

# ED Screening for Outpatient Alcohol Withdrawal Management

Clinical Guidelines, Suggested Template/Order Set,
Decision Flow

#### I. **DEFINITIONS**:

<u>Alcohol intoxication:</u> Reversible syndrome of clinically significant problematic physiologic and behavioral changes in relation to recent alcohol consumption, which may be due to recent use with little or no chronic use or due to an increased consumption in the face of chronic use. Abstinence in this setting gradually resolves the intoxication.

<u>Alcohol Use Disorder</u>: Behavioral syndrome characterized by loss of control in intake of alcohol, compulsive use despite negative consequences, cravings for alcohol, and possible (but not required) experience of tolerance and/or withdrawal in relation to alcohol use.

<u>Alcohol Withdrawal:</u> Syndrome of problematic behavioral change with physiologic and cognitive manifestations resulting from abrupt cessation of or marked reduction in heavy prolonged alcohol intake. May range in severity from mild (e.g., anxiety, slight tremor, insomnia) to severe (e.g., seizures, delirium, delirium tremens). Severe alcohol withdrawal can be fatal.

ASAM criteria: Multidimensional assessment of an individual's needs, obstacles and liabilities, as well as their strengths, assets, resources and support structure in relation to addiction treatment. Used to help match individuals to an appropriate level of care within a continuum of options ranging from early interventions to acute care hospital placement.

<u>Delirium tremens:</u> A severe and sometimes fatal form of alcohol withdrawal. Syndrome consists of delirium (acute disruption in thinking and attention) and autonomic instability (tachycardia, hypertension, hyperthermia, diaphoresis), with onset typically around 48-72 hours after last use of alcohol. Risk factors include acute concurrent mental illness, past history of alcohol withdrawal-related seizure or Delirium Tremens, heavy and long drinking history, age over 60 years, and elevated admission blood alcohol.

<u>Detox:</u> Short for detoxification. A term sometimes used imprecisely to mean either the process of discontinuing or significantly decreasing either chronic or acute use of alcohol, or the treatment facility itself where the detoxification is occurring. The process may be accompanied by Alcohol Withdrawal.

<u>Medication services:</u> The prescription or administration of medications related to substance related disorder treatment services (whether to assist in safe detoxification or in support of maintenance treatment of a substance use disorder), and/or the assessment or management of the side effects of that medication.

<u>Observation:</u> The process of monitoring an individual's course of detoxification and/or withdrawal as frequently as deemed appropriate. This may include, but is not limited to, observation of the individual's health status.

<u>Sobriety:</u> Concept that starts as a state absent of intoxication, and is further marked by an orientation of an individual's life towards recovery (a process of change through which people improve their health and wellness, live self-directed lives, and strive to reach their full potential).

<u>Abstinence</u>: The complete absence of use of a substance or the complete discontinuation of a particular behavior.

#### II. PURPOSE:

To provide guidance for the Emergency Room Physician performing a screening exam for either outpatient or detoxification facility alcohol withdrawal management.

This guideline is meant to be a basic guideline, not an enforceable standard, and is intended to assist the clinical professional in caring for PHC adult members seeking assistance in withdrawal from alcohol. Recommendations are not intended to replace sound clinical judgment in caring for individual patients. These recommendations, while consistent with State guidelines governing health care services, including those provided through the Organized Delivery System ("Drug Medi-Cal") waiver, go beyond the minimum requirements set by DHCS in the area of recommended clinical oversight and screening. The recommendations do not address the specific billing arrangements or administrative support that would accompany a clinician's application of the guidelines. This guideline does NOT address screening evaluations performed in an office setting (see separate policy) nor screening for alcohol use or misuse (see policy on screening for alcohol misuse).

