** New Online Registration for REMAC Refresher Exam – see below **

From the Editor

** New Online Registration for REMAC Refresher Exam **

Go to www.planetReg.com/E31112555131510 (or www.nycremSCO.org & click the REGISTER link under “News & Announcements”).

See the last page of this journal for details.

** August 1, 2011 REMAC Protocol revisions in effect **

Only the August 1, 2011 protocols are in effect in the field and on certification exams. (See page 2 for outline of changes.)

Always see nycremsco.org for the current approved protocols.

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

** Mandatory REMAC Credentialing 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.

Please direct inquires on this process to NYC REMSCO at 212-870-2301
Outline of August 2011 NYC REMAC protocol changes
see REMAC Advisories 2011-02, 2011-03, 2011-04 at nycremsco.org

General Operating Procedures
• CPR: clarifies that REMAC follows AHA except as specified
• Advanced Airway Management: adds section making use of ETI and alternative airways equal except in non-cardiac arrest situations, limiting ETI to 2 total attempts
• Definition of Unstable Dysrhythmias: removes chest pain, SOB, possible MI from definition

CFR Protocols
• 300 WMD, 301 Resp Distress/Failure, 320 Traumatic Arrest, 328 Burn: updated to match BLS protocols
• 304 Non-Traumatic Chest Pain: removes blood pressure assessment and assistance or patient with NTG admin

BLS Protocols
• 403 Non-Traumatic Arrest: mandates AED availability & use; moves transport order to step 8
• 407 Wheezing: removes wheezing from list of assessment criteria; mandates OLMC contact for epinephrine to patients over 33 years-old
• 410 Anaphylaxis: mandates OLMC contact for patients over 33 years-old
• 413 Seizures: removes list of signs/symptoms
• 414 Poisoning or Drug OD: removes OLMC contact, information list, & order for dilution
• 426 Soft Tissue Injuries: adds tourniquet option
• 430 EDP: removes GCS from assessment

ALS Protocols
** “ETI” changed to “Advanced Airway Management”
• 500-A Smoke Inhalation**: changes dopamine admin to Standing Order
• 500-B Cyanide Exposure**: removes note on indications; changes dopamine admin to Standing Order
• 501 Resp Arrest: protocol deleted
• 503 Non-traumatic Arrest: limits switching from AED to ALS monitor only at the end of CPR cycle
• 503-B PEA/Asystole**: removes atropine
• 504-A Suspected MI: moves aspirin to step 1; makes total doses of NTG unlimited under Standing Orders; removes morphine & Medical Control Options
• 504-B Cardiogenic Shock: moves fluid bolus and dopamine to Standing Order
• 505-A, B & C Dysrhythmias: adds note: if defibrillator’s maximum joule setting is less than 360, use equivalent cardioversion energies
• 506 APE: makes total doses of NTG unlimited under Standing Orders
• 507 Asthma & 508 COPD: makes total doses of albuterol unlimited under Standing Orders; mandates mixing of albuterol & ipratropium, limited to 3 doses
• 510 Anaphylaxis: changes methylprednisolone and dexamethasone to Standing Orders
• 515 Non-Cardiogenic Shock & 520 Traumatic Arrest: removes repeat of fluids under Medical Control Options
• 521 Head Injuries**: clarifies indication for advanced airway management & moves it to step 2
• 528 Burns & 529 Pain Management: adds fentanyl to Medical Control Options
• 531 Severe Nausea/Vomiting: new protocol
• 543 Neonate Resuscitation: removes meconium aspiration; moved IV/IO access, epi and fluid bolus admin to Standing Orders; removes Medical Control Options
• 550 Peds Resp Arrest: adds note referring to Peds AMS protocol; changes naloxone to weight-base dosing with titration; removes ET admin of naloxone
• 551 Peds Obstructed Airway: clarifies procedure with cuffed ET tube
• 553 Peds Non-Traumatic Arrest**: increases joule settings
• 559 Peds Traumatic Arrest**

Appendices
• Appendix B Patient Assessment: clarifies transport decision; removes CUPS
• Appendix D AED Guidelines: appendix deleted
• Appendix I Hospital Listing: adds pediatric ages
• Appendix T Use of Tourniquets: appendix added
### REMAC Exam Study Tips

