From the Editor

To ensure the highest-possible quality of patient care in NYC, REMAC has raised CME and exam requirements for all re-certification and new candidates.

** All candidates must now meet CME requirements **

- All REMAC paramedics and candidates should review Certification & CME Information on page 3 journal and plan accordingly.
- All upcoming exam candidates, see registration instructions at the bottom of the last page of this journal.
- Candidates who will not have a CME letter at the time of their REMAC exam must email Christopher.Swanson@fdny.nyc.gov ASAP.

** The exam format has changed for all candidates **

- Early testing is strongly encouraged, there is no loss of certification time.
- Study Tips – to pass the exam, candidates MUST:
  - memorize the REMAC GOP, BLS and ALS protocols, and appendices
  - interpret 3 and 12-lead ECGs
  - calculate drug doses based on patient weight
- 120 question multiple-choice exam with a 3-hour time limit
  - 20 Scenario questions: two new intensive patient-care scenarios
    - one adult and one pediatric, 10 questions each
    - similar to past REMAC Orals and Scenario exams
    - testing the candidate’s ability to integrate history, physical exam, ECG interpretation, diagnosis, treatment using the NYC REMAC protocols
  - 100 General questions: the same format and content as past REMAC exams, on protocol content and patient care
- Passing score is 80%. Exam failure permits a retest the same month.
On August 1, 2015 REMAC Protocol revisions take effect for the field and exams

**REMEMBER: the protocols on the street are the protocols on the exam!**

Always see [nycremsco.org](http://nycremsco.org) for the current approved protocols

**For updates, see REMAC Advisory 2015-03, 04, 05 & 07 at nycremsco.org**

### General Operating Procedures

- **Spinal Precautions**
  - Removes rapid-takedown
  - New policy language
- **Pediatric Patients**
  - Changes age parameters
- **Prehospital Sedation**
  - Removes etomidate administration rate for intubation
  - Increases etomidate maximum dose for cardioversion
- **IO Administration**
  - Limits number of attempts
- **Pre-existing Central Venous Catheter**
  - New GOP section

### BLS Protocols

- **407 – Wheezing & 410 – Anaphylaxis**
  - Changes note to not delay transport
  - Changes OLMC contact requirements
- **411 – Altered Mental Status**
  - Adds pediatric dosing for naloxone
  - Removes contraindications for pediatrics and therapeutic opiate use
  - Initiate transport prior to repeating treatment
  - Adds QA component
- **421 – Head and Spine Injuries**
  - Removes immobilization
  - Adds spinal precautions
  - Removes hyperventilation

### ALS Protocols

- **500-A – Smoke Inhalation & 500-B – Cyanide**
  - Changes blood drawing to “if available”
  - Changes age requirement
  - Changes bottle use of hydroxocobalamin
  - Deletes Table 2
- **530 – Excited Delirium**
  - Changes name of protocol
  - Changes age parameters
  - Adds pediatric dosing for naloxone
  - Removes contraindications for pediatrics and therapeutic opiate use
  - Initiate transport prior to repeating treatment
  - Adds QA component

### Appendices

- **Appendix P – CPAP**
  - Removes pregnancy as contraindication
REMAC Exam Study Tips

REMAC candidates have difficulty with: REMAC Written exams are approximately:
* 12-lead EKG interpretation 10% BLS 15% Adult Trauma
* ventilation rates for peds & neonates 10% Adult Arrest 15% Pediatrics

Certification & CME Information

- By the day of their exam, all REMAC paramedics and candidates must present a letter from their Medical Director verifying fulfillment of CME requirements.
- Upcoming candidates without a CME letter ASAP must email Christopher.Swanson@fdny.nyc.gov
- FDNY paramedics, see your ALS coordinator or Division Medical Director for CME letters.
- CME letters must indicate the proper number of hours, per REMAC Advisory # 2007-11:
  - 36 hours - Physician Directed Call Review
    - ACR Review
    - QA/I Session
    - Emergency Department Teaching Rounds - Maximum of 18 hours
  - 36 hours - Alternative Source CME - Maximum of 12 hours per venue
    - Online CME (see examples below) - Clinical rotations
    - Lectures / Symposiums / Conferences - Associated Certifications – 4 hours each:
      - BCLS / ACLS / PALS / NALS / PHTLS
- Failure to maintain a valid NYS EMT-P card will suspend your NYC REMAC certification until NYS is recertified.

