** On May 1, 2014 REMAC Protocol revisions take effect – see below **

From the Editor

** On May 1, 2014 REMAC Protocol revisions take effect **

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

Beginning May 1, 2014, protocols revisions are in effect in the field and on REMAC certification exams (See page 2 for outline of changes)

Always see nycremsco.org for the current approved protocols

** Online Registration for REMAC Refresher Exam **

Go to http://www.planetReg.com/E91194150131422

or www.nycremsco.org & click the REGISTER link under “News & Announcements”

See the last page of this journal for details

** Mandatory REMAC Card Fee **

A $25 fee has been instituted by NYC REMAC for all new or recertifying paramedic credentials. No fee is collected at the exam. After successfully completing a REMAC exam, candidates will receive an email directly from NYC REMSCO requiring a completed application and credentialing fee by money order only. On receipt, a permanent NYC REMAC certification card will be issued.

For inquires on cards call NYC REMSCO at 212-870-2301
Outline of May 2014 NYC REMAC protocol changes

see REMAC Advisories 2014-01 & 2014-02 at nycremsco.org

General Operating Procedures

• Medical Control at the Scene
  o deletes AED note
  o clarifies non-solicited intervention

• Prehospital Sedation
  o increases Etomidate dose
  o adds 0₂ via nasal cannula

• Transport Procedures
  o deletes stroke center distance
  o deletes LBBB to PCI facility
  o adds LVAD as specialty care

• CPR
  o adds medical criteria
  o clarifies CPR for pediatrics

• Pediatric Patients
  o clarifies age of patients

• IO Administration
  o adds shock indication
  o limits attempts
  o adds Lidocaine

• IN Administration
  o adds Glucagon & Fentanyl

• Drug Guidelines
  o adds Ondansetron caution

• Pediatric Protocols
  o adds Broselow tape

BLS Protocols

• 400 – WMD
  o updates table

• 411 – AMS, 413 – Seizures, 415 – Shock
  o removes note on immobilization

• 414 – Poison/Drug Overdose
  o removes obtaining sample
  o updates venomous bite

• 426 – Soft Tissue Injuries
  o adds tourniquet

ALS Protocols

• 503A, 503-B – Cardiac Arrests
  o changes vasopressin to if available

• 507, 554 – Adult & Pediatric Asthma
  o clarifies MCO epinephrine

• 510 – Allergic/Anaphylactic Reaction
  o changes name of protocol

• 515-B – Septic Shock
  o new protocol

Appendices

• Appendix H – Specialty Care
  o updates specialties

• Appendix I – Hospital Listings
  o adds available services

• Appendix U – Septic Shock
  o new appendix
REMAC Exam Study Tips

REMAC candidates have difficulty with:

* Epinephrine use for ped patients
* 12-lead EKG interpretation
* Ventilation rates for ped & neonates

REMAC Written exams are approximately:

* 15% Protocol GOP
* 35% Adult Med. Emerg.
* 10% BLS
* 15% Adult Trauma
* 10% Adult Arrest
* 15% Pediatrics

Certification & CME Information

- Failure to maintain a valid NYS EMT-P card will invalidate your REMAC certification.
- By the day of their refresher exam all candidates must present a letter from their Medical Director verifying fulfillment of CME requirements. Failure to do so will prevent recertification.
- 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)
    - Lectures / Symposiums / Conferences
    - Journal CME

REMAC Refresher Written examinations are held monthly, and may be attended up to 6 months before your expiration date. See the exam calendar at the end of this Journal. To register, by the first day of the month of your exam go to http://www.planetReg.com/E91194150131422 or www.nycremsco.org & click the REGISTER link under “News & Announcements.”

REMAC Basic Written and Scenario examinations are held monthly. Registration is limited to the first 25 applicants with a postmarked deadline of the first day of the month. See the exam calendar at the end of this journal.