REMAC candidates have difficulty with:

- *Epinephrine use for peds patients*  
- *12-lead EKG interpretation*  
- *ventilation rates for peds & neonates*

REMAC Written exams are approximately:

- 15% Protocol GOP
- 10% BLS
- 10% Adult Trauma
- 10% Adult Arrest
- 15% Pediatrics

---

### Certification & CME Information

- **Of the 36 hours of Physician Directed Call Review CME required for REMAC Refresher recertification, at least 18 hours must be ACR/PCR Review (which may include QA/QI Review). The remaining 18 hours may include ED Teaching Rounds and OLMC Rotation.**

- 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 #2000-03:**
  - 36 hours - Physician Directed Call Review
    - ACR Review, QA/I Session (minimum 18 hours of ACR/QA review)
    - Emergency Department Teaching Rounds, OLMC Rotation
  - 36 hours - Alternative Source CME - **Maximum of 12 hours per venue**
    - Online CME - Clinical rotations
    - Lectures / Symposiums / Conferences - Associated Certifications: BCLS / ACLS / PALS / NALS / PHTLS

---

### 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, call the Registration Hotline @ 718-999-7074 by the last day of the month prior to your exam.

**New 2012:** REMAC Basic Written and Oral examinations are held every January, March, May, July, September & November. Registration is limited to the first 36 applicants. 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 swansoc@fdny.nyc.gov

---

**REMSCO:** [www.NYCREMSCO.org](http://www.NYCREMSCO.org)  
**Online CME:** [www.EMS-CE.com](http://www.EMS-CE.com) [www.MedicEd.com](http://www.MedicEd.com)  
**www.EMCert.com** [www.WebCME.com](http://www.WebCME.com) [www.EMINET.com](http://www.EMINET.com)
FDNY ALS Division Coordinators

Citywide ALS  718-999-1738  Division 4  718-281-3392
Capt. Joseph Pataky  Mike Romps

Division 1  212-964-4518  Division 5  718-979-7175
Joseph Farrell  Joseph D’Agosto

Division 2  718-829-6069  Bureau of Training  718-281-8325
Edwin Martinez  Hector Arroyo

Division 3  718-968-9750  EMS Pharmacy  718-571-7620
Gary Simmonds  Cindy Corcoran

FDNY EMS Medical Directors

Dr. Glenn Asaeda  718-999-2666  Dr. Dario Gonzalez  718-281-8473
Field Response Division 5  Field Response Division 2
OLMC Director, REMAC Coordinator  USAR/FEMA Director, OEM Liaison

Dr. David Ben-Eli  718-999-0404  Dr. Doug Isaacs  718-281-8428
Field Response Division 3  Field Response Division 1
Haz-Tac, PASU & EMS Resident Director  EMS Training & Rescue Medic Director

Dr. John Freese  718-999-2790  Dr. Bradley Kaufman  718-999-1872
Chief Medical Director  Field Response Division 4
Prehospital Research Director  QA, EMD & EMS Fellowship Director

