

# COHESIVE HEALTHCARE MANAGEMENT & CONSULTING

## **Mangum Regional Medical Center**

TITLE			Policy	
Management of Alcohol Intoxication and Alcohol Withdrawal		EMD-011		
Manual	EFFECTIVE DATE	REVIEW	EVIEW DATE	
<b>Emergency Department</b>				
DEPARTMENT	REFERENCE			
<b>Emergency Department</b>				

#### I. SCOPE

This policy applies to Mangum Regional Medical Center for the assessment, management, and treatment of patients who present to the Emergency Department (ED) with signs and symptoms of acute alcohol intoxication or withdrawal.

#### II. PURPOSE

Alcohol is the most commonly used drug and is a leading cause of morbidity and mortality in the United States. An annual average of approximately 88,000 deaths are attributed to excessive alcohol use. Every day approximately 29 people are killed in alcohol related motor vehicle crashes, accounting for 28% of all traffic-related deaths in the United States. The rate of alcohol-related Emergency Department (ED) visits have increased over 50% since 2006.

Alcohol intoxication causes physical and mental impairments in a progressive manner as the alcohol level increases and the person becomes more intoxicated. Alcohol intoxication causes:

- Poor judgment
- Disinhibition of normal social functioning
- Slurred speech
- Loss of memory
- Euphoria
- Ataxia
- Vomiting
- Confusion and disorientation
- Progressive lethargy to coma
- Possible death

Effects of alcohol can vary dramatically from person to person. Many factors can account for the differences in how the amounts of alcohol affect one person more than another, including the

signs and symptoms. The major factors that account for the variations in the signs and symptoms include but are not limited to the following:

- Prior experience with alcohol (tolerance): a heavy drinker can achieve high blood alcohol concentration (BAC) levels without developing signs and symptoms of intoxication whereas a novice drinker may have severe symptoms.
- Taking medications: alcohol can enhance the effects of medications, especially those of the sedative class such as sleeping pills or anti-anxiety medications.
- Co-morbidities: co-existing medical conditions may affect how a person reacts to alcohol.
- Smell of alcohol on person's breath: there is a poor correlation between the strength of the smell of alcohol on the person's breath and the BAC level.
- Blood alcohol concentration (BAC): effects of alcohol vary from person to person, and not all people exhibit all the identified effects (based on typical social drinker):
  - o **50mg/dL**: loss of emotional restraint, vivaciousness, feeling of warmth, flushing of skin, mild impairment of judgment;
  - 100mg/dL: slight slurring of speech, loss of control of fine motor movements (such as writing), confusion when faced with tasks requiring thinking, emotionally unstable, inappropriate laughter;
  - o **200mg/dL**: very slurred speech, staggering gait, double vision, lethargic but able to be aroused by voice, difficulty sitting upright in a chair, memory loss;
  - o **300mg/dL**: stuporous, able to be aroused only briefly by strong physical stimulus (such as a face slap or deep pinch), deep snoring;
  - o **400mg/dL**: comatose, not able to be arouse, incontinent, low blood pressure, irregular breathing; and
  - 500mg/dL: death possible, either from cessation of breathing, excessively low blood pressure, or vomiting entering the lungs without the presence of the protective reflex to cough it out

Alcohol withdrawal syndrome is a clinical diagnosis that cannot be confirmed by laboratory or diagnostic testing. It is a diagnosis of exclusion. The tremor of alcohol withdrawal is critical to the diagnosis. Characteristic tremor is an intention tremor, meaning at rest there is no tremor, if the patient extends their arms there will be a fine motor tremor that is constant and does not fatigue. Patient may also have a tongue tremor that is a more sensitive of alcoholic tremor than the hand tremor. It is critical to recognize alcohol withdrawal syndrome early to prevent life-threatening complications such as alcoholic seizures or delirium tremens (DTs) from occurring. Mild withdrawal typically occurs about six (6) hours after cessation or decrease of alcohol intake and lasts up to 24 to 48 hours. Symptoms of mild withdrawal include but are not limited to: tremors, sweating, tachycardia, gastrointestinal upset, headache, and headache. Moderate to severe withdrawal progresses from mild withdrawal and includes conditions such as alcoholic hallucinosis, alcoholic withdrawal seizures and/or DTs.