# III. PHYSIOLOGY OF INTOXICATION AND WITHDRAWAL

- A. Intoxication: Alcohol intoxication results from the binge use of alcohol with little or no chronic use, or due to increased consumption in the face of chronic use. Alcohol is absorbed primarily through the small intestine, and consumption produces corresponding increases in blood alcohol content (BAC). The rate of BAC increase is indirectly proportional to the rate of alcohol's transit from the stomach to the small intestine. Therefore, the presence of food in the stomach can correspondingly slow the rate of increase in BAC, and conversely bariatric weight loss procedures may lead to faster rises in BAC. BAC can be fatal when levels exceed a critical value (usually above 400mg/dL in a non-tolerant individual). Severity of intoxication generally corresponds directly with BAC. However, in individuals who have developed tolerance to alcohol's effects, the level of demonstrated clinical intoxication may be less than predicted by BAC alone. Therefore, intoxication must be assessed through direct clinical evaluation, in conjunction with laboratory studies. Toxic BAC levels may require emergency dialysis, since unless alcohol was very recently consumed most of the consumed alcohol will have entered the small intestine and therefore unreachable by gastric lavage.
- B. Withdrawal: Alcohol is metabolized primarily in the liver by zero-order kinetics (a fixed amount processed over a given amount of time), typically around 15mg/hr in the individual without significant liver impairment. Therefore, abstinence from alcohol in this setting predictably and gradually resolves intoxication, but this process may nonetheless need to be supervised to ensure no complications of the acute intoxication (such as aspiration or death). Chronic daily use of alcohol results in the development of physiological tolerance, and abrupt cessation of (or marked decrease in) alcohol consumption can result in physiological withdrawal. Alcohol withdrawal severity can vary from mild discomfort to severe impairment (Seizures, Delirium Tremens), and can be fatal (either directly as a result of withdrawal itself, or secondarily due to trauma or additional medical complications. Each episode of alcohol withdrawal can increase the likelihood of experiencing alcohol withdrawal with subsequent use of alcohol, even is use is at a lower level than previously—a process

known as kindling.

C. <u>Cormorbidity:</u> The risk of alcohol intoxication and withdrawal may be increased by concurrent medical issues (liver failure will prolong intoxication, for example, by decreasing the rate of alcohol metabolism), and the presence of other substances or medications (concurrent consumption of alcohol and sedative-hypnotics, for example, can worsen intoxication and complicate withdrawal management).

Both alcohol intoxication and alcohol withdrawal can present as medical emergencies and therefore require professional evaluation.

# IV. MANAGEMENT OF ACUTE ALCOHOL INTOXICATION AND EARLY ABSTINENCE

A. <u>Overview:</u> Acute alcohol intoxication (being drunk): may be due to binge use with little or no chronic use or due to an increased consumption in the face of chronic use. Short-term abstinence in this setting resolves the intoxication, and may need to be supervised in the hospital to ensure no complications of the acute intoxication (such as aspiration or death).

# B. Evaluation of the Intoxicated Patient

Patients with an altered level of sensorium/consciousness and should be cleared by history, physical exam, clinically appropriate laboratories/studies, and/or brain imaging if history of head trauma. In addition, the ED provider should screen for significant co-occurring disorders (medical or psychiatric) that would preclude safe outpatient management of abstinence/early sobriety. Dangerously toxic BAC levels may require emergency dialysis.

- C. Options for outpatient observation of abstinence/early sobriety: Any patient presenting to the emergency department for medical clearance for outpatient alcohol withdrawal management who is either
  - a. Not planning to cease alcohol consumption long term (i.e., discharged after resolution of significant alcohol intoxication but before onset of significant alcohol withdrawal) or
  - b. Is at low risk of Alcohol Withdrawal with continued abstinence after resolution of significant alcohol intoxication (see section on Alcohol Withdrawal for more details). An example is a person without daily alcohol use or with low daily alcohol use who has a short-term alcohol binge.

# D. <u>Disposition:</u>

- a. Candidates for non-medically supervised management of abstinence/early sobriety include those with:
  - 1. Lack of history of significant head trauma/traumatic brain injury, significant past or current intracranial pathology, and/or active seizure disorder
  - 2. Lack of history of significant medically-complicated alcohol withdrawal (i.e., repeated medical admissions for DTs or alcohol withdrawal seizures)
  - 3. Lack of current medical or psychiatric conditions (i.e., decompensated cardiovascular illness, active psychosis or suicidal ideation, significant cognitive impairment).
  - 4. Stable mental status characterized by:
    - 1) Appropriate sensorium absent of confusion, psychosis, or somnolence impairing ability to engage in meaningful treatment conversation

- 2) Ambulatory at baseline level of functionality
- 3) Mild ataxia/somnolence/anxiety/insomnia without significant co-morbidities.
- 5. No alcohol consumption in a period of time adequate to ensure that current clinical presentation is unlikely to deteriorate as a result of continued worsening intoxication. A period of 2 hours is usually sufficient
- b. If the patient does not choose long-term abstinence or want non-medical alcohol withdrawal management, they may be released after no longer demonstrating clinically significant alcohol intoxication and after execution of a comprehensive risk/benefit informed consent conversation. Many of these patients will return to their previous level of alcohol consumption.
- c. If a patient does plan long-term abstinence, the screening process for assessing risk of withdrawal can be started while still intoxicated, but may need to be repeated as intoxication gradually resolves.