EMS Fellows
Dr. Pamela Lai  718-999-0364  Dr. Michael Redlener  718-999-0351

FDNY OLMC Physicians and ID Numbers

<table>
<thead>
<tr>
<th>Name</th>
<th>ID</th>
<th>Name</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandrou, Nikolaos</td>
<td>80282</td>
<td>Isaacs, Doug</td>
<td>80299</td>
</tr>
<tr>
<td>Asaeda, Glenn</td>
<td>80276</td>
<td>Jacobowitz, Susan</td>
<td>80297</td>
</tr>
<tr>
<td>Barbara, Paul</td>
<td>80306</td>
<td>Jameson, Angus</td>
<td>80309</td>
</tr>
<tr>
<td>Ben-Eli, David</td>
<td>80298</td>
<td>Kaufman, Bradley</td>
<td>80289</td>
</tr>
<tr>
<td>Cox, Lincoln</td>
<td>80305</td>
<td>Munjal, Kevin</td>
<td>80308</td>
</tr>
<tr>
<td>Freese, John</td>
<td>80293</td>
<td>Schenker, Josef</td>
<td>80296</td>
</tr>
<tr>
<td>Giordano, Lorraine</td>
<td>80243</td>
<td>Schnitzer, Leila</td>
<td>80241</td>
</tr>
<tr>
<td>Gonzalez, Dario</td>
<td>80256</td>
<td>Schoenwetter, David</td>
<td>80304</td>
</tr>
<tr>
<td>Hansard, Paul</td>
<td>80226</td>
<td>Silverman, Lewis</td>
<td>80249</td>
</tr>
<tr>
<td>Hegde, Hradaya</td>
<td>80262</td>
<td>Soloff, Lewis</td>
<td>80302</td>
</tr>
<tr>
<td>Hew, Phillip</td>
<td>80267</td>
<td>Van Voorhees, Jessica</td>
<td>80310</td>
</tr>
<tr>
<td>Huie, Frederick</td>
<td>80300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The proper assessment of a patient experiencing a medical or traumatic emergency requires that you to not only obtain a complete history but also perform a complete physical examination and to appropriately document and communicate the findings that result from that exam. In many cases, your exam will provide valuable information that will help to guide the treatment that you provide and even the choice of hospital destination.

And so in this month’s CME article we will begin a two-part review the detailed physical assessment of a patient. (The primary physical examination is presumed to have already been completed and will not be addressed in this article.) But rather than focusing in on the trauma exam or the medical exam as is often done in textbooks, we will combine both and recognize that some patients may not present with a clear medical or traumatic emergency while others may present with a mixture of both, requiring our assessments to consider the findings that may be important for both.

In this month’s article we will focus on the examination of the head and neck, as well as the principles that should be considered for every area of the body when it comes to the trauma exam. And then in next month’s article we will continue with the examination and cover the chest, abdomen, extremities, back, neurological exam, and skin.

So, let’s take it from the top…

**Head**

Examination of the patient’s head begins with a general inspection. For the purpose of a trauma examination, this includes an assessment for each of the components of the DCAP-BTLS mnemonic that is often taught. And though this assessment is important for every part of the trauma examination, we will describe these findings just once in this article.

DCAP-BTLS is a mnemonic designed to remind you of the various soft tissue and musculoskeletal injuries that you should look for during each portion of the focused or detailed physical assessment for trauma: **Deformity**, **Contusions**, **Abrasions**, **Penetrating injuries / Puncture wounds**, **Burns**, **Tenderness**, **Lacerations**, and **Swelling**.

**Deformity** is defined as a “malformation, distortion, or disfigurement” of normal body structure and may be a sign of underlying soft tissue or musculoskeletal injury. And of particular concern is the possibility that the mechanism of injury that resulted in the external finding of deformity was also sufficient to produce injuries to the underlying structure and organs.

**Contusions** are soft tissue injuries in which the skin is not broken and that result in disruption of capillaries and small blood vessels beneath the surface of the skin. The resulting bleeding into the tissue beneath the skin’s surface gives it a black-and-blue or purple discoloration (known as ecchymosis). Over time, as this blood is reabsorbed, the color of the contusion will change, often taking on a brown or yellowish appearance. But you should keep in mind that the “age” of the injury cannot be accurately determined based upon its color.
Abrasions, sometimes referred to in non-medical terms as “scraps,” are superficial injuries in which the skin is broken, typically in a number of small areas grouped together and may result in minor bleeding or hemorrhage. Penetrating injuries or puncture wounds are caused by a foreign object that pierces the skin and enters the body tissue. As a result of this foreign object, which may exit the body or remain in the tissue, there is significant risk of injury to the underlying tissues and organs as well.

Burns are injuries that result from chemical, thermal, electrical, radiation, or mechanical energy that is transferred to the tissue. Burns are classically described as first, second, third, or fourth degree. First-degree burns involve only the superficial layer of the skin (the epidermis) and are characterized their painful state and red appearance. Second-degree burns involve deeper layers of the skin (dermis), are painful, and appear red with clear and/or bloody blisters. Third-degree burns involve destruction of all layers of the skin and, because the nerve endings contained in the skin are destroyed, are painless and appear white or brown and leathery. (Of note, although the area of third-degree burn will be painless, there are almost always areas of surrounding first- and second-burns that will cause the patient pain.) Fourth-degree burns are the most severe, involve damage to the skin as well as the underlying muscle and/or bone, are also painless, and appear black in nature.