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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Friedman, Matt 80313  Schenker, Josef 80296
Giordano, Lorraine 80243  Schneitzer, Leila 80241
Gonzalez, Dario 80256  Silverman, Lewis 80249
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INTRANASAL NALOXONE: A NEW WEAPON IN THE BLS ARSENAL AND

Opioids are very effective medicines that are often prescribed for pain control. Consequently, they also have a high potential for abuse. According to the National Institute of Health, some of the most commonly abused prescription drugs are codeine, morphine, methadone, and fentanyl. Overdoses may occur unintentionally (e.g., a person took extra prescribed pill because she forgot she already had taken one) or purposefully in an attempt to ‘get high’ or to attempt suicide. Since 1990, deaths related to opioid overdoses have more than tripled. 100 people die from drug overdoses every day in the United States. This opiate abuse epidemic has garnered much attention; and the public has demanded a response. For over 20 years, paramedics in New York City have been able to successfully treat and reverse the effect of opioids using naloxone. In the past three years, EMTs from other regions of New York State and other members of the public have received training in the administration of the opiate antidote naloxone. This journal will discuss how opiates work, the physiologic changes associated with opiates, how to assess and manage patients with suspected opiate overdose, and finally, we will discuss considerations when it comes to special populations and concerns when it comes to administering naloxone.

Opiates

Opiates are derived from the opium poppy which was refined in Mesopotamia (Present day Middle East) dating back to 3400 BCE. The Sumerians referred to it as Hul Gil, the “joy plant”. The Greek, Roman, Persian, Indian and Arab empires used it for medicinal purposes and surgical procedures, as well as for recreational use. By the 17th Century, countries such as China identified recreational use of the opium poppy plant to be so dangerous, Opium prohibition was put into effect. On the other side of the world in the Americas, widespread use of unprocessed opium continued through the American Civil War.

Opiates such as morphine are derived from mature poppies that are scored with a knife several times over a couple of days. When theses poppies are scored, they release white, milky latex and that dries into “poppy tears” which when completely dry turn into a sticky brown resin. Once the latex is collected, it is refined, processed and inspected. When all those processes are complete, it is packaged and sent all around the world for medicinal use. The illicit substance heroin is made from the same plant. Heroin is sometimes referred to as “black tar”, “smack”, “H”, “white horse”, “china white” (a very pure form of heroin), junk, and other names. Figure 2 shows the categorization of opioids and other controlled drugs based upon their abuse potential.

Opiates and Opioids: What’s the difference?

The terms opiates and opioids are used interchangeably but actually mean two different things. Opiates refer to a drug made from opium, and opioid is a term used to describe synthetic and organic sources of medications which have the properties of opium. These drugs can be administered by various routes, including ingestion, injection, inhalation, and absorption. Opioids are very effective analgesics, often prescribed for the management of severe, acute or chronic pain. Opioids act by attaching to specific proteins called opioid receptors (µ, κ, σ), which are found in the brain, spinal cord, gastrointestinal tract, and other organs in the body.
Assessing Your Patient

Scene Survey

The riskiest time for the EMS provider is arrival at the scene. The EMS provider must rapidly assess any risks that may be present and must quickly make appropriate decisions and take actions to ensure that neither the patient nor the providers become exposed to increased risk. The scene size up starts with dispatch and premise history. Knowing your response area can help you predict potential complications in the EMS response. The EMS provider should avoid the natural urge to rush into a scene and immediately begin providing patient care. This leads to “tunnel vision” and may lead the provider to overlook safety precautions and the need for additional assistance. The scene size up should include:

- Scene safety issues (violent crowds, unsafe traffic conditions, downed power lines, or hypodermic needles, broken glass, etc.)
- Use of standard precautions (gloves)
- Identifying the potential nature of illness (use clinical clues such as: the presence of needles and syringes, wax paper on the floor, presence of pill bottles)

The provider should always assess for the possible signs of crime scenes and violence such as fighting or loud voices, the use of weapons or knowledge of weapons used, unusual silence, and knowledge of prior violence.