Alcohol is a significant factor for suicidal and self-harming behaviors. A person addicted to alcohol is 120 times more likely to attempt suicide than a person without a substance abuse disorder. Alcohol is often used as a mechanism for coping for other risk factors such as a loss of a loved one or failing health. Some statistics show that more than 50% of all people who compete suicide were intoxicated with alcohol or other substances at the time of death.

The purpose of this policy is to minimize morbidity and mortality through:

- Standardization of the management and treatment of patients who present to the hospital's ED with acute alcohol intoxication or withdrawal;
- Recognition of all patients with alcohol use disorders through the use of evidence-based screening tools;
- Identification of those patients with, or at risk of, potentially life-threatening complications; and
- Prompt initiation of appropriate medical management based on an individual patient assessment

#### III. DEFINITIONS

- A. **Alcohol Use Disorder:** refers to a "chronic relapsing brain disorder characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational or health consequences." (NIAAA, 2020). Alcohol use disorder can range from mild to severe depending on the number of symptoms the patient presents with. To meet diagnosis patient must have any two of the 11 signs during the same 12-month period to receive a diagnosis of AUD. Signs and symptoms can include:
  - Drinking more or longer than intended;
  - Unable to limit alcohol intake;
  - Wanting to cut down alcohol intake or making unsuccessful attempts;
  - A lot of time spent drinking, being sick or getting over after-effects;
  - Strong cravings or urges to drink alcohol;
  - Failure to fulfill obligations at work, school or home to due to repeated alcohol use;
  - Continued consumption of alcohol, regardless of physical, social, or interpersonal consequences, or after having had a memory blackout;
  - Missing social and work activities and hobbies;
  - Use of alcohol in unsafe situations, such as driving, using machinery, etc.;
  - Need for increased alcohol consumption to feel same effect due to developing a tolerance, or found that usual number of drinks had less effect than before;
  - Withdrawal symptoms such as nausea, sweating and shaking, when stop drinking or drink to avoid these symptoms
- B. **Alcohol Dependence:** means a cluster of behavioral, cognitive and physiological factors that typically include a strong desire to consume alcohol that results in difficulties controlling its use. Three (3) or more of the following six (6) behaviors, occurring together for at least one (1) month or occurred repeatedly within one (1) year period:
  - Compulsion to drink;
  - Lack of control;
  - Withdrawal state;

- Tolerance:
- Salience; and
- Persistence use

A person who is alcohol dependent may persist in consuming alcohol, despite the harmful effects. A higher priority will also be placed on alcohol than other activities and obligations. This dependence results in significant problems in one or more areas of the person's life.

- C. **Alcohol Intoxication:** means a transient physiological state of high level of alcohol. This occurs when the quantity of alcohol a person consumes exceeds the person's tolerance for alcohol, resulting in behavioral and/or physical abnormalities. Also known as "drunkenness". Symptoms may include slurred speech, euphoria, poor coordination, disturbances in level of consciousness, erratic behavior, impaired balance or other psychophysiological functions and responses. If left uncontrolled may cause ataxia, coma and even death.
- D. **Alcohol Withdrawal:** refers to a group of symptoms that may occur from the sudden reduction of alcohol use after chronic or prolonged ingestion. Symptoms include but not limited to: anxiety, agitation, irritability, depression, mood swings, insomnia, tremor of hands, tongue, eyelids, fever (with or without infection), hypertension, tachycardia, sweating, nausea, vomiting, diarrhea, headache, and dilated pupils.
- E. **Alcoholic hallucinosis:** refers to hallucinations, usually visual hallucinations (auditory and tactile hallucinations also) that develop within 12 to 24 hours of cessation of alcohol. Patients are typically aware they are hallucinating and can become very distressed. Alcoholic hallucinosis is not associated with global clouding of the sensorium as with delirium tremens, and vital signs are usually normal.
- F. **Binge Drinking:** means a pattern of excessive drinking defined as men who consume five (5) or more alcoholic drinks or women who consume four (4) or more alcoholic drinks in two (2) hours or less. Binge drinking has serious health consequences such as: unintentional injuries (car crashes, falls, burns, alcohol poisoning), violence (suicide, sexual assault), and chronic diseases (hypertension, stroke, heart disease and liver disease).
- G. **Delirium Tremens (DTs):** refers to the most severe form of alcohol withdrawal syndrome, manifested by altered mental status and sympathetic overdrive (autonomic hyperactivity such as sweating, palpitations, upset stomach) which can progress to cardiac collapse. DTs usually occurs 48 to 96 hours after the cessation or reduction of alcohol intake and lasts one (1) to five (5) days. Risk factors for the development of DTs include:
  - History of sustained drinking
  - History of alcohol withdrawal seizures
  - History of DT