REMAC certification exams are held monthly for new and expired candidates, and for currently certified paramedics who may attend up to 6 months before their expiration date.

REMAC CME and Protocol information is available and suggestions or questions about the newsletter are welcome. Call 718-999-2671 or email Christopher.Swanson@fdny.nyc.gov

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Kornelia Haynes

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Alexandrou, Nikolaos 80282  Jacobowitz, Susan 80297
Asaeda, Glenn 80276  Kaufman, Bradley 80289
Barbara, Paul 80306  Lai, Pamela 80311
Bayley, Ryan 80314  Munjal, Kevin 80308
Ben-El, David 80298  Redlener, Michael 80312
Freese, John 80293  Rotkowitz, Louis 80317
Friedman, Matt 80313  Schenker, Josef 80296
Giordano, Lorraine 80243  Schneitzer, Leila 80241
Gonzalez, Dario 80256  Silverman, Lewis 80249
Hansard, Paul 80226  Soloff, Lewis 80302
Hegde, Hradaya 80262  Van Voorhees, Jessica 80310
Hew, Phillip 80267  Williams, Alan 80316
Huie, Frederick 80300  Zabar, Benjamin 80323
Isaacs, Doug 80299  Zimmerman, Jason 80324
ALCOHOL USE DISORDER

The Sobering Side of Alcohol Use

Ethanol is the single most important substance of abuse in the United States. It is the active agent in beer, wine, vodka, whiskey, rum, and other liquors. While most social use does not cause negative health effects, there is a dangerous side to alcohol. Drinking is associated with risky behaviors like unsafe sexual activity, drinking and driving, and experiencing or engaging in violent behavior such as physical fights. As an EMT or paramedic on the streets of New York City, you undoubtedly see the medical effects of alcohol on some of your patients, and possibly on multiple different patients during a single tour.

There is an abundance of statistics that demonstrate the effects of alcohol use. Here are just a few that we felt were the most eye-opening.

More than 85,000 deaths a year in the United States are directly attributed to alcohol use. The New York City Department of Health and Mental Hygiene reports that more than 1,700 New Yorkers die of alcohol-related causes each year. Roughly 1 in 10 deaths among working age adults results from excessive drinking. Alcohol is a factor in one in ten hospitalizations in New York City. Alcohol use was related to 40 percent of all traffic fatalities. One in Five New Yorkers reports being harmed by someone else’s drinking. The lifetime rate of suicide attempts among frequent alcohol users was 7 percent, well above the general adult population rate of 1 percent. These numbers are certainly impressive and scary, and EMS is likely involved in most of the severe alcohol related injuries and fatalities.

Worldwide, alcohol killed 3.3 million people in 2012. A study found that a quarter of all Russian men die before they reach their mid-fifties, largely from drinking to excess. Some men in that study reported drinking three or more bottles of vodka a week.
But if that is not enough to get your attention, let’s talk about children. One in four (27%) New York City adolescents (aged 12-20) consumed alcohol in the past 30 days. Sixteen percent consumed more than five drinks (binged) on at least one occasion in the past 30 days. People who begin drinking before age 21 increase their risk of developing alcohol use disorders. Each year, alcohol-related injuries (homicide, suicide, and unintentional injury) cause 5,000 deaths among people under age 21 in the United States.

In 2011, there were nearly 7,000 alcohol-related emergency department visits among New Yorkers under age 21. Seventy percent of attempted suicides by college students involved frequent alcohol use.

_Some may consider this an epidemic worse than any we have faced before._

**Acute Intoxication**

Signs and symptoms of acute ethanol intoxication vary with severity and can include slurred speech, incoordination, unsteady gait, memory impairment, disinhibited behavior, nystagmus (rapid, involuntary movement of the eyeball), hypotension, tachycardia, stupor, or coma.

I think all of you would say that you readily recognize the intoxicated patient after caring for hundreds, maybe thousands of them. It might surprise you that sometimes we get it wrong.

Mr. B was a 43 year-old man who was sitting on the sidewalk and observed vomiting. A concerned bystander called 911 and the ambulance responded. The EMTs assisted Mr. B into the ambulance where they performed a full patient assessment. He appeared disheveled with dirty and tattered clothing and his breath smelled of alcohol (AOB). He had an unsteady gait and slurred speech, but attempted to answer questions before he would fall back to sleep. Vital signs were stable and examination did not reveal any apparent trauma. The EMTs had a presumptive diagnosis of acute alcohol intoxication. He was transported without incident to the Emergency Department.