Tenderness is pain experienced by the patient upon palpation. Lacerations are a rip, cut, or tear of the skin. Swelling is a transient enlargement of an area of tissue that may be caused by injury to that tissue, a collection of fluid (including blood) within the tissue, or a collection of blood (which is termed a hematoma) beneath the surface of the skin in that area.

Further examination of the head includes an examination of the eyes, ears, nose, and throat.

**Eyes**

Examining the eyes should include inspection of the pupils, the colored part of the eyes (the iris), the superficial tissue overlying the eye (the conjunctiva) and the white surface of the eyes (the sclera).

A patient’s pupils should appear round, should be symmetric, and should react to light by constricting. Misshapen pupils may be a sign of chronic eye disease (for example glaucoma or cataracts) or serious eye injury (penetrating injury of the eye). Although unequal pupils (termed anisocoria) are a normal finding in ~10% of patients.
but should never be more than a 1mm difference between the two eyes), unequal pupils in the setting of head trauma and/or altered mental status suggests an increase in intracranial pressure. Pupils that are constricted suggest the possibility of intracranial hemorrhage, narcotic (opioid) toxicity, or exposure to an organophosphate / nerve agent. Pupils that are dilated may be a sign of shock or other increase in sympathetic nervous system (fight-or-flight) activity, eye trauma, or drugs (e.g., hallucinogens, amphetamines). A pupil that does not react to light may be a sign of an intracranial mass or hemorrhage, death, or the rare glass eye (which can be an embarrassing “miss”).

The iris, or the colored portion of the eye, is an important part of the assessment particularly for a patient who has experienced facial trauma. Blood that collects over the iris and within the “bubble” that overlies it (the anterior chamber) is called a hyphema and can cause long-term complications such as glaucoma and permanent visual impairment.

The conjunctiva is the thin membrane that covers the inner surface of the eyelids and the white portion of the eye (the sclera). Inflammation of this membrane (conjunctivitis) causes it to become red and results from irritation due to trauma, chemical, allergic reactions or infections and may be accompanied by pus. And in some instances either trauma or a sudden increase in pressure (due to hypertension, sneezing, laughing, coughing or vomiting) can cause the blood vessels within this membrane to rupture resulting in a collection of blood between the conjunctiva and the sclera called a subconjunctival hematoma. Different than a hyphema, subconjunctival hemorrhages are essentially small bruises / contusions over the sclera and resolve without complications or pain.

The one sign that may be of most importance when examining the sclera is a yellow discoloration of the normally white portion of the eye. This yellow discoloration, called scleral icterus, is a sign of increased bilirubin levels in the blood and may be one of the first signs of chronic liver disease such as cirrhosis, hepatitis, or other causes of liver dysfunction.

Finally, in examining the tissue around the eyes there is one sign that is important to note in a patient with a recent history of head trauma: Raccoon eyes. This purplish discoloration, or ecchymosis, around the eyes can be a sign of a particular kind of skull fracture known as a basilar skull fracture. Although this is not an immediate finding and often takes hours to develop after a head injury, it can be a significant finding in a patient with recent head trauma and other signs of a more serious injury (headache, vomiting, altered mental status, etc).

Ears

Although the national curriculum for paramedics includes the use of an otoscope for internal examination of the ears, this is currently not part of the standard practice in New York City and will not be addressed here.
However, there are two signs that you should be aware of when examining the ears of a trauma patient: Battle’s sign and CSF otorrhea.

Battle’s sign, named after William Henry Battle – an English surgeon and teacher, is ecchymosis found just behind the ear, specifically overlying the bony point just posterior to the ear (known as the mastoid process). Battle’s sign, like raccoon eyes, is a sign of a basilar skull fracture that develops in the hours to days after the injury and may be a sign of a more serious underlying brain injury. CSF otorrhea (clear or slightly bloody fluid – cerebrospinal fluid - running out of the ears) is rare, but it is also a sign of serious head injury and may put the patient at risk for developing meningitis.

