However, abstinence remains the optimal outcome.

A patient's willingness to abstain has important implications for the choice of medication. For example, a study of oral naltrexone demonstrated a modest reduction in the risk of heavy drinking in people with mild dependence who chose to cut down rather than abstain.⁴ Acamprosate is approved for use in patients who are abstinent at the start of treatment. Total abstinence is needed with disulfiram. Disulfiram is contraindicated in patients who continue to drink, because a disulfiram-alcohol reaction occurs with any alcohol intake.

► **Which of the Medications Should be Prescribed?**

(see *Appendix A: Prescription Medication Table for Alcohol Dependence*)

Which medication to use will depend on clinical judgment and patient preference. Each has a different mechanism of action. Some patients may respond better to one type of medication than another.

NALTREXONE

Naltrexone works by blocking the euphoria associated with alcohol use. Its use is CONTRAINDICATED in patients taking opiates. Oral naltrexone is associated with lower percentage drinking days, fewer drinks per drinking day, and longer times to relapse.^{5,6} It is most effective in patients with strong cravings. Efficacy beyond 12 weeks has not been established. Although it is especially helpful for curbing consumption in patients who have drinking "slips" it may also be considered in patients who are motivated, have intense cravings and are not using or going to be using opioids. It appears to be less effective in maintenance of abstinence as meta-analyses have shown variable results. Monitoring of liver enzymes may be required.

ACAMPROSATE

Acamprosate works by reducing chronic withdrawal symptoms. Acamprosate increases the proportion of dependent drinkers who maintain abstinence for several weeks to months, a result demonstrated in multiple European studies and confirmed by a meta-analysis of 17 clinical trials.⁷ However, this has not been demonstrated in patients who have NOT undergone detoxification and NOT achieved alcohol abstinence prior to beginning treatment. Acamprosate should be initiated as soon as possible after detoxification and the recommended duration of treatment is one year. There is currently insufficient evidence to suggest that acamprosate has a therapeutic advantage over naltrexone.

DISULFIRAM

Disulfiram is an aversive agent that causes nausea, vomiting, and dysphoria with alcohol use. Abstinence and counselling are required before initiation of treatment with disulfiram. Data on the effectiveness of disulfiram in alcohol use disorders is mixed. Disulfiram has been shown to have modest effects on maintaining abstinence from alcohol, particularly if it is administered under supervision. It is most effective when given in a monitored fashion, such as in a clinic or by a spouse. Thus the utility and effectiveness of disulfiram may be considered limited because compliance is generally poor when patients are given it to take at their own discretion.^{8,9} Disulfiram may be considered for those patients that can achieve initial abstinence, are committed to maintaining abstinence, can understand the consequences of drinking alcohol while on disulfiram, and can receive adequate ongoing supervision. It may also be used episodically for high-risk situations, such as social occasions where alcohol is present. Daily uninterrupted disulfiram therapy should be continued until full patient recovery, which may require months to years.

► **How Long Should Medications be Maintained?**

The risk for relapse to alcohol dependence is very high in the first 6 to 12 months after initiating abstinence and gradually diminishes over several years. Therefore, a minimum initial period of 6 months of pharmacotherapy is recommended. Although an optimal treatment duration has not been established, treatment can continue for one to two years if the patient responds to medication during this time when the risk of relapse is highest. After patients discontinue medications, they may need to be followed more closely and have pharmacotherapy reinstated if relapse occurs.

► **If One Medication Does Not Work, Should Another Be Prescribed?**

If there is no response to the first medication selected, you may wish to consider a second. This sequential approach appears to be common clinical practice, but currently there are no published studies examining its effectiveness. There is not enough evidence to recommend a specific ordering of medications.

► **Is There Any Benefit to Combining Medications?**

There is no evidence that combining any of the medications to treat alcohol dependence improves outcomes over using any one medication alone.

► **Should Patients Receiving Medications Also Receive Specialized Alcohol Counselling or a Referral to Mutual Support Groups?**

Offering the full range of effective treatments will maximize patient choice and outcomes, since no single approach is universally successful or appealing to patients. Medications for alcohol dependence, professional counselling, and mutual support groups are part of a comprehensive approach. These approaches share the same goal while addressing different aspects of alcohol dependence: neurobiological, psychological, and social. The medications are not prone to abuse, so they do not pose a conflict with other support strategies that emphasize abstinence. Using medications to treat patients does not interfere with counselling or other abstinence based programs such as AA.

Almost all studies of medications for alcohol dependence have included some type of counselling, and it is recommended that all patients taking these medications receive at least brief medical counselling. In a recent large trial, the combination of oral naltrexone and brief medical counselling sessions delivered by a nurse or physician was effective without additional behavioral treatment by a specialist.¹⁰ Patients were also encouraged to attend mutual support groups to increase social encouragement for abstinence.

Rationale

Outpatient alcohol withdrawal is safe and cost effective for the vast majority of problem drinkers.¹¹⁻¹⁴ Only about 20 per cent of problem drinkers require a hospital based or inpatient setting for alcohol detoxification.¹ Patients are treated earlier in the course of their disease in an office based setting which prevents further complications, and reduces the need for hospitalization. Withdrawal as an outpatient is more effective in reaching certain populations that may not use inpatient detox, such as women, children, youth, older adults, psychiatric populations, human immunodeficiency virus (HIV) affected, and people with other disabilities.

Resources

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► Appendices

Appendix A: Prescription Medication Table for Alcohol Dependence

This guideline is based on scientific evidence current as of the Effective Date.

This guideline was developed by the Guidelines and Protocols Advisory Committee, approved by the British Columbia Medical Association, and adopted by the Medical Services Commission.