The doctor did an assessment which had similar findings to the exam performed by the EMTs. Lab tests were sent. Typically, intoxicated patients are observed as their bodies metabolize the alcohol, and are discharged once the signs of acute intoxication (e.g., slurred speech, unsteady gait) have resolved. However, in the case of Mr. B, this did not happen. Eight hours later when the doctor reassessed Mr. B, he was found to be unimproved. This time, the doctor became much more concerned, and quickly checked the labs that showed an ethanol level of 30 mg/dL at the time of arrival, which was too low to have caused the signs of intoxication when the patient was initially assessed. A stat head CT was performed, and Mr. B was found to have a subdural hematoma that required neurosurgical intervention. Unfortunately, the delay in diagnosis may have contributed to the Mr. B’s permanent neurological disability.
A study showed that at least 20% of adolescents and adults who were hospitalized with traumatic brain injury were intoxicated at the time of their injury. It is not surprising that there is a significant link between being intoxicated and incurring a serious injury. Whether because of diminished motor control, blurred vision, poor decision making or greater vulnerability to being victimized, a number of persons incur a traumatic brain injury while they are intoxicated. *Since these patients are at high risk, maybe the ED doctor should order a head CT on all patients thought to have alcohol intoxication to avoid missing any intracranial pathology?*

Unfortunately, exposure to ionizing radiation from an x-ray or CT can increase the patient’s risk of developing cancer. While having a few radiologic studies might have a negligible risk, many of these patients are frequent utilizers of the Emergency Department, which would lead to multiple repeat studies resulting in a high radiation exposure. A study from Bellevue Hospital looked at a high risk group of frequent utilizers with severe alcohol use disorders, and found the median exposure to ionizing radiation to be approximately 100 times the median value found in the general population which created a large increase in the lifetime attributable risk of developing cancer (*The Journal of Emergency Medicine*, Vol. 46, No. 4, pp. 582-587, 2014).

*Figure (A) CT showing middle cerebral infarction on the right, a massive calcified chronic subdural hematoma on the left producing a mass effect with falcine herniation, and signs of cerebral atrophy. (B) Anteroposterior and (C) lateral view of the skull X-ray showing a calcified mass in the left hemisphere.*

So where does that leave us? We don’t want to miss an intracranial bleed or injury, but also don’t want to cause increased negative effects from using too many radiological studies. Here is the point. Providers must use their physical diagnosis skills to stratify patients’ risk of intracranial injury to determine who needs and who does not need radiologic imaging.

**Fully assess your patients** who appear to have alcohol intoxication, and don’t be complacent that “he’s just drunk”. A thorough physical examination is warranted to rule out illness or injury masked by alcohol ingestion. Engage the patient as best possible to assess their mental status. “Sir, please try to answer just a few questions for me.” Encourage them to follow some simple commands so that you can see that their motor and neuro function is intact. Examine the scalp for any hematoma, abrasion, cranial step-off (skeletal *deformity* in which 2 adjacent bones which should be aligned with each other are displaced and are at different levels – resembling a step of a staircase), or other signs of trauma. Assess the pupils. Look in the ears, nose, and mouth for signs of trauma. Perform a complete secondary assessment. And certainly make the Emergency Department nurse or doctor aware of any abnormalities that might indicate a greater concern so that those patients can get potentially lifesaving imaging sooner.
Alcohol as a Risk Factor for Other Diseases

Acute intoxication is only the tip of the iceberg. Chronic alcohol use can be a significant contributing factor for the development of more than 200 diseases. Let’s review a few…

Cirrhosis of the liver is caused by chronic damage to liver cells and eventual necrosis (i.e., cell death). This results in complications such as ascites, splenomegaly, and bleeding esophageal and gastric varices. In addition, cirrhosis may lead to hepatic encephalopathy caused by the accumulation of toxic metabolic waste products that normally would be detoxified by a healthy liver.

Pancreatitis is an inflammation of the pancreas that usually causes pain in the upper abdomen radiating to the mid-back. Effects include malabsorption, electrolyte imbalances, pancreatic abscess, and sepsis.

Gastritis results from the toxic effects of ethanol on the gastric mucosa which leads to areas of erosion. In chronic gastritis, blood may ooze continually from the mucosal lining, and ulcers may develop.