Primary Survey

The primary survey is designed to help the provider to detect and treat all immediate life threats. The primary survey on a patient with suspected opioid overdose will be suffering from respiratory depression, possibly breathing less than 10 times per minute. These patients will require protection of their airway and positive pressure ventilation.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Classification Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-I</td>
<td>Substances have a high potential for abuse, have no currently accepted medical use in treatment in the U.S., and have a lack of accepted safety for use under medical supervision</td>
<td>Ecstasy (MDMA), heroin, LSD, marijuana, methaqualone, peyote</td>
</tr>
<tr>
<td>C-II</td>
<td>Substances have a high potential for abuse, which may lead to severe psychological or physical dependence, and have a currently accepted medical use (with severe restrictions)</td>
<td>Hydromorphone, methadone, meperidine, oxycodeone, fentanyl, morphine, opium, codeine, cocaine, amphetamine, methamphetamine, methylphenidate</td>
</tr>
<tr>
<td>C-III</td>
<td>Have less potential for abuse than substances in C-I or C-II, and abuse may lead to moderate or low physical dependence or high psychological dependence</td>
<td>Hydrocodone/acetaminophen (Vicodin), Tylenol with Codeine, buprenorphine, benzoctamine, phenetidine, ketamine, anabolic steroids (Dmpo–Testosterone)</td>
</tr>
<tr>
<td>C-IV</td>
<td>Have a low potential for abuse relative to substances in C-III</td>
<td>Alprazolam, carisoprodol, clonazepam, clorazepate, diazepam, lorazepam, midazolam, temazepam, triazolam</td>
</tr>
<tr>
<td>C-V</td>
<td>Have a low potential for abuse relative to substances listed in C-IV and consist primarily of preparations containing limited quantities of certain narcotics</td>
<td>Robitussin AC, Phenergan with Codeine, ephedrine</td>
</tr>
</tbody>
</table>

A: Airway - is it open? If it is not open, in a non-trauma case perform a head-tilt chin-lift. Will it stay open? If the airway will not stay open, and the patient does not have a gag reflex, insert an oropharyngeal airway.

B: Breathing - check the rise and fall of the chest to ensure symmetrical breathing. In cases of opioid overdose, these patients are typically hypoventilating and require assistance with a BVM.

C: Circulation - What is the patients overall perfusion status? Is there a carotid pulse/radial pulse? How is the patients skin color, temperature and condition? In cases of opioid overdose, these patients develop hypoxia caused by their slow or absent breathing and cyanosis may be present.
D: Disability - This is a brief, highly abridged assessment of neurologic status. The provider assesses pupils in this step to ensure they are equal, round, and reactive to light. In cases of opioid overdose, the provider should anticipate pinpoint non-reactive pupils.

### Secondary survey

The purpose of the secondary survey is to identify anything that may interfere with the airway, breathing, and circulation that has not been identified in the primary survey. Also, the secondary survey allows the provider to play detective and look for more clinical indicators to support their differential diagnosis and develop and execute a treatment plan. History of present illness should be assessed using the OPQRST mnemonic and obtain a SAMPLE history. Also, it is important to ask for:

- Surgical history
- Social history (do you smoke, drink, take any recreational drugs?)
- Familial history (Unexplained family member death, prevalent disease in family i.e.: heart disease)
- For female patients of child bearing age: last menstrual period (LMP- ask them “what was the first day of your last menstrual period”). This is important in case the patient requires use of x-rays, CT scans or other diagnostic tests/treatments that could be detrimental to a pregnant patient.

During the secondary survey, the provider should also perform a head-to-toe physical examination. If the patient is conscious and alert, the provider can perform a more vectored physical exam. In cases of opioid overdose, these patients require a thorough head-to-toe examination because these patients are often unable to communicate with you. Opiates typically cause miosis (pinpoint pupils), constipation, and the most dangerous effect of them all, central nervous system and respiratory depression. While maintaining situational awareness and looking around, the provider may find indicators of a potential overdose such as:

- Melted spoons with residue inside of them (may contain cotton which removes impurities from Heroin)
- Syringes
- Pill bottles with warning labels on them
- Boxes with medication patches (one of the most common is Duragesic-Fentanyl)
- “track marks” or multiple scars or wounds that look like venipuncture

Sometimes opioids are administered transdermally using medication patches. This route of medication administration poses a unique challenge for pre-hospital providers. While assessing for the potential for an opioid overdose, the provider may not see some of the anticipated indicators such as syringes, needle marks on the skin, or pill bottles. In these instances, a good head to toe physical exam can help locate these medication patches. In cases of an overdose, these patches should be removed with a gloved hand and disposed of properly.