- Age > 30 years of age
- Presence of a concurrent illness
- Presence of severe alcohol withdrawal and elevated BAC
- Greater period since person's last drink

Approximately 5% of withdrawal patients will suffer from DT. Symptoms include agitation, global confusion, disorientation, hallucinations, fever, hypertension, tachycardia and diaphoresis. *DTs are a medical emergency with a high mortality rate.* 

H. Wernicke's Encephalopathy: refers to a syndrome that occurs due to a deficiency of thiamine (vitamin B1). This neurological disease classically presents with a clinical triad of confusion, ataxia and ocular abnormalities, but only 10% of patients present with all three features. The syndrome may develop rapidly or over several days. Inappropriately managed may result in death or Korsakoff's syndrome (disproportionate memory loss, psychosis) in up to 85% of survivors.

## IV. POLICY

The approach to the management and treatment of patients with acute alcohol intoxication or withdrawal is multidisciplinary. At a minimum all patients who present to the ED with signs or symptoms of acute alcohol intoxication or withdrawal will be screened using the Cage Questionnaire (see Attachment A) to screen for harmful drinking and alcohol use disorders. Nursing staff will be responsible for reporting the results of screening to the responsible ED physician/mid-level provider. Nursing staff will perform a full physical and psychosocial assessment of the patient and document the findings in the patient's medical record. The hospital will provide a prompt medical assessment with appropriate stabilizing treatment by the qualified medical provider as recognized in the Hospital Medical Staff Bylaws/Rules, Regulations and Policies. For those patients who have been identified with an alcohol misuse disorder the ED physician/mid-level provider will provide a brief intervention as recommended by the American College of Emergency Physicians using the EDDIRECT method (see Attachment B).

A patient presenting with signs and symptoms suggestive of acute alcohol intoxication and suspected suicidal/homicidal ideation or self-harming behaviors should be carefully screened and medically cleared. After the physician/mid-level provider has completed the MSE and ruled out all medical causes for suicidal/homicidal ideations or self-harming behaviors, patient has had a chance to sober up and is still expressing these behaviors a Licensed Mental Health Professional evaluation should be obtained per the Care and Treatment of the Psychiatric Patient Policy prior to referring the patient to mental health facility.

Once the patient has been assessed and treated the hospital will discharge the patient following the brief intervention with discharge instructions and referral resources (i.e. primary care

provider, out-patient substance abuse centers, AA, etc.). If indicated the Hospital will arrange and expedite an appropriate transfer of the patient to a mental health or substance abuse facility.

#### V. PROCEDURE

### A. <u>Management of Alcohol Intoxication</u>

#### 1. **Assessment**

- a. All patients presenting to the ED will initially be triaged using the Emergency Severity Index (ESI) in order to determine the order in which they will receive a medical screening examination (MSE) by a physician/mid-level provider.
- b. During triage all patients who present with signs and symptoms suggestive of alcohol intoxication will be screened using the Cage Questionnaire to screen for harmful drinking and alcohol use disorders.
  - i. Results should be reported to the physician/mid-level provider and documented in the patient's medical record.
  - ii. If the patient cannot be screened at triage due to the patient's medical status (i.e. unconscious, intubated, or mentally unstable) screening may be postponed until the patient has been stabilized and can be assessed. The screening should be performed as soon as possible as the patient's condition permits.
- c. If the patient presents with suicidal/homicidal ideation or self-harming behaviors the patient should be screened for the risk of suicide using the ASQ Suicide Risk Screening Tool. If the patient has a positive screen see Care and Treatment of the Psychiatric Patient Policy.
  - i. Patient should be allowed to sober up and the physician/mid-level provider should re-assess the patient to determine the patient's mental state.
- d. Nursing staff should perform and document a focused nursing assessment to rule out any medical conditions that may be contributing to the patient's mental condition. Assessment should include a psychosocial assessment of the patient.
  - i. Any abnormalities should be reported to the physician/mid-level provider promptly.
- e. The physician/mid-level provider responsible for the patient's care will perform an appropriate MSE including any tests (i.e. labs, etc.), to rule out a medical illness as the cause for or contributing to the patient's presenting condition.
- f. Patients presenting with acute alcohol intoxication should be reevaluated hourly by nursing staff to determine if the patient is returning to baseline. If the patient's mental and physical status is

not returning to baseline nursing staff should immediately notify the responsible physician/mid-level provider.