Wernicke encephalopathy is an acute neurologic disorder manifested by gait ataxia, nystagmus, disturbances of speech, signs of neuropathy (paresthesias, impaired reflexes), and stupor. This results from a reduction in intestinal absorption and metabolism of thiamine caused by alcohol. Treatment is with the intravenous administration of thiamine.

Korsakoff syndrome is also caused by a deficiency of thiamine. It is manifested by decreased short term memory, amnesia, confabulation (invention of stories to make up for gaps in memory) and dementia. One writer described how the patient could recite flawlessly the works of Wordsworth, but had no recollection of their meeting one minute after he stepped out of the room. Patients with Korsakoff syndrome rarely recover.
Fetal alcohol syndrome is a group of signs and symptoms that result from a woman's use of alcohol during her pregnancy. Among their symptoms, children with FAS may grow less quickly than other children, have facial abnormalities and have problems with their central nervous systems, including mental retardation and behavioral problems. Some of the atypical facial features are displayed below.

**Alcohol Use Disorder (AUD)**

Unhealthy alcohol use ranges from use that puts patients at risk of health consequences to use causing multiple medical and/or behavioral problems allowing for a diagnosis of Alcohol Use Disorder (AUD). AUD is characterized by a problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by multiple psychosocial, behavioral, or physiologic features. Alcohol use disorder rates are elevated among adults with significant disability, other substance use disorders, or a mood disorder.

The *Diagnostic and Statistical Manual of Mental Disorders (DSM)* is published by the American Psychiatric Association and standardizes the criteria for the classification of mental disorders, which includes alcohol related disorders. The 4th edition (DSM-IV) of this manual identified two distinct alcohol related disorders, ‘Alcohol Abuse Disorder’ and ‘Alcohol Dependence Disorder’, with specific criteria for each. The 5th edition (DSM-V) was published in May 2013, and integrates the two DSM-IV disorders into a single disorder called ‘Alcohol Use Disorder’ (AUD) with mild, moderate, and severe sub-classifications. The chart on the following page demonstrates both criteria and the integration into the single AUD diagnosis.
<table>
<thead>
<tr>
<th>DSM-IV</th>
<th>DSM-5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In the past year, have you:</strong></td>
<td><strong>In the past year, have you:</strong></td>
</tr>
<tr>
<td>Found that drinking—or being sick from drinking—often interfered with your home or family? Or caused job troubles? Or school problems?</td>
<td>1. Had times when you ended up drinking more, or longer, than you intended?</td>
</tr>
<tr>
<td>More than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?</td>
<td>2. More than once wanted to cut down or stop drinking, or tried to, but couldn't?</td>
</tr>
<tr>
<td>More than once gotten arrested, been held at a police station, or had other legal problems because of your drinking?</td>
<td>3. Spent a lot of time drinking? Or being sick or getting over other aftereffects?</td>
</tr>
<tr>
<td><strong>&quot;This is not included in DSM-5&quot;</strong></td>
<td><strong>&quot;This is new to DSM-5&quot;</strong></td>
</tr>
<tr>
<td>Continued to drink even though it was causing trouble with your family or friends?</td>
<td>4. Wanted a drink so badly you couldn't think of anything else?</td>
</tr>
<tr>
<td>Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?</td>
<td>5. Found that drinking—or being sick from drinking—often interfered with taking care of your home or family? Or caused job troubles? Or school problems?</td>
</tr>
<tr>
<td>Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?</td>
<td>6. Continued to drink even though it was causing trouble with your family or friends?</td>
</tr>
<tr>
<td>Had times when you ended up drinking more, or longer, than you intended?</td>
<td>7. Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?</td>
</tr>
<tr>
<td>More than once wanted to cut down or stop drinking, or tried to, but couldn't?</td>
<td>8. More than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?</td>
</tr>
<tr>
<td>Spent a lot of time drinking? Or being sick or getting over other aftereffects?</td>
<td>9. Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?</td>
</tr>
<tr>
<td>Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?</td>
<td>10. Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?</td>
</tr>
<tr>
<td>Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?</td>
<td>11. Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?</td>
</tr>
</tbody>
</table>

The presence of at least 2 of these symptoms indicates an **Alcohol Use Disorder (AUD)**.