Always consider other possibilities for patient presentation in your differential diagnosis, such as stroke. A bleed in the pons can cause pinpoint pupils and changes in breathing pattern.

### Intranasal Naloxone

Starting July 1st, 2014, FDNY Certified First Responders and Emergency Medical Technicians will be authorized to administer intranasal naloxone. Naloxone is an opioid antagonist, meaning it competitively binds to the opioid receptors, not allowing the drug to continue its effect. Naloxone can be administered safely to adults demonstrating respiratory depression with suspected opioid overdose. An alternative technique in administering some medications is ‘through the nose’ (intranasal or IN). The nasal mucosa is actually an excellent place to absorb drugs and medications. It has a large surface area and a good blood supply. (Snorting
cocaine through the nose has been popular for many decades). When the medication is absorbed it is absorbed directly into the blood stream and begins working almost as quickly as an IV injection. The medication is sprayed into the nose (much like a decongestant) but it has to be delivered at the correct droplet size to work properly (10-50 microns). Since the olfactory mucosa (area that allows smelling to occur) is in direct contact with the brain, medication can absorb directly from the olfactory mucosa into the brain CSF and skip the blood stream/blood brain barrier. When the drug is administered using a mucosal atomizer device (MAD), a syringe plunger is pressed creating a fine mist. After 1-2 minutes following the administration of intranasal naloxone, the patient should have increased respirations. These patients may even wake up and begin to gag on oral airway adjuncts that previously may have been needed to maintain their airways. In some cases, patients may become violent and combative. After naloxone administration, patients may complain of nausea and sometimes vomit.

Special Considerations: Naloxone Administration

Chronic opioid users can have a myriad of problems after the administration of Naloxone. The body responds to frequent opioid use by developing tolerance whereby larger doses of the drug is required to produce the same amount of effect on the body. Therefore, patients sometimes, without proper medical advisement, increase their intake of opioids. Patients will do this to achieve goals like inducing euphoria or management of pain. Patients using large amounts of opioids may require more than one dose of naloxone to successfully reverse the respiratory depression.

Patients chronically using opioids may develop a physical dependence. Administration of naloxone may induce withdrawal symptoms. Some may have mild symptoms while others will have more severe symptoms. The signs and symptoms of opioid withdrawal in an individual who is physically dependent on opioids may include, but are not limited to: body aches, diarrhea, tachycardia, fever, runny nose, sneezing, piloerection (goose bumps on the skin), sweating, yawning, nausea or vomiting, nervousness, restlessness or irritability, shivering or trembling, abdominal cramps, weakness, and increased blood pressure. When treating a patient with opioid withdrawal who is experiencing nausea, ondansetron (which can be administered by ALS providers) has been proven both safe and effective.

Abusers may simultaneously administer an opioid and another drug, often mixed together in the same syringe. Using IV cocaine with heroin or morphine is often referred to as “speedballing” or “powerballing”. The administration of naloxone in these patients will reverse the effects of the opioid, but can result in the patient developing a strong sympathetic nervous system response as now the cocaine is unopposed (e.g., elevated heart rate, elevated blood pressure, myocardial ischemia). So while the provider wants to administer the naloxone if respiratory depression present, this possibility exists and must be monitored.
411: ALTERED MENTAL STATUS

NOTE: Emotionally disturbed patients must be presumed to have an underlying medical or traumatic condition causing an altered mental status.

Assess such patients for an underlying medical or traumatic condition causing an altered mental status and treat as necessary.

1. Assess the situation for potential or actual danger and establish a safe zone, if necessary.

NOTE: All suicidal or violent threats or gestures must be taken seriously. These patients should be in police custody if they pose a danger to themselves and/or others.

2. If an underlying medical or traumatic condition causing an altered mental status is not apparent; the patient is fully conscious, alert, and able to communicate; and an emotional disturbance is suspected, see Protocol #430.