- i. Evaluations should be documented in the patient's medical record.
- ii. Hourly evaluations should include at minimum: pupils, neurological, mental status, cardiac activity, vital signs, and musculoskeletal exam.

## 2. **Observation and Monitoring**

- a. Patient should be placed in a quiet room with low lighting and minimal stimulation.
- b. Patient should be assessed for fall risk and interventions initiated based assessment
  - i. Patients who are agitated or have gait disturbances may need one-to-one observation to ensure patient safety.
- c. If patient has screened positive for suicide, self-harming behaviors of determined to be depressed ensure the room is clear of objects that may be used to harm themselves or others.
- d. Vital signs should be assessed and documented in the patient's medical record as follows unless otherwise ordered:
  - Every hour until patient shows signs of returning to baseline; then
  - Every 4 hours
  - At discharge or transfer
  - As needed (PRN)

### 3. Labs and Diagnostics

- a. Point-of-care (POC) blood glucose should be done *immediately* for all patients presenting with suspected alcohol intoxication.
- b. Labs
  - i. CBC
  - ii. CMP
  - iii. Ethanol level
  - iv. Serum salicylate and APAP levels
  - v. PT/INR, PTT
  - vi. Urinalysis
  - vii. Lactate (if indicated)
  - viii. Blood gases (if indicated)
- c. Diagnostics (if indicated)
  - i. ECG
    may assist in evaluating for cardiac ischemia or other toxic ingestions
  - ii. Chest X-ray can be useful in ruling out pulmonary co-morbidities such as pneumonia
  - iii. Non-contrast Head CT scan

may be necessary if there is a concern for any type of trauma or if the patient remains altered.

### 4. Pharmacological Management

a. See Alcohol Intoxication & Withdrawal Protocol (Attachment D).

### B. Management of Alcohol Withdrawal

#### 1. **Assessment**

- a. All patients presenting to the ED will initially be triaged using the Emergency Severity Index (ESI) in order to determine the order in which they will receive a medical screening examination (MSE) by a physician/mid-level provider.
- b. During triage all patients who present with signs and symptoms suggestive of alcohol withdrawal will be screened using the Cage Questionnaire to screen for harmful drinking and alcohol use disorders.
  - i. Results should be reported to the physician/mid-level provider and documented in the patient's medical record.
  - ii. If the patient cannot be screened at triage due to the patient's medical status (i.e. unconscious, intubated, or mentally unstable) screening may be postponed until the patient has been stabilized and can be assessed. The screening should be performed as soon as possible as the patient's condition permits.
- c. If the patient presents with suicidal/homicidal ideation or self-harming behaviors the patient should be screened for the risk of suicide using the ASQ Suicide Risk Screening Tool. If the patient has a positive screen see Care and Treatment of the Psychiatric Patient Policy EMD-008.
  - i. If the patient is medically unstable the physician/mid-level provider should re-assess the patient to determine the patient's mental state.
- d. Nursing staff should perform and document a focused nursing assessment to rule out any medical conditions that may be contributing to the patient's mental condition. Assessment should include a psychosocial assessment of the patient.
  - i. Any abnormalities should be reported to the physician/mid-level provider promptly.
- e. The physician/mid-level provider responsible for the patient's care will perform an appropriate MSE including any tests (i.e. labs, etc.), to rule out a medical illness as the cause for or contributing to the patient's presenting condition.
- f. Nursing staff will assess the patient's withdrawal symptom severity using the Clinical Institute Withdrawal Assessment Scale for Alcohol, Revised (CIWA-Ar) (See Attachment C).

- i. The completed CIWA-Ar Protocol will be documented in the patient's medical record.
- ii. If the patient is having DT's the CIWA-Ar should not be performed.