The severity of the AUD is defined as:

- **Mild:** The presence of 2 to 3 symptoms
- **Moderate:** The presence of 4 to 5 symptoms
- **Severe:** The presence of 6 or more symptoms
**Alcohol Withdrawal**

Signs and symptoms of withdrawal, seen in patients who abruptly stop or reduce alcohol intake, range from tremulousness to hallucinations, seizures, and death. Symptoms generally occur between 4 and 72 hours after the last drink or after a reduction in drinking amounts, peak at about 48 hours, and may last up to 5 days. Minor reactions include facial flushing, diaphoresis, nausea and vomiting. **Delirium tremens** is the most serious form of alcohol withdrawal and is characterized by psychomotor, speech, and autonomic hyperactivity, profound confusion, disorientation, delusions, hallucinations, tremor, agitation, and insomnia. An episode may last up to three days and can recur for up to 1 month. Delirium tremens is a true medical emergency and patients have a mortality rate of 15 percent.

The EMS treatment of alcohol withdrawal is mainly supportive care with monitoring of the patient’s airway, ventilatory and circulatory status, and level of consciousness. ALS treatment should include intravenous hydration, ECG monitoring and treatment of dysrhythmias, and benzodiazepine administration for generalized seizure activity.

![Image of Alcohol Withdrawal Symptoms Timeline](image)

**CIWA Score**

The Clinical Institute Withdrawal Assessment for Alcohol (CIWA) score is a ten item scale used in the assessment and management of alcohol withdrawal. Each item on the scale is scored independently, and the summation of the scores yields an aggregate value that correlates to the severity of alcohol withdrawal. The ten items evaluated on the scale are common symptoms and signs of alcohol withdrawal, and are shown on the following page.
Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar)

<table>
<thead>
<tr>
<th>Patient:</th>
<th>Date:</th>
<th>Time:</th>
<th>(24 hour clock, midnight = 00:00)</th>
</tr>
</thead>
</table>

**Pulse or heart rate, taken for one minute:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Mild nausea with no vomiting</td>
</tr>
<tr>
<td>2</td>
<td>Severe nausea with no vomiting</td>
</tr>
<tr>
<td>3</td>
<td>Moderate nausea with no vomiting</td>
</tr>
<tr>
<td>4</td>
<td>Intermittent nausea with dry heaves</td>
</tr>
<tr>
<td>5</td>
<td>Constant nausea, frequent dry heaves and vomiting</td>
</tr>
</tbody>
</table>

**Blood pressure:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Very mild itching, pins and needles sensation, any burning, any numbness, or do you feel things crawling on or under your skin?</td>
</tr>
<tr>
<td>2</td>
<td>Severe itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>3</td>
<td>Very severe itch, pins and needles, burning or numbness</td>
</tr>
</tbody>
</table>

**TACTILE DISTURBANCES** -- Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bags crawling on or under your skin?" Observation.

**NAUSEA AND VOMITING** -- Ask "Do you feel sick to your stomach? Have you vomited?" Observation.

**TREMOR** -- Arms extended and fingers spread apart. Observation.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Very mild itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>2</td>
<td>Severe itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>3</td>
<td>Very severe itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>4</td>
<td>Intermittent nausea with dry heaves</td>
</tr>
<tr>
<td>5</td>
<td>Constant nausea, frequent dry heaves and vomiting</td>
</tr>
</tbody>
</table>

**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.

**PAROXYSMAL SWEATS** -- Observation.

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Very mild itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>2</td>
<td>Severe itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>3</td>
<td>Very severe itch, pins and needles, burning or numbness</td>
</tr>
<tr>
<td>4</td>
<td>Intermittent nausea with dry heaves</td>
</tr>
<tr>
<td>5</td>
<td>Constant nausea, frequent dry heaves and vomiting</td>
</tr>
</tbody>
</table>

**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.

**ANXIETY** -- Ask "Do you feel nervous?" Observation.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
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<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Mild anxiety</td>
</tr>
<tr>
<td>2</td>
<td>Moderate anxiety</td>
</tr>
<tr>
<td>3</td>
<td>Severe anxiety</td>
</tr>
<tr>
<td>4</td>
<td>Very severe anxiety</td>
</tr>
<tr>
<td>5</td>
<td>Equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Very mild</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>Severe</td>
</tr>
<tr>
<td>4</td>
<td>Very severe</td>
</tr>
</tbody>
</table>

**AGITATION** -- Observation.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Somewhat more than normal activity</td>
</tr>
<tr>
<td>2</td>
<td>Normal activity</td>
</tr>
<tr>
<td>3</td>
<td>Moderately fidgety and restless</td>
</tr>
<tr>
<td>4</td>
<td>Severe</td>
</tr>
<tr>
<td>5</td>
<td>Very severe</td>
</tr>
</tbody>
</table>

**ORIENTATION AND CLOUDING OF SENSORIUM** -- Ask "What is the date this? Where are you? Who are you? Who am I?" Observation.