3. Monitor the airway.

4. Administer oxygen.

NOTE: IF OVERDOSE IS SUSPECTED, USE HIGH FLOW OXYGEN.

5. Request Advanced Life Support assistance, if appropriate.

6. If an overdose is strongly suspected, and the patient’s respiratory rate is less than 10/minute, administer intranasal (IN) Naloxone, if available, 2mg/2ml via mucosal atomizer device (MAD). Administer 1mg naloxone in each nostril.

a. Contraindications:
   i. Cardiopulmonary Arrest,
   ii. Active seizure,
   iii. Pediatric patients,
   iv. Therapeutic opiate use through a physician prescription,
   v. Evidence of nasal trauma, nasal obstruction and/or epistaxis.

7. If after 5 minutes, there is no improvement, administer a repeat dose of 2mg/2ml naloxone, via mucosal atomizer device (MAD). Administer 1mg naloxone in each nostril.

8. If the patient is conscious, is able to swallow, and is able to drink without assistance, provide a glucose solution, fruit juice, or non-diet soda by mouth.

   a. Do not give oral solutions to unconscious patients.
   b. Do not give oral solutions to patients with head injuries.


10. Assess and monitor the Glasgow Coma score. (See Appendix E.)
   a. Do not delay transport.

References for this section

2. Barbara Aehlert et al. Mosby JEMS: Paramedic Practice Today Above and Beyond 2010, P1100-1104, 1132-1134
3. New York State Department of Health BEMS Policy Statement 13-01 Intranasal Naloxone (Narcan ©) for Basic Life Support EMS Agencies
4. National Institute of Health- The science of drug abuse and addiction
   http://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs/commonly-abused-prescription-drugs-chart
Technology update: Philips HeartStart FR3 AED

Soon, basic life support ambulances will be getting the new FR3 AED to replace the current FR2 AEDs that are in use. These new FR3 AEDs perform all the same functions as the FR2, as well as some new tasks to help improve overall patient care and outcomes. In 2011, the FDNY introduced an ALS monitor that provided real-time feedback on CPR using visual and auditory feedback. OOHCA, meaning out-of-hospital cardiac arrest survival rates, in NYC are the best they’ve ever been, some of the success is attributed to real time biofeedback. This feature, commonly referred to as Q CPR is one of the new features of the FR3 AED. In this article, we will review all the components of the Philips FR3 AED, its features, and its operation.

FR3: The basics

Ready Light: The ready light is the green light located at the top of the AED. When it is blinking green that means it is ready for use. If the ready light is off and the FR3 is chirping, press the On/Off button to start the FR3. When voice prompts begin, press the button again to display the status screen for information about the status of the FR3 and how to resolve the problem. If the FR3 is emitting triple chirps, press the On/Off button once. If an error message is displayed on the status screen, notify your supervisor.

Power button: The power button turns the device on and off. The provider can also turn on the AED simply by lifting the lid of the AED carrying case.

Pediatric Key-Hole: These AEDs were designed with a pediatric key hole. The physicians at the Office of Medical Affairs (OMA) prefer we do not use them due to the most recent American Heart Association literature. According to the AHA, higher energy settings for defibrillation are associated with first time conversion rates from ventricular fibrillation (VF) to organized rhythms.

Shock Button: The FR3 shock button is located towards the bottom of the AED and will illuminate when the device is charged and waiting to deliver a shock.

Pads connector socket: Once a day, the FR3 will not only perform tests on its internal mechanisms, it will also test the integrity of the AED pads. For this reason, we will always leave a set of FR3 SMART Pads III only plugged into the AED. The FR3 AED pads can be safely used with the current FDNY ALS monitor, the Philips HeartStart MRX.
Color Display: The all color and now larger screen make the device user friendly.

Soft keys: Below the display are three grey soft keys. These buttons will help the provider navigate through the menus to either turn the device off or help prepare the AED to perform data management.

The rear of the AED houses the battery which only be changed if needed by MEU. Behind the AED battery as shown below, is a data card. This card is not to be removed from the device.