Nose

Blood or other fluid coming from either nostril can be a sign of serious underlying illness or injury. Bleeding from a nostril (known as epistaxis) can be a sign of significant and uncontrolled high blood pressure (hypertension). And in a trauma patient, rhinorrhea (clear or bloody fluid coming from the nose that may include cerebrospinal fluid, or CSF) can be a sign of a significant head injury.

Since epistaxis and rhinorrhea are far more common than otorrhea, this seems to be a good spot to pause for a moment to describe one potentially useful way to tell the difference between blood and bloody fluid containing CSF. Although its accuracy has been called into question, many still suggest that the “halo test” is one method of determining if there is CSF contained within bloody fluid leaking from the nose or ears. To do this test, you would simply dip the corner of a 4”x4” gauze into the fluid and, because CSF is drawn up onto the gauze more quickly than blood, a halo or line of fluid will appear above the blood. That said, any blood fluid coming from the ears or nose after head trauma should be considered a significant finding, regardless of the “halo test” results.

Throat

In examining the throat, you are also examining the mucous membranes, teeth, and voice. Mucous membranes can be an indicator of the hydration state of the patient and may serve as a reliable indicator of anemia. The mucous membranes typically appear pink and moist. Dry or “tacky” / “sticky” mucous membranes should be considered a sign of dehydration (along with poor skin turgor – see next month’s article). And pale mucous membranes may be a sign of anemia including hemorrhagic shock.

In cases of head and facial trauma, the teeth should be examined to ensure that they are intact, do not pose a threat to the airway, and that they are all present (keeping in mind that teeth that have been knocked out or loose may be successfully re-implanted).
As for the patient’s voice, this is not only an important part of the exam when assessing for stroke (see the neurologic exam section in next month’s article), but it can also provide information about airway injury and swelling. A muffled voice is a significant exam finding for a patient who has suffered a neck injury, been strangled, experienced smoke inhalation or inhaled a noxious gas, as this may be a sign of impending airway compromise.

Neck

From the perspective of a medical assessment, jugular venous distension (or JVD) is the one important physical finding. JVD occurs when increased pressure prevents normal blood return to the heart from the head and neck. This may occur as a result of fluid overload, congestive heart failure, pneumothorax or tension pneumothorax, pericardial tamponade, or arrhythmias such as bradycardias or atrial fibrillation.

And although we typically describe patients as having JVD when their neck veins are fully engorged, it is important to remember that this finding can actually be more subtle. JVD is supposed to be assessed with the patient sitting in a 45-degree Fowler’s position, and anything more than 3cm (just slightly more than one inch) of JVD is considered abnormal. That said, a patient who has significant jugular venous distension while in an upright or Fowler’s position will obviously have the same if you lie them back, so repositioning the patient in that case is not needed. However, JVD should not be assessed in the supine position.

Most other findings on examination of the neck pertain to trauma. These include findings such as subcutaneous air, tracheal deviation, and assessing for signs of a potential cervical spine injury.

Air just beneath the skin, or subcutaneous emphysema, in the setting of penetrating or blunt trauma is a sign of significant airway injury, pneumothorax, or pneumomediastinum. Subcutaneous emphysema causes swelling of the tissue and upon palpation is often described as having a “tissue paper” or “Rice Krispies” feeling as the air is felt to move within the tissue.

Tracheal deviation is often listed as a “classic” sign of a tension pneumothorax, and yet the importance of that finding (or its requirement) is currently the subject of debate. When it is present, tracheal deviation is caused by the large amount of pressure on the side of the tension pneumothorax and the shift of the mediastinum toward the opposite side of the chest. As a result, the tracheal deviation will be away from the side of the thorax affected by the tension pneumothorax.

Finally, when examining a patient’s neck it is important to assess for signs of a potentially significant cervical spine injury so that immobilization may be appropriately but selectively applied. Now notice the important word in that last sentence – “significant.” The criteria for selective cervical spine immobilization are not meant to identify...
every patient with a neck injury, but they are meant to limit the use of immobilization to those patients for whom there is a reasonable concern for a significant injury to the cervical spine – one that has the potential to compromise the spinal cord.