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Cannot do serial addictions or is uncertain about date</td>
</tr>
<tr>
<td>2</td>
<td>Disoriented for date by no more than 2 calendar days</td>
</tr>
<tr>
<td>3</td>
<td>Disoriented for date by more than 2 calendar days</td>
</tr>
<tr>
<td>4</td>
<td>Disoriented for place or person</td>
</tr>
</tbody>
</table>

**Total CIWA-Ar Score**

| Rater's Initials | Maximum Possible Score 67 |

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The CIWA-Ar is not copyrighted and may be reproduced freely. This assessment for monitoring withdrawal symptoms requires approximately 5 minutes to administer. The maximum score is 67 (see instrument). Patients scoring less than 10 do not usually need additional medication for withdrawal.

Treatment recommendations can be based upon the total CIWA score. The maximum score is 67. A score less than 10 is considered mild withdrawal and can typically be managed with supportive care and without medication. A score of 10-15 demonstrates a risk for major complications, and the patient will need medication (usually benzodiazepines) to reduce symptoms and hospitalization for close monitoring. A score greater than 15 indicates severe withdrawal with a risk for serious complications, and the patient should be considered for admission to an intensive care unit.

The Person Behind the Disease

On a closing note, I wanted to discuss an interesting paper entitled “Voices of Homeless Alcoholics Who Frequent Bellevue Hospital: A Qualitative Study” (Annals of Emergency Medicine, Vol. 65, No. 2, pp. 178-186, 2015). The researchers interviewed 20 homeless alcoholics at length to understand their life, goals, history, and views on their emergency medical care usage. I would encourage you to read the full study, but here are a few of their discussion points.

Their stories underscore and put in sharp relief the hopelessness that reinforces their slide. As their capacity to envision a different future diminishes, they increasingly lose motivation for personal recovery. Their difficulty maintaining hygiene practices, the chronic relapsing nature of their alcoholism, and often limited impulse control all contribute to the stigma that attaches itself to them in public and in medical communities. The stigma, in part, comes from a lack of knowledge about this cohort and addiction.

Once families, jobs, and homes were lost, our subjects reported their perceived inability to recover. Consistent with that in previous research, our cohort had difficulty navigating social systems and developed lowered expectations and a lack of trust in them. The perception that these individuals present repeatedly to the ED for food and shelter often leads providers to question the validity or severity of their medical complaints. However, the exceptionally high morbidity and mortality of this population should give us pause.

Allowing these individuals to speak for themselves forces others to remember that an alcoholic is first a human being. Before succumbing to their disease and becoming, as one man said, “nuisances…wast[ing] [our] time,” many described noble aspirations; they married high school sweethearts, were building careers, and wrote poetry. As providers, we often feel powerless in our repeated encounters with these individuals, and our failure to engage them or intervene can leave them feeling dehumanized.

As EMS providers, we also feel powerless to break the cycle of these repeated encounters. This may lead to a personal sense of failure, but only if we fail to understand that we can play a role in the lives of these individuals. Thom Dick, in his book People Care, suggests that we use opportunities like this to learn about life and people, a kind of college on wheels. He suggests, “Ask them to tell you how they ended up where they are. You’ll hear fascinating stories of movie stars, Fortune 500 stockbrokers and CEOs, as well as ordinary working stiffs who suffered singular adverse events that overwhelmed them and took away whatever it was they treasured most in life.” He believes that the best caregivers are people who have long understood what it means to suffer, something you won’t find in a book. It brings you to a whole other level of function as a caring professional, in a caring business.
Conclusion

In summary, alcohol use is associated with risky behaviors that can result in morbidity and mortality. Chronic alcohol use is a risk factor for the development of more than 200 different diseases. Intoxicated patients need to have a thorough physical examination to rule out illness or injury that can be masked by alcohol ingestion. The DSM-5 establishes the criteria for the diagnosis of AUD. Alcohol withdrawal is a life-threatening medical condition. The CIWA score can help assess the severity of alcohol withdrawal. Finally, we must remember that an alcoholic is first a human being, and caring for them is part of what we do.