#### V. CLEARANCE FOR OUTPATIENT WITHDRAWAL MANAGEMENT

- A. <u>Overview:</u> By definition, patients at risk of withdrawal have an element of chronicity to their use of alcohol. A patient with lower chronic use of alcohol who consumes a greater quantity over a short period of time will develop intoxication. If this individual contemplates short-term alcohol abstinence and is seeking medical assistance in that process, then after resolution of intoxication, that individual will need a comprehensive pre-withdrawal management medical evaluation, including assessment of risk of severe withdrawal.
- B. <u>Screen for Risk of severe alcohol withdrawal:</u> Screening for Risk of severe alcohol withdrawal should be performed on all individuals with chronic alcohol use or for those taking concurrent benzodiazepines or other sedative/hypnotic medications. Risk factors for severe withdrawal (and relative contraindications for outpatient withdrawal management) are listed here:
  - 1. Risk factors for severe withdrawal:
    - 1) Multiple prior episodes of withdrawal, especially those that have required intensive medical management
      - a) History of alcohol withdrawal delirium or delirium tremens
      - b) History of an alcohol withdrawal seizure or seizure disorder
    - 2) Presentation with seizure or autonomic instability in the current drinking/withdrawal episode
    - 3) Advanced age
    - 4) Abnormal CBC, CMP, INR, pregnancy test
      - a) Low platelet and white cell counts, high MCV, elevated INR, deranged electrolyte levels such as hypokalemia, and elevated AST/ALT are all indicative of chronic alcohol use, for example
    - 5) Long duration of heavy alcohol use on a daily or near daily basis: greater than 15 consecutive days intake of large amounts of alcohol (10 or more drinks per day for women and 13 for men); daily use for 3-15 days of higher numbers of drinks can also led to withdrawals (see graphs in appendix)
    - 6) Elevated BAC (>100mg/dL) without evidence of clinical intoxication (reflective of tolerance and heavy chronic use)

- 2. Relative contraindications to outpatient withdrawal management:
  - 1) Other acute medical or psychiatric illnesses of moderate to severe severity
    - a) Suicidal or homicidal ideation; psychosis
    - b) Poorly controlled chronic medical conditions (such as DM, COPD, CHF, cardiovascular disease)
  - 2) Concurrent use of sedative-hypnotic medications, opioids
  - 3) Other acute illness of moderate to severe severity (e.g. acute cholecystitis, appendicitis, pancreatitis, or pneumonia)

#### C. Screening Tools:

<u>Overview</u>: Certain signs and symptoms of alcohol withdrawal can overlap and mask those of other medical illnesses, so interpret screening tool results in light of a broader comprehensive clinical evaluation.

Screening tools that assess RISK for alcohol withdrawal include:

- 1. Prediction of Alcohol Withdrawal Severity Scale (PAWSS)
- 2. Luebeck Alcohol-Withdrawal Risk Scale (LARS)

Screening tools that assess symptom severity include:

- 1. Clinical Instrument Withdrawal Assessment for Alcohol-Revised (CIWA-Ar) which relies heavily on subjective patient report.
- 2. Brief Alcohol Withdrawal Scale (BAWS) which uses objective findings.
- 3. Short Alcohol Withdrawal Scale (SAWS) which uses objective findings
- 4. Newcastle Alcohol Withdrawal Scale (AWS).

Screening for the existence and severity of an alcohol or other substance use disorder

1. Alcohol Smoking Substance Involvement Screening Test (ASSIST).

#### **D.** Emergency Department Assessment

- In patients not contemplating/agreeing to trying to abstain from alcohol/benzodiazepines, the risk of withdrawal and corresponding clinical conversation with the patient should be noted in the ED progress note and any case management record system (such as EDIE) and the patient should be counselled to seek medical attention in the event withdrawal/cessation of alcohol consumption is contemplated.
- 2. Complete risk assessment for alcohol withdrawal: Patients with chronic alcohol use disorder planning cessation of alcohol consumption require a complete evaluation of their risk of severe alcohol withdrawal, including completion of the CIWA-Ar (the screening tool mandated by the State of California as part of the Medi-Cal Voluntary Inpatient Detoxification benefit), a comprehensive history and physical exam, laboratory and imaging studies as appropriate, so ideal setting of alcohol withdrawal management can be determined and tailored referrals made. This process constitutes a "medical clearance" for entry into a residential SUD treatment facility. See appendix for a sample form including all elements needed for medical clearance.
- E. Selecting the best setting for Withdrawal Management