The FR3 AED case will carry two sets of AED pads, one attached to the device ready for use, and the other will be in the top flap of the AED case lid. Also in the lid is a shave kit and adhesive pads for the Q CPR meter.

FR3: Use of Q-CPR meter

The Q-CPR meter is a real-time bio-feedback device integrated with the FR3 AED just as it is with the ALS monitor. It uses an accelerometer to detect approximate rate, depth and recoil of compressions using a technology similar to what is found in today’s smart phones. After identifying the patient is in cardiac arrest, the placement and use of this device is essential. The proper landmark for placement is in the middle of the breastbone using the image on the meter as a guide. Make sure to apply the Q-CPR adhesive pad onto the device before placing it on the chest. The Q-CPR meter can indicate the overall quality of compressions and provide guidance and instruction to improve the quality of care provided. On the top right of the screen is a green status light indicating that the device has power. Once the provider start performing compressions, these images will appear.

The guide on the left side of the screen indicates appropriate depth and recoil. The top grey bar indicates recoil and the bottom grey bar indicates depth. While performing proper CPR, both grey bars should light up. If the compressor does not allow for adequate recoil, the grey indicator on top will not light up and after a few compressions without recoil a yellow arrow will appear to correct the compressor. The indicator on the right that looks like a speedometer is calibrated to indicate the rate of CPR being performed. The device is calibrated to 100-120 compressions per minute in accordance with AHA guidelines. If the rate is too slow, the needle will appear to the left of the green range. If the rate is too fast, the needle on the indicator will appear to the right of the green range.

Remember, the Q-CPR meter is not to be used on children under the age of 8 or weighing less than 25 kilograms (55 pounds).
FR3: Operation

Upon identification of a patient in cardiac arrest, one provider will initiate CPR while other provider will open the AED case and apply the pads and prepare the Q-CPR meter. This will minimize hands off time in the resuscitation efforts. Upon application of the pads, the AED will start to analyze the patients’ rhythm so verify if a shock is needed. If the AED indicates a shock is advised, defibrillate, and immediately after defibrillation, apply the Q-CPR meter and continue CPR. The emphasis should be on high quality CPR using the Q-CPR meter and rotating in a fresh rescuer for compressions every two minutes. If there is a no shock indicated message, apply the Q-CPR meter and continue CPR.

Summary

Innovation in equipment allows for more efficient and effective resuscitation efforts. The current and future practice of EMS will be based on evidence based medicine; making changes to protocols, guidelines, policy and procedure through research and science. The use of the Q-CPR meter will now be available to FDNY BLS resources prior to the arrival of the ALS. This data will allow OMA to look at the overall resuscitation effort to improve the quality of care and increase out-of-hospital cardiac arrest survival in New York City.

References for this section

1. *AHA ECC 2010 Guidelines* Part 6: Electrical Therapy pages S706-S708, S710, S712
3. Philips FR3 Training toolkit

Written by: **YONATAN KLEIN, EMT-P / CIC**
FDNY EMS Bureau of Training.
QUESTIONS FOR BLS AND ALS

1. If you see this image appear on the Q-CPR meter, it indicates to the compressor that…
   a. The compression rate is too slow
   b. The compression rate is too fast
   c. There is inadequate chest compression depth
   d. There is inadequate chest recoil

2. If you see this image appear on the Q-CPR meter, it indicates to the compressor that…
   a. The compression rate is too slow
   b. The compression rate is too fast
   c. There is inadequate chest compression depth
   d. There is inadequate chest recoil

3. If you see this image appear on the Q-CPR meter, it indicates to the compressor that…
   a. The compression rate is too slow
   b. The compression rate is too fast
   c. There is inadequate chest compression depth
   d. There is inadequate chest recoil

4. What is the initial dose of intranasal naloxone to be administered to a suspected opioid overdose?
   a. 0.5 mg
   b. 1.0 mg
   c. 1.5 mg
   d. 2.0 mg

5. Snorting heroin or swallowing pain killer pills produce all of these effects except:
   a. Respiratory depression
   b. Respiratory arrest
   c. Pinpoint pupils
   d. Increased respirations
QUESTIONS FOR ALS