Written by: Dr. Bradley Kaufman
FDNY First Deputy Medical Director

Lt. Joan Hillgardner
FDNY Office of Medical Affairs

References


CME JOURNAL 2016 QUIZ J01-02 ALCOHOL

All 10 questions for ALS and BLS Providers

1. People who begin drinking before the age of 21
   a. Are at increased risk of developing AUD
   b. Have a 20% chance of committing suicide
   c. Will likely have withdrawal if abruptly stop drinking
   d. Should be reported to police authorities

2. In NYC, alcohol can be a contributing factor in deaths by
   a. Motor vehicle collisions
   b. Homicides and suicides
   c. Domestic violence
   d. All of the above

3. A study showed that at least _____ percent of adolescents and adults who were hospitalized with traumatic brain injury were intoxicated at the time of their injury
   a. 10
   b. 20
   c. 40
   d. 65
4. In patients with apparent alcohol intoxication, EMTs and Paramedics should have a greater suspicion for intracranial injury when patient has
   a. Slurred speech
   b. Unsteady gait
   c. Scalp hematoma
   d. History of diabetes

5. Fetal alcohol syndrome
   a. Result from a woman’s diagnosis of AUD prior to pregnancy
   b. Result from a woman’s use of alcohol during pregnancy
   c. Result from neonatal abstinence syndrome after delivery
   d. Can be prevented with vitamin supplementation

6. The DSM-5 gives criteria for a diagnosis of
   a. Alcohol abuse
   b. Alcohol dependence
   c. Alcohol use disorder
   d. Alcohol withdrawal

7. CIWA categories include the following, except
   a. Tremor
   b. Visual disturbances
   c. Headache
   d. Ataxia

8. A CIWA score greater than 15 indicates
   a. severe withdrawal with a risk for serious complications
   b. mild withdrawal managed with supportive care
   c. high risk of intracranial trauma
   d. eye opening, verbal response, and motor response intact

9. Alcohol use disorder mainly affects
   a. People without health insurance
   b. People of all different socioeconomic classes
   c. Unemployed persons
   d. People who drink less expensive forms of alcohol

10. The following are all symptoms that contribute to a diagnosis of AUD, except
    a. Spend a lot of time drinking
    b. Wanted a drink so badly you couldn’t think of anything else
    c. Continued to drink even though was causing trouble with family
    d. More than once have gotten arrested or had other legal problems because of your drinking
Based on the CME article, place your answers to the quiz on this answer sheet. Respondents with a minimum grade of 80% will receive 1 hour of Online/Journal CME.

Please submit this page only once, by one of the following methods:
- FAX to 718-999-0119 or
- MAIL to FDNY OMA, 9 MetroTech Center 4th flr, Brooklyn, NY 11201

Contact the Journal CME Coordinator at 718-999-2790:
- three months before REMAC expiration for a report of your CME hours.
- for all other inquiries.

Monthly receipts are not issued. You are strongly advised to keep a copy for your records.

Note: if your information is illegible, incorrect or omitted you will not receive CME credit.

check one: □ EMT □ Paramedic □ other

Name

NY State / REMAC # or “n/a” (not applicable)

Work Location

Phone number

Email address

Submit answer sheet by the last day of February 2016

January – February 2016
CME Quiz

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. Questions 1-10 for all providers
**Regional CME** – *Sessions are subject to change. Please confirm through the listed contact.*

See other opportunities at [www.nycemcso.org](http://www.nycemcso.org) under **News & Announcements**

*Note*: A potential source of Call Review is **E.D. Teaching Rounds** (maximum of 18 hours)

See any hospital E.D. Administrator for availability (especially HHC hospitals)