- a. <u>Inpatient Setting (ASAM level 4-WM):</u> The California Department of HealthCare Services sets the following minimum requirements for management of alcohol withdrawal in the inpatient setting (see APL 18-001)—"Voluntary Inpatient Detoxification."
  - 1) Clinical Institute Withdrawal Assessment Scale for Alcohol, revised (CIWA-Ar) Score (mandated assessment tool for this Medi-Cal benefit) greater than 8 and one or more of the following high-risk factors meet criteria for inpatient admission: multiple substance abuse; history of delirium tremens; unable to receive the necessary medical assessment, monitoring and treatment in a setting with a lower level of care (possibly as a result of lack of medical or social support); medical co-morbidities that make detoxification in an outpatient setting unsafe; history of failed outpatient treatment; psychiatric co-morbidities; pregnancy; history of seizure disorder or withdrawal seizures, or
  - 2) Any patient with a CIWA-Ar Score greater than 15 (includes patients with diagnosis of delirium tremens)
- b. ASAM Levels of Care for residential withdrawal management: This category generally includes individuals with an initial CIWA-Ar score of 8 or lower, but with the co-morbidities noted above, or those with a CIWA-Ar score of 9-15 without significant co-morbidities. (These CIWA scores based on APL 18-001 and may change with adoption of new ASAM guidelines)
  - 1) 3.2-WM: Clinically managed population-specific high-intensity residential services
    - a) 24 hour trained counselors to stabilize multidimensional imminent danger. Services include daily therapies to assess progress, medical services, individual and group therapy, withdrawal support, and health education services.
  - 2) 3.7-WM: Medically monitored intensive inpatient services
    - a) 24-hour nursing care with physician availability for significant problems in dimensions 1, 2, or 3 (acute intoxication/withdrawal potential, biomedical conditions and complications, and readiness to change, respectively). 16 hours/day counselor availability.

NOTE: ASAM Levels 3.1, 3.3, and 3.5 are levels of care for ongoing residential treatment (not withdrawal management) and do NOT have continuous nursing or physician or other medical oversight.

If no residential supervised withdrawal management program is available, the patient can be monitored/treated in the emergency room for 6-12 hours to determine the clinical trajectory of the patient: admission vs. outpatient non-medically supervised treatment.

The patient will be evaluated hourly by the nurse, including vital signs and CIWA-Ar. If the patient's withdrawal becomes more severe under such observation, the patient may be transferred by the Emergency room for potential inpatient admission.

If the CIWA-Ar score declines, the vital signs are stable and the mental status is satisfactory, the patient may be transitioned to a lower level of care after 6-12 hours of this intensive observation.

- c. ASAM Levels of Care for Ambulatory (Outpatient) Withdrawal Management.
  - 1) Level 1-WM: Ambulatory Withdrawal Management Without Extended On-Site Monitoring
    - a) Organized outpatient services are delivered in regularly scheduled sessions in some combination of one or more of: a physician's office, addiction treatment facility, or patient's home. Services include individual assessment, medication/nonmedication withdrawal management, education, clinical support and discharge planning.
  - 2) Level 2-WM: Ambulatory Withdrawal Management With Extended On-Site Monitoring
    - a) Organized outpatient services are delivered in daily, extended sessions in some combination of one or more of: a physician's office, a general/mental health care facility, and/or an addiction treatment facility. Services include individual assessment, medication/nonmedication withdrawal management, education, clinical support and discharge planning.
- 2. Prescription of medications (detailed below), for use at the facility where Withdrawal Management will be monitored. Emergency Departments should consider building these into order sets for quick us by their electronic medical records systems.

Note that if the facility that will be monitoring the patient for withdrawal does not, as a policy, permit use of controlled substances to assist with withdrawal, then patients with mild withdrawal symptoms and no risk of severe withdrawal might be managed without benzodiazepines.