6. Which of the following is not an opioid medication?
   a. Morphine
   b. Valium
   c. Vicodin
   d. Percocet

7. The term speedballing is used to describe:
   a. Consumption of energy drinks mixed with opioids
   b. Use of heroin and morphine together
   c. Consumption of opioids quickly
   d. None of the above

8. Which of the following therapies would be most appropriate in the management of patients experiencing withdrawal syndrome?
   1. IV access at a KVO rate
   2. Cardiac monitoring
   3. Administration of ondansetron IV
   4. Administration of Thiamine IV
   5. Administration of Diazepam IV prophylactically
   a. 1 only
   b. 1, 2, 4
   c. 1, 2, 3
   d. 1, 2, 3, 5

9. You and your partner are dispatched to back up a BLS unit for a cardiac arrest. Right before you and your partner walk into the room, the BLS defibrillates using the FR3 AED and they continue CPR. At what point do you and your partner transition from using the FR3 to your cardiac monitor?
   a. Immediately, followed by a rhythm analysis
   b. After performing endotracheal intubation
   c. After the next AED analysis
   d. After establishing vascular access

10. Which of the following patients is not a candidate for the use of a Q-CPR meter?
    a. 42 year-old-male, weighing 220 pounds
    b. 9 year-old-male, weighing 66 pounds
    c. 8 year-old-female, weighing 56 pounds
    d. 7 year-old-female, weighing 50 pounds
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  ________________________

Name

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

Work Location

Phone number

Email address

Submit answer sheet by the last day of July 2014
## Citywide CME

*Sessions are subject to change without notice. Please confirm through the listed contact.*

<table>
<thead>
<tr>
<th>Boro</th>
<th>Facility</th>
<th>Date</th>
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<th>Topic</th>
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<td>ED Conference Room</td>
<td>Dr Hew</td>
<td>Manny Delgado 718-363-6644</td>
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<td>Avram Conference Rooms</td>
<td>Dr Brandler</td>
<td>Aaron Scharf 718-780-1859</td>
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<td>Lutheran</td>
<td>4th Wed</td>
<td>1730-1930</td>
<td>Call Review RSVP →</td>
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<td>Dr Chitnis</td>
<td>Dale Garcia 718-630-7230</td>
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<td><a href="mailto:dgarcia@lmeme.com">dgarcia@lmeme.com</a></td>
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<td>Dr Williams</td>
<td>RSVP: <a href="mailto:ssamuels@nyp.org">ssamuels@nyp.org</a></td>
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<td>Schwartz Lecture Hall 401 E 30 Street</td>
<td>TBA</td>
<td>Jessica Kovac 212-263-3293</td>
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<td>Mt Sinai Qns</td>
<td>last Tues</td>
<td>1800-2100</td>
<td>Lecture or Call Review</td>
<td>25-10 30 Ave, conf room</td>
<td>Dr Dean</td>
<td>Donna Smith-Jordan 718-267-4390</td>
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<td>East bldg, courtyard flr</td>
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<td>Mary Ellen Zimmermann RN</td>
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<td>Judith Brown 718-869-7223</td>
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<td>1400</td>
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<td>MLB conf room</td>
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<td>William Amaniera 718-818-1364</td>
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<td>Regina McGinn Center 475 Seaview Ave</td>
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<td>Andrea Kleboe 718-226-7878</td>
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<td>TBA: call to inquire →</td>
<td>346 Seguine Ave</td>
<td>Dr Barbara</td>
<td><a href="mailto:pbarbara.md@gmail.com">pbarbara.md@gmail.com</a></td>
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## 2014 NYC REMAC Examination Schedule

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<tr>
<th>Month</th>
<th>Registration Deadline</th>
<th>Refresher exams*</th>
<th>Basic exams**</th>
<th>NYS/DOH Written Exam***</th>
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<td>January</td>
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<td>December</td>
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* The REMAC Refresher Written 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 nycremsco.org before the registration deadline above. Candidates may attend an exam no more than 6 months prior to expiration.

** REMAC Basic Written & Scenario 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 is $100 by money order. Email 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.