In assessing for the need for spinal immobilization, if any of the following criteria are met in a patient who has suffered head or neck trauma, cervical spine immobilization should be applied:

- Altered mental status, including alcohol or drug intoxication
- Glasgow coma scale score < 15
- Complaint of neck or spine pain
- Spine tenderness on midline palpation
- Inability to assess for neck / spine tenderness, including an unreliable exam because of an injury that distracts the patient from your history-taking or exam of their neck
- Prior initiation of spinal immobilization materials (i.e. collar, board) by others (e.g., CFR)
- Weakness, paralysis, tingling or numbness in any extremity(s) since the time of the injury
- Deformity of the spine following the injury
- High-risk mechanisms

And so if any of these criteria are present, or if despite the lack of any of these criteria you still have significant concern for a potential cervical spine injury, the patient should be immobilized. It is important to remember that spinal immobilization is not a harmless procedure, and so its application should be selective and reserved for those patients who meet these criteria.

**Conclusion**

A proper physical examination does not take a lot of time, but attention to the details of that exam are important to guide your treatment, the choice of hospital destination or the identification of cases of high index of suspicion in the event of a refusal of medical aid (RMA), and the communication of your physical findings to the receiving facility in both written and verbal fashion. In this month’s article, we reviewed the first portion of that exam, and in next month’s article we will complete the process by reviewing the assessment of the chest, abdomen, extremities, back, skin and neurologic system.

Written by: John Freese, MD
Chief Medical Director, FDNY
1. DCAP-BTLS is a mnemonic used to help providers remember the various findings for a trauma exam that include all of the following except:
   a. abrasions
   b. concussions
   c. burns
   d. lacerations
   e. swelling

2. Which of the following most accurately describes an abrasion?
   a. superficial injuries in which the skin is broken in a number of small areas with minor bleeding or hemorrhage
   b. soft tissue injuries in which the skin is not broken with resulting hemorrhage beneath the surface of the skin
   c. “malformation, distortion, or disfigurement” of normal body structure
   d. rip, cut, or tear of the skin
   e. wounds caused by a foreign object that pierces the skin and enters the body tissue

3. Which of the following most accurately describes a contusion?
   a. superficial injuries in which the skin is broken in a number of small areas with minor bleeding or hemorrhage
   b. soft tissue injuries in which the skin is not broken with resulting hemorrhage beneath the surface of the skin
   c. “malformation, distortion, or disfigurement” of normal body structure
   d. rip, cut, or tear of the skin
   e. wounds caused by a foreign object that pierces the skin and enters the body tissue

4. Which of the following most accurately describes a laceration?
   a. superficial injuries in which the skin is broken in a number of small areas with minor bleeding or hemorrhage
   b. soft tissue injuries in which the skin is not broken with resulting hemorrhage beneath the surface of the skin
   c. “malformation, distortion, or disfigurement” of normal body structure
   d. rip, cut, or tear of the skin
   e. wounds caused by a foreign object that pierces the skin and enters the body tissue

5. Which of the following most accurately describes deformity?
   a. superficial injuries in which the skin is broken in a number of small areas with minor bleeding or hemorrhage
   b. soft tissue injuries in which the skin is not broken with resulting hemorrhage beneath the surface of the skin
   c. “malformation, distortion, or disfigurement” of normal body structure
   d. rip, cut, or tear of the skin
   e. wounds caused by a foreign object that pierces the skin and enters the body tissue
6. Constricted pupils may be a sign of:
   a. Opioid toxicity
   b. Hallucinogen toxicity
   c. PCP toxicity
   d. Oxygen toxicity
   e. Alcohol toxicity

7. Burns that red, painful, and involve blistering of the skin are properly characterized as:
   a. First-degree
   b. Second-degree
   c. Third-degree
   d. Fourth-degree
   e. Fifth-degree

8. Burns that are red, painful, and involve no blistering of the skin are properly characterized as:
   a. First-degree
   b. Second-degree
   c. Third-degree
   d. Fourth-degree
   e. Fifth-degree

9. Which of the following physical exam findings requires the application of cervical spine immobilization?
   a. A history of drug abuse
   b. GCS = 15
   c. Absence of midline neck tenderness
   d. Inability to assess for neck tenderness
   e. Absence of other injuries

10. Which of the following is not a criterion that requires selective cervical spine immobilization?
    a. An injury that distracts the patient from your history-taking or exam
    b. History of alcohol abuse
    c. Midline neck or spine tenderness
    d. Numbness in an arm or leg since the time of the injury
    e. Altered mental status
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 this month
## Citywide CME - April 2012