Alcohol withdrawal management pharmacologic employing benzodiazepines can be either symptom-triggered, or fixed-schedule tapers. For ASAM levels 3.2-WM, fixed taper schedules may be more appropriate, given the lack of medical and nursing oversight at these facilities. Some example fixed-schedule tapers are listed below.

- i. <u>Reduce moderate withdrawal symptoms</u> (CIWA score between 10 and 18) and risk for serious withdrawal symptoms. Maximum prescribed medication: sufficient for 4 days according to one of the following regimens; may direct to use extra doses earlier for severe symptoms, but refills should only be provided after clinical re-evaluation. (From ASAM Guideline on Alcohol Withdrawal Management; 2019; preliminary)
  - 1. Long acting benzodiazepine protocol (chlordiazepoxide; brand name Librium; best for normal liver function—significant functional hepatic impairment will slow metabolism time). There are many variations; the regimen below may be individualized based on the clinical scenario.

a. Loading dose: 100 mg

b. Day one: 50 mg every 6 hoursc. Day two: 25 mg every 6 hoursd. Day three: 25 mg twice a day

e. Day four: 25 mg at night

Total for four days: 19 tablets of 25mg

- 2. Dose equivalencies: Roughly equivalence doses of 25mg of chlordiazepoxide are the following: diazepam 5 mg, oxazepam 30 mg and lorazepam 1 mg.
  - a. Oxazepam or lorazepam may be preferable when treated individuals with significant hepatic impairment, since oxazepam and lorazepam are primarily metabolized outside of the liver.
- ii. If withdrawal symptoms **are not present or are mild** (CIWA score less than 10), patients are usually managed in an ambulatory setting, then one of the following protocols could be considered:
  - 1. Non-benzodiazepine option: Gabapentin. Many dosage options are available. A simple one is:
    - a. Gabapentin 300mg #28 tablets. 1 in the am, 1 mid-day, 2 at bedtime for 7 days
  - Benzodiazepine dosing in an uncontrolled setting does carry some risk of overdose and diversion. If secure medication storage and reliable supervision by a friend or family member is available, here are two lower dose options to consider.
    - Long acting benzodiazepine protocol (chlordiazepoxide; brand name Librium; best for normal liver function) (15 tablets of 25 mg)
      - i. Day one: 50 mg every 6 to 12 hours as needed
      - ii. Days two to five: 25 mg every 6 hours as needed
    - b. Shorter acting benzodiazepine protocol (oxazepam; brand name Serax; best if impaired liver function as demonstrated by elevated PT) (15 tablets of 15mg)
      - i. Day one: 30 mg every 6 hours as needed
      - ii. Days two to five: 15 mg every 6 hours as needed
- iii. Nutritional support (for all clients with alcohol withdrawal):
  - 1. Recommended for all clients in withdrawal:
    - a. thiamine 100 mg for 3 days;
    - b. multivitamins with minerals daily
  - 2. Supportive treatment for symptoms (any setting)
    - a. Nausea/vomiting: ondansetron, 4mg PO or SL q4 hours prn

- b. Diarrhea: loperamide 2mg: 1-2 prn loose stools
- c. Pain: acetaminophen 500mg q 6 hr prn (provided that liver function is sufficient)
- d. Anxiety: hydroxyzine 25-50mg po q6 hrs.

#### D. Additional Resources

- a. Regional Poison Control Centers can provide consultation on withdrawal management: 1-800-222-1222.
- b. Warm line advice for SUD treatment is available at 1-855-300-3595.

#### E. References:

- 1. From the World Health Organization, Clinical Guidelines for Withdrawal Management and Treatment of Drug Dependence in Closed Settings, https://www.ncbi.nlm.nih.gov/books/NBK310652/#part4.s2
- 2. From the American Society for Addiction Management, *The National Practice Guideline: for the Use of Medications in the Treatment of Addiction Involving Opioid Use*, <a href="https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf">https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf</a>
- 3. From DHCS: Withdrawal Management (Detox) Services, Frequently Asked Questions, February 2016
- 4. All Plan Letter 18-001, Voluntary Inpatient Detoxification, January 11, 2018
- 5. All Plan Letter 17-016, Alcohol Misuse Screening and Behavioral Counseling Interventions in Primary Care, October 27, 2017
- 6. A quick primer on withdrawal from Alcohol and Opiates, Dr. Murtuza Ghadiali, August 22, 2018
- 7. APL 18-014, Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care
- 8. Rastegar, D. and Fingerhood M. *The ASAM Handbook of Addiction Medicine*, 2016. Oxford University Press
- 9. The American Society of Addiction Medicine. *Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions*, Third Edition, 2013. David Mee-Lee Editor.