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<tr>
<th>Boro</th>
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<tr>
<td>BK</td>
<td>Kingsbrook</td>
<td>contact to inquire →</td>
<td>ED Conference Room</td>
<td>Aaron Scharf 718-363-6644</td>
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<tr>
<td></td>
<td>Lutheran</td>
<td>contact to inquire → Call Review</td>
<td>Inquire →</td>
<td>Dale Garcia 718-630-7230 <a href="mailto:dgarcia@lmcme.com">dgarcia@lmcme.com</a></td>
</tr>
<tr>
<td>MN</td>
<td>Lenox Hill &amp; Health Plex</td>
<td>contact to inquire → Call Review, Lecture</td>
<td>Inquire →</td>
<td>Brian Lynch 512-589-9128 <a href="http://www.lenoxhillhospitalems.org">Lenox Hill Hospital EMS</a></td>
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<tr>
<td></td>
<td>Mt Sinai Hosp</td>
<td>contact to inquire → Call Review</td>
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<td>Eunice Wright <a href="mailto:eunice.wright@mountsinai.org">eunice.wright@mountsinai.org</a></td>
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<tr>
<td></td>
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<td>contact to inquire →</td>
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<td>Steven M. Samuels 212-746-0596</td>
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<tr>
<td></td>
<td>NYU School of Medicine</td>
<td>contact to inquire → Call Review, Lecture</td>
<td>Inquire →</td>
<td><a href="mailto:danielle.milbauer@nyumc.org">danielle.milbauer@nyumc.org</a> <a href="http://cme.med.nyu.edu/course">http://cme.med.nyu.edu/course</a></td>
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<tr>
<td>QN</td>
<td>Elmhurst Hosp</td>
<td>Call Review, Trauma Rounds</td>
<td>A1-22 Auditorium 3rd Wednesdays, 0830-0930</td>
<td>Anju Galer RN 718-334-5724 <a href="mailto:galera@nychhc.org">galera@nychhc.org</a></td>
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<tr>
<td></td>
<td>Mt Sinai Qns</td>
<td>Call Review, Lecture</td>
<td>25-10 30 Ave, conf room last Tuesdays, 1800-2100</td>
<td>Donna Smith-Jordon 718-267-4390</td>
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<tr>
<td></td>
<td>NYH Queens</td>
<td>contact to inquire →</td>
<td>East bldg, courtyard flr</td>
<td>Mary Ellen Zimmermann RN 718-670-2929</td>
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<td></td>
<td>Queens Hosp</td>
<td>Call Review</td>
<td>Emergency Dept 2nd &amp; 4th Thurs 1615-1815</td>
<td>Maria Jones or Julia Fuzailov 718-883-3070</td>
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<tr>
<td></td>
<td>St John’s University</td>
<td>contact to inquire → Call Review</td>
<td>175-05 Horace Harding Expwy</td>
<td>718-990-8436 <a href="http://www.stjohns.edu/ems/cme">www.stjohns.edu/ems/cme</a></td>
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<tr>
<td></td>
<td>St John’s Episcopal</td>
<td>contact to inquire → Lecture</td>
<td>1st floor Board Room</td>
<td>Michelle Scarlett <a href="mailto:mscarlet@ehs.org">mscarlet@ehs.org</a></td>
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<tr>
<td>SI</td>
<td>RUMC</td>
<td>contact to inquire → Call Review, Lecture</td>
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<td>Tony McKay NRP <a href="mailto:amckay@rumcsi.org">amckay@rumcsi.org</a></td>
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<td>SIUH North &amp; South</td>
<td>contact to inquire → Call Review</td>
<td>Inquire →</td>
<td>Holly Acierno RN <a href="mailto:hacierno@SIUH.edu">hacierno@SIUH.edu</a></td>
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# 2016 NYC REMAC Examination Schedule

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<thead>
<tr>
<th>Month</th>
<th>Registration Deadline</th>
<th>Refresher exams(^1) – no fee for exam</th>
<th>Basic exams(^2) all at 18:00</th>
<th>NYS/DOH Written(^3)</th>
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\(^1\) REMAC Refresher examination is offered for paramedics who meet CME requirements and whose REMAC certifications are either current or expired less than 30 days. To enroll, go to the REGISTER link under “News & Announcements” at [nycremesco.org](http://nycremesco.org) before the registration deadline above. Candidates may attend an exam no more than 6 months prior to expiration. Early testing is strongly encouraged; there is no loss of certification time.

\(^2\) REMAC Basic examination is for initial certification, or inadequate CME, or certifications expired more than 30 days. Seating is limited. Registrations must be postmarked by the deadline above. Exam fee by $100 money order to NYC REMSCO is required.

\(^3\) All Basic candidates must meet new education requirements. Email [Christopher.Swanson@fdny.nyc.gov](mailto:Christopher.Swanson@fdny.nyc.gov) for instructions.

NYS/DOH exam dates are listed for information purposes only. Scheduling is through your paramedic program or contact NYS DOH for more information.