## 2. **Observation and Monitoring**

- a. Patient should be placed in a quiet room with low lighting and minimal stimulation.
- b. Patient should be assessed for fall risk and interventions initiated based assessment
  - i. Patients who are agitated or have gait disturbances may need one-to-one observation to ensure patient safety.
- c. If patient has screened positive for suicide, self-harming behaviors or determined to be depressed ensure the room is clear of objects that may be used to harm themselves or others.
- d. Vital signs should be assessed and documented in the patient's medical record as follows unless otherwise ordered:
  - Mild withdrawal every 4 hours
  - Moderate withdrawal every 2 hours
  - Severe withdrawal every hour
  - As needed (PRN)
  - At discharge or transfer

### 3. Labs and Diagnostics

- a. Point-of-care (POC) blood glucose should be done *immediately* for all patients presenting with suspected alcohol intoxication.
- b. Labs
  - i. CBC
  - ii. CMP
  - iii. Ethanol level
  - iv. Serum salicylate and APAP levels
  - v. PT/INR, PTT
  - vi. Urinalysis
  - vii. Lactate (if indicated)
  - viii. Blood gases (if indicated)
- c. Diagnostics (if indicated)
  - i. ECG
    - may assist in evaluating for cardiac ischemia or other toxic ingestions
  - ii. Chest X-ray can be useful in ruling out pulmonary co-morbidities such as pneumonia
  - iii. Non-contrast Head CT scan

may be necessary if there is a concern for any type of trauma or if the patient remains altered.

## 4. Pharmacological Management

a. See Alcohol Intoxication & Withdrawal Protocol (Attachment D).

### 5. Symptom Triggered Withdrawal Management

- a. Treatment of alcohol withdrawal should be symptom triggered, meaning tailored to the patient's individual needs and determined by the severity of withdrawal signs and symptoms.
- b. Patients who have been screened and identified as alcohol dependent will be assessed for alcohol withdrawal syndrome. This should be supported by using the CIWA-Ar assessment tool and clinical judgment.
- c. Nursing staff should assess patients in alcohol withdrawal using the CIWA-Ar assessment tool.
- d. Alcohol Withdrawal Prophylaxis Medications
  - i. See Alcohol Intoxication & Withdrawal Protocol (Attachment D).
- e. Nursing staff should assess the patient's response using the CIWA-Ar assessment tool as follows:
  - IV benzodiazepines every 15 minutes
  - PO or IM benzodiazepines every 2 hours
  - No treatment every 4 hours

#### C. Aggressive/Agitated Patient

- a. Initially the physician/mid-level provider should assess to determine whether the patient is agitated/aggressive due to being intoxicated or secondary to injury, infection or other factors that may have contributed to the confusion.
- b. Ensure the patient is in a calm environment. Minimize the stimulation.
- c. Ensure the room is clear of objects that may be used as a weapon or thrown.
- e. Staff may attempt to defuse escalating aggressiveness/agitation through de-escalation measure such as:
  - i. Respect the patient's personal space.
  - ii. Maintain calm speech, demeanor, and facial expression.
  - iii. Establish verbal contact (designate one staff member to directly communicate and interact with the patient whenever possible.
  - iv. Listen closely to what the patient is saying.
  - v. Stand at an angle from the patient, hands should be visible.

- vi. Identify wants and feelings.
- vii. Find a way to respond that agrees with or validates the patient's position.
- viii. Explain to the patient what you want them to do.
- ix. Clearly inform the patient of acceptable behaviors.
- x. Set clear limits.
- xi. Offer choices and optimism.
- xii. Show kindness (offer blankets, magazines, food, beverages, if not contraindicated).
- xiii. Never promise the patient something that cannot be delivered.
- d. Patients who are agitated or aggressive secondary to acute alcohol intoxication may require one-to-one observation to ensure their own, other patient's, visitors and staff safety.
  - i. If the patient becomes violent or out of control staff should contact local Law Enforcement.
- d. Pharmacological Management of Agitation
  - i. See Aggressive/Agitated/Disturbed Patient Order Protocol EMD-010A.