# ED screening for medical clearance for admission to a AUD treatment program

Patient Name:	DOI	3:	KEY to ASAM Levels
MR#			TET to TISTINI Develo
Treatment program being co	onsidered		<ol> <li>Outpatient</li> <li>Intensive outpatient</li> <li>Residential</li> </ol>
Facility Name:	AS	AM level:	3.1 or 3.2: Residential with clinical supervision 3.7 or 4.0: Inpatient,
History:			medically supervised
Alcohol/Drug/Psycho-activ	e substance use in past week	:	
Drug name	Specific Name/Form	Recent use/day	Last Used
Tobacco			
Alcohol			<del></del>
Benzodiazepine(s)			
Marijuana			
Opioids			
Methamphetamine			
Cocaine			
Other			
pregnancyChronic kidney failureCirrhosis/liver insufficiencyAngina requiring nitratesClass III or IV CHFSevere HTN (chronic, poorlAcute medical condition red		epsis, surgical problem)	
Current Medications:			
Medication Allergies:			
Psychiatric History:Schizophrenia: PsychosisBipolar disorder: Psychosi			
Prior SUD treatment History: History of alcohol with History of alcohol with Treatment Dates Drug			
Social History:Unstable Housing status			

Physical exam.

Vital signs: Weight, Height, Pulse, Respiration, Blood Pressure, O2 Saturation

Mental status exam: (See attachment)  Neuro exam:GaitCoordinationFocal findings: Depression screen: PHQ9 score:Suicidal?			
Examination directed on history:			
Lab work: CBC with differential, CMP Magnesium, Phosphorus Blood alcohol level Screen for other drugs in system Qualitative HCG (urine or serum pregnancy test) if woman of reproductive age			
If liver disease: PT/INR, Lipid profile or Cholesterol			
Imaging:  If cough: CXR to R/O TB/pneumonia:  If suspected head trauma or unexplained altered LOC: Head CT:  Modified CIWA scale score (see scoring tool, attached)			
Assessment:			
Acute Alcohol IntoxicationChronic Alcohol use (Blood alcohol level:)Alcohol Use DisorderOther substance use:			
Alcohol Withdrawal: Low Risk (CIWA score less than 8) Alcohol Withdrawal: Medium Risk (CIWA-Ar score of 8 or lower, with the co-morbidities noted below, or a CIWA-Ar score of 9-15 without co-morbidities.) Alcohol Withdrawal: High Risk			
Co-morbidities:			
Plan: Observe in Emergency Department Admit to hospital Medically stable for outpatient sobering (non-medically supervised) Medically stable for medically supervised sobering Medically stable for outpatient withdrawal management			

<u>Medication Regimens Prescribed</u>: (circle those prescribed)

<u>Moderate withdrawal symptoms</u> and risk for serious withdrawal symptoms (C1WA score between 10 and 18). Maximum prescribed medication: sufficient for 4 days according to one of the following regimens; may direct to use extra doses earlier for severe symptoms, but refills should only be done after clinical re-evaluation.

- 1. Long acting benzodiazepine protocol (chlordiazepoxide; brand name Librium; best for normal liver function)
  - a. Loading dose: 100 mg (give in ED), plus 15 tablets of 25 mg prescribed with these instructions:

- b. Day one: 50 mg every 6 to 12 hours
- c. Day two: 25 mg every 6 hours
- d. Day three: 25 mg twice a day
- e. Day four: 25 mg at night
- 2. Shorter acting benzodiazepine protocol (oxazepam; brand name Serax; best if impaired liver function as demonstrated by elevated PT)
  - a. Loading dose: 30 mg (given in ED), plus 10 tablets of 30mg prescribed with these instructions:
  - b. Day one: 30 mg every 6 hours
  - c. Day two: 30 mg every 8 hours
  - d. Day three: 30 mg every 12 hours
  - e. Day four: 30 mg at night