THE GUIDELINES AND PROTOCOLS ADVISORY COMMITTEE

The principles of the Guidelines and Protocols Advisory Committee are to:

- encourage appropriate responses to common medical situations
- recommend actions that are sufficient and efficient, neither excessive nor deficient
- permit exceptions when justified by clinical circumstances

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Disclaimer

The Clinical Practice Guidelines (the "Guidelines") have been developed by the Guidelines and Protocols Advisory Committee on behalf of the Medical Services Commission. The Guidelines are intended to give an understanding of a clinical problem, and outline one or more preferred approaches to the investigation and management of the problem. The Guidelines are not intended as a substitute for the advice or professional judgment of a health care professional, nor are they intended to be the only approach to the management of clinical problem.



Appendix A: Prescription Medication Table for Alcohol Dependence ^a

Generic Name Brand/Trade Name	Adult Oral Dose	Mechanism of Action	Cautions/ Contraindications ^b	Therapeutic Considerations (including side effects and drug interactions) ^b	PharmaCare Coverage	Annual Cost (cost per tablet/capsule)
Naltrexone ^c (ReVia[®]) <i>(Approved indication: treatment of alcohol dependence to support abstinence and decrease relapse risk)</i>	50 mg once daily (start at 25 mg once daily to minimize side effects)	Blocks the action of endorphins when alcohol is consumed.	Must be opioid free for 7 to 10 days before initiating and must stop for 7 days if opioid therapy required. Liver failure, current or anticipated opioid use, hypersensitivity.	Some side effects include: nausea, vomiting, headache, fatigue, somnolence, hepatotoxicity. Drug interactions: opioids, medications that can also contribute to hepatocellular injury (i.e. NSAIDs)	Limited coverage ^d	Annual cost = \$1952.50 (50 mg tablet = \$5.30)
Acamprosate (Campral[®]) <i>(Approved indication: maintenance of abstinence from alcohol in patients who are abstinent at treatment initiation)</i>	666 mg three times daily 333 mg three times daily if mild to moderate renal impairment	Restores the imbalance of neuronal excitation and inhibition caused by chronic alcohol use.	Severe renal impairment, pregnancy, hypersensitivity.	Some side effects include: diarrhea, nausea, headache, depression. Suicidal ideation (rare) Can be used in patients with liver disease Drug interactions: naltrexone	Limited coverage ^d	Annual cost = \$1817.70 (333 mg tablet = \$0.80)
Compounded disulfiram (Antabuse[®] no longer available) <i>(Approved indication: deterrent to alcohol use/abuse)</i>	Maintenance: 250 mg once daily Range: 125 to 500 mg once daily	Blocks alcohol metabolism causing an aversive reaction to alcohol when it is consumed. Reaction: flushing, nausea, vomiting, headaches, palpitations, hypotension.	Total abstinence is needed. Do not give to intoxicated individuals or within 36 hours of alcohol consumption. Cardiac disease, cerebrovascular disease, renal/ hepatic failure, pregnancy, psychiatric disorders, alcohol consumption, hypersensitivity.	DO NOT ADMINISTER WITHOUT PATIENT'S KNOWLEDGE. Alcohol reaction can occur up to two weeks after last dose and symptoms (severe) can include: hepatotoxicity, peripheral neuropathy, respiratory depression, psychotic reactions, optic neuritis. Some common side effects include: drowsiness, metallic taste, impotence, headache. Drug interactions: alcohol containing medications, metronidazole, warfarin, diazepam, amitriptyline, phenytoin.	Regular Benefit	Annual cost = \$146 (125 mg capsule = \$0.30) (250 mg capsule = \$0.40) (500 mg capsule = \$0.80)

- a. All treatments should be part of a comprehensive treatment program that includes psychosocial support.
- b. This is not an exhaustive list. For complete details please refer to the drug monographs.
- c. Naltrexone injectable extended release (Vivitrol[®]) is not available in Canada at time of publication.
- d. PharmaCare coverage will only be provided for a patient who meets the Limited Coverage criteria, and whose prescription is written by a prescriber who has entered into a Collaborative Prescribing Agreement.

Note: Please check with Health Canada for product monographs and for advisories, warnings and recalls at: www.hc-sc.gc.ca

Pricing is approximate as per PharmaNet 2010/06/24 and does not include dispensing fee.

The information in this chart was drawn primarily from package inserts and references 15, 16 and 17. And also: Compendium of Pharmaceuticals and Specialties: The Canadian Drug Reference for Health Professionals. Toronto, Ontario; 2010. Micromedex Healthcare Series Website. Accessed June 20, 2010.

PharmaCare Coverage Definitions

G: generic(s) are available.
regular coverage: also known as regular benefit; does not require Special Authority; patients may receive full coverage*
partial coverage: Some types of regular benefits are only partially covered* because they are included in the Low Cost Alternative (LCA) program or Reference Drug Program (RDP) as follows:
LCA: When multiple medications contain the same active ingredient (usually generic products), patients receive full coverage* for the drug with the lowest average PharmaCare claimed price. The remaining products get partial coverage.
RDP: When a number of products contain different active ingredients but are in the same therapeutic class, patients receive full coverage* for the drug that is medically effective and the most cost-effective. This drug is designated as the Reference Drug. The remaining products get partial coverage.
Special Authority: requires Special Authority for coverage. Patients may receive full or partial coverage* depending on LCA or RDP status. These drugs are not normally regarded as first-line therapies or there are drugs for which a more cost-effective alternative exists.
no coverage: does not fit any of the above categories;
 *coverage is subject to drug price limits set by PharmaCare and to the patient's PharmaCare plan rules and deductibles. See www.health.gov.bc.ca/pharmacare/ for further information.