#### D. Brief Intervention

- a. After the nursing staff has screened the patient and determined the patient to be an "at-risk", "harmful" or "dependent" drinker the ED physician/mid-level provider will be responsible for providing a brief intervention using the EDDIRECT framework supported by the ACEP.
- b. The brief intervention will be provided based on the patient's medical stability.
- c. For "at-risk" or "harmful" drinkers the brief interventions may consist of goal setting within safe limits, discharge instructions and a referral to the patient's primary care provider.
- d. For "dependent" drinkers or those patients the ED physician/mid-level provider is unsure of the patient's alcohol problems, the brief intervention may consist of a negotiation process with the patient to seek further assessment and referral to a specialized treatment program.
- e. The ED physician/mid-level provider will conduct the brief intervention using EDDIRECT as follows:
  - i. **E**mpathy:
    - Adopt a warm, reflective and understanding style. Avoid a blaming, confrontational or coercive style.
  - ii. **D**irectness.
    - Maintain eye contact and raise the subject.
    - "I would like to take a few minutes to talk about your alcohol use."
  - iii. **D**ata.

- Feedback: "I am concerned about your drinking. Our screening indicates that:
  - 1. You are above what we consider the safe limits of drinking, and
  - 2. You are at risk for alcohol-related illness, injury and death."
- Offer comparison to national norms. (See Quick Reference Card Screening for Alcohol Problems in the ED.)
- iv. **I**dentify willingness to change.
  - "On a scale from 1-10 how ready are you to change your drinking patterns?"
  - If the response is 6 or less, then ask "Why not less?"
  - If the response is greater than or equal to 7, the patient is ready, move on to recommendations.
  - The response will help the physician/mid-level provider to identify discrepancies and assist the patient to move along the continuum from ambivalence to change.
- v. **R**ecommend action/advice

ED)

- All patients:
  - "We recommend that you never drive after drinking."
- At-Risk/Harmful Drinkers:
   Statement of recommended drinking limits (See Quick Reference Card – Screening for Alcohol Problems in the
  - Follow-up with your primary care physician
- Screen positive, but unsure if dependent drinker:
   Abstain from drinking, and refer for further assessment to social work, psychiatry or a specialized treatment facility or alcohol counselor
- Dependent drinkers: Abstain from drinking and refer to a detoxification center, specialized alcohol treatment facility, Alcoholics Anonymous (AA), and/or primary care.
- vi. Elicit response
  - "How does this sound to you?" or "Where does this leave you?"
- vii. Clarify and confirm action
  - Possible clarification:
    - "We have just completed a screening test for a whole spectrum of alcohol problems that may lead to an increase risk of illness and injury. WE are not attempting to label you as an alcoholic. We are recommending what we know to be safe drinking limits. We want you to follow up with your primary care physician, just as we would with any patient who has screened positively for other health

problems such as high blood pressure or a high sugar level."

• Possible confirmation:

"We are very concerned about your drinking. In the interest of your health (and family) we recommend immediate referral for further assessment and treatment. We know that cutting back or abstaining from alcohol is very difficult to do on you own. We would like to offer you help."

viii. Telephone referral.

- "Would you be willing to speak with a counselor, social worker, etc. now?"
- "I'd like to call right now for an appointment or referral. What do you think?"

#### VI. REFERENCES

American College of Emergency Physicians (2017). Alcohol screening and brief intervention in the emergency department. Clinical Practice Management. [Electronic Version] Retrieved on 01/20/20 from <a href="https://www.acep.org/Clinical-Practice-Management/Alcohol-Screening-and-Brief-Intervention-in-the-ED/">https://www.acep.org/Clinical-Practice-Management/Alcohol-Screening-and-Brief-Intervention-in-the-ED/</a>

Borgundvaag, B. MD.; and Kahan, M. MD. (2016). Alcohol Withdrawal and Delirium Tremens: Diagnosis and Management. Emergency Medicine Cases. [Electronic Version] Retrieved on 01/17/20 from https://emergencymedicinecases.com/alcohol-withdrawal-delirium-tremens/

Brathen, G. & Ben-Menachern, E., et al. (2011). Alcohol-related seizures. Chapter 29. European Handbook of Neurological Problems. [Electronic Version]. Retrieved on 01/22/20 from <a href="https://www.eaneurology.org/fileadmin/user\_upload/guidline\_papers/EFNS\_guideline\_2011\_Alcohol-related\_seizures.pdf">https://www.eaneurology.org/fileadmin/user\_upload/guidline\_papers/EFNS\_guideline\_2011\_Alcohol-related\_seizures.pdf</a>