# Mild withdrawal symptoms-symptom triggered (for supervised settings).

- 1. If withdrawal symptoms are not present or are mild (C1WA score less than 10), then one of the following protocols applies:
  - a. Non-benzodiazepine option: Gabapentin 300mg #28 tablets. 1 in the am, 1 mid-day, 2 at bedtime for 7 days.
  - b. Long acting benzodiazepine protocol (chlordiazepoxide; brand name Librium; best for normal liver function) (15 tablets of 25 mg)
    - i. Day one: 50 mg every 6 to 12 hours as needed
    - ii. Days two to five: 25 mg every 6 hours as needed
  - c. Shorter acting benzodiazepine protocol (oxazepam; brand name Serax; best if impaired liver function as demonstrated by elevated PT) (15 tablets of 15mg)
    - i. Day one: 30 mg every 6 hours as needed
    - ii. Days two to five: 15 mg every 6 hours as needed

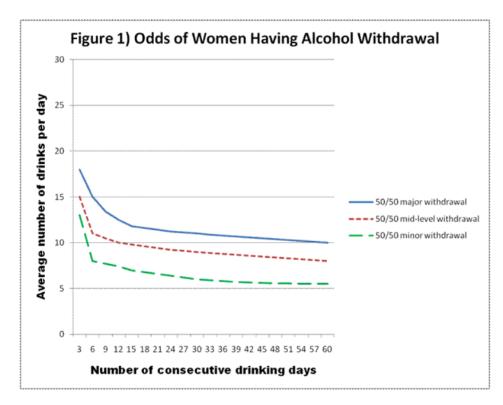
### **All patients** who may experience withdrawal:

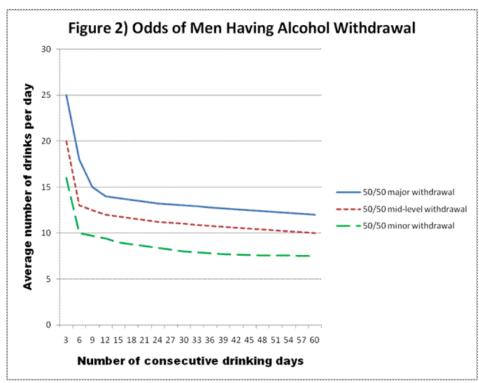
thiamine 100 mg for 3 days multivitamins with minerals daily ondansetron, 4mg PO or SL q4 hours prn nausea loperamide 2mg: 1-2 prn loose stools acetaminophen 500mg q 6 hr prn pain hydroxyzine 25-50mg po q6 hrs. prn anxiety

# Appendix I: Risk Factors for Risk of Severe or Complicated Alcohol Withdrawal

- a. Abnormal CBC, Electrolytes, Prothrombin time
- b. Other acute illness of moderate to severe severity
- c. History of delirium tremens
- d. History of an alcohol withdrawal seizure or seizure disorder.
- e. Long-term (greater than 15 consecutive days) intake of large amounts of alcohol (10 or more drinks per day for women and 13 for men); daily use for 3-15 days of higher numbers of drinks can also led to withdrawals (see graphs in appendix)
- f. Suicidal ideation or psychosis
- g. Poorly controlled chronic medical conditions (such as DM, COPD, CHF, cardiovascular disease)
- h. Concurrent use of methamphetamines, cocaine, benzodiazepines, opioids or PCB.

Appendix 2: Risk of withdrawal related to alcohol consumption, from HAMS Harm Reduction Network, 2015





# **Appendix 3: CIWA scale:**

NAUSEA AND VOMITING Ask "Do you feel sick to your stomach? Have you vomited?" Observation.  0 no nausea and no vomiting 1 mild nausea with no vomiting 2 3 4 intermittent nausea with dry heaves 5 6 7 constant nausea, frequent dry heaves and vomiting	TACTILE DISTURBANCES Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?" Observation.  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
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	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
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	VISUAL DISTURBANCES Ask "Does the light appear to be too bright? Is its color 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
ANXIETY Ask "Do you feel nervous?" Observation.  0 no anxiety, at ease 1 mild 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	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 moderate 4 moderately severe 5 severe 6 very severe 7 extremely severe
AGITATION Observation.  0 normal activity 1 somewhat more than normal activity 2 3 4 moderately fidgety and restless 5 6 7 paces back and forth during most of the interview, or constantly thrashes about	ORIENTATION AND CLOUDING OF SENSORIUM Ask "What day is this? Where are you? Who am I?"  0 oriented and can do serial additions 1 cannot do serial additions or is uncertain about date 2 disoriented for date by no more than 2 calendar days 3 disoriented for date by more than 2 calendar days 4 disoriented for place/or person  Total CIWA-Ar Score  Rater's Initials  Maximum Possible Score 67