Centers for Disease Control and Prevention (2015). Alcohol Poisoning Statistics. Retrieved on 01/17/20 from <a href="https://www.cdc.gov/vitalsigns/alcohol-poisoning-deaths/index.html">https://www.cdc.gov/vitalsigns/alcohol-poisoning-deaths/index.html</a>

Centers for Disease Control and Prevention (2019). Impaired Driving: Get the Facts. Retrieved on 01/17/20 from <a href="https://www.cdc.gov/motorvehiclesafety/impaired\_driving/impaired\_drv\_factsheet.html">https://www.cdc.gov/motorvehiclesafety/impaired\_driving/impaired\_drv\_factsheet.html</a>.

D'Onofrio, G. MD; and Degutis, L. DrPH. (2002). Preventive care in the emergency department: Screening and brief intervention for alcohol problems in the emergency department: A systematic review. Academic Emergency Medicine. [Electronic Version]. Retrieved on 01/17/20 from https://onlinelibrary.wiley.com/doi/epdf/10.1197/aemj.9.6.627

Etherington, J. (1996). Emergency management of acute alcohol problems: Part 1: Uncomplicated withdrawal. Canadian Family Physician. [Electronic Version]. Retrieved on

01/17/20 from <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2146916/pdf/canfamphys00081-0092.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2146916/pdf/canfamphys00081-0092.pdf</a>

Etherington, J. (1996). Emergency management of acute alcohol problems: Part 2: Alcohol-related seizures, delirium tremens, and toxic alcohol ingestion. Canadian Family Physician. [Electronic Version]. Retrieved on 01/17/20 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2146857/pdf/canfamphys00082-0117.pdf

Hoffman, R. MD; and Weinhouse, G. MD. (2019). Management of moderate and severe alcohol withdrawal syndromes. Up-to-date.com. [Electronic Version] Retrieved on 06/05/19 from <a href="https://www.uptodate.com/contents/management-of-moderate-and-severe-alcohol-withdrawal-syndromes">https://www.uptodate.com/contents/management-of-moderate-and-severe-alcohol-withdrawal-syndromes</a>

Katttimani, S. and Bharadwaj, B. (2013). Clinical management of alcohol withdrawal: A systematic review. Industrial Psychiatry Journal. [Electronic Version] Retrieved on 01/20/20 from <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4085800/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4085800/</a>

Long, D. BS; and Long, B. MD. (2016). Alcohol Withdrawal: Pearls and Pitfalls. emDocs. [Electronic Version] Retrieved on 06/05/19 from http://www.emdocs.net/alcohol-withdrawal/

Magee, M. MSN, RN, CPHQ, CPPS; and Horrine, T. BSN, RN. (2017). Frequent monitoring and behavioral assessment: Keys to the care of the intoxicated patient. Pennsylvania Patient Safety Advisory. [Electronic Version]. Retrieved on 01/17/20 from <a href="http://patientsafety.pa.gov/ADVISORIES/documents/201706\_45.pdf">http://patientsafety.pa.gov/ADVISORIES/documents/201706\_45.pdf</a>

Malone, D. and Friedman, T. (2004). Drunken patients in the general hospital: their care and management. Postgraduate Medical Journal. [Electronic Version] Retrieved on 01/17/20 from <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743218/pdf/v081p00161.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743218/pdf/v081p00161.pdf</a>

Morgan, M. (2015). Acute alcohol toxicity and withdrawal in the emergency room and medical admissions unit. Clinical Medicine. [Electronic Version]. Retrieved on 01/17/20 from <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4953238/pdf/486.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4953238/pdf/486.pdf</a>

White, A.M. and Slater, M.E., et al. (2014) Trends in alcohol-related emergency department visits in the United States: Results from the Nationwide Emergency Department Sample, 2006 to 2014. *Alcoholism: Clinical and Experimental Research* [Electronic Version] Retrieved on 01/17/20

### VI. ATTACHMENTS

Attachment A: Cage Questionnaire

Attachment B: EDDIRECT Brief Intervention Tool

Attachment C: Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA, Ar)

Attachment D: Alcohol Intoxication & Withdrawal Order Protocol

### **REVISIONS/UPDATES**

Date	Brief Description of Revision/Change