*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>
<th>Time</th>
<th>Topic</th>
<th>Location</th>
<th>Host</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK</td>
<td>Kingsbrook</td>
<td>TBA</td>
<td>TBA</td>
<td>TBA: call to inquire →</td>
<td>ED Conference Room</td>
<td>Dr Hew</td>
<td>Manny Delgado 718-363-6644</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LICH</td>
<td>TBA</td>
<td>TBA</td>
<td>TBA: call to inquire →</td>
<td>Avram Conference Rooms</td>
<td>Dr Brandler</td>
<td>Aaron Scharf 718-780-1859</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lutheran</td>
<td>4&lt;sup&gt;th&lt;/sup&gt; Wed</td>
<td>1730-1930</td>
<td>Call Review RSVP →</td>
<td>Call for location →</td>
<td>Dr Chitnis</td>
<td>Dale Garcia 718-630-7230 <a href="mailto:dgarcia@lmcmc.com">dgarcia@lmcmc.com</a></td>
</tr>
<tr>
<td>MN</td>
<td>NY Presbyterian</td>
<td>TBA</td>
<td>TBA</td>
<td>TBA: call to inquire →</td>
<td>Weill Cornell Campus TBA</td>
<td>Dr Williams</td>
<td>RSVP: <a href="mailto:ssamuels@nyp.org">ssamuels@nyp.org</a> Ana Doulis 212-746-0885 x2</td>
</tr>
<tr>
<td></td>
<td>NYU School of Medicine</td>
<td>TBA</td>
<td>TBA</td>
<td>TBA: call to inquire →</td>
<td>Schwartz Lecture Hall</td>
<td>TBA</td>
<td>Jessica Kovac 212-263-3293</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>401 E 30 Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QN</td>
<td>FDNY-BOT</td>
<td>Cancelled until further notice</td>
<td></td>
<td></td>
<td></td>
<td>TBA</td>
<td>Anju Galer RN 718-334-5724 <a href="mailto:galera@nychhc.org">galera@nychhc.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elmhurst Hosp</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Wed</td>
<td>1300</td>
<td>Call Review: Trauma Rounds</td>
<td>A1-22 Auditorium</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NYH Queens</td>
<td>Thursdays</td>
<td>0800-0900</td>
<td>Call Review/Trauma Rounds</td>
<td>East bldg, courtyard flr</td>
<td>Dr Sample</td>
<td>Mary Ellen Zimmermann RN 718-670-2929</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parkway Hosp</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Wed</td>
<td>1830-2130</td>
<td>Call Review</td>
<td>Board Room, 1st flr</td>
<td>TBA</td>
<td><a href="mailto:pambruzzino@capitolhealthmgmt.com">pambruzzino@capitolhealthmgmt.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Queens Hosp</td>
<td>&lt;sup&gt;2&lt;sup&gt;nd&lt;/sup&gt; Thurs&lt;/sup&gt;</td>
<td>1615-1815</td>
<td>Call Review</td>
<td>Emergency Dept</td>
<td>718-883-3070</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;sup&gt;4&lt;sup&gt;th&lt;/sup&gt; Thurs&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>St John’s Episcopal</td>
<td>6/19</td>
<td>1830-2030</td>
<td>Lecture: Infectious Disease</td>
<td>Board Room</td>
<td>TBA</td>
<td>Judith Brown 718-869-7223 <a href="mailto:jbrowne@ehs.org">jbrowne@ehs.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8/21</td>
<td></td>
<td>Lecture: Pharmacology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>RUMC</td>
<td>TBA</td>
<td>1400</td>
<td>TBA: call to inquire →</td>
<td>MLB conf room</td>
<td>TBA</td>
<td>William Amaniera 718-818-1364</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SIUH North</td>
<td>TBA</td>
<td>TBA</td>
<td>TBA: call to inquire →</td>
<td>Regina McGinn Center</td>
<td>TBA</td>
<td>Andrea Kleboe 718-226-7878</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>475 Seaview Ave</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SIUH South</td>
<td>TBA</td>
<td>TBA</td>
<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> 917-903-7475</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Month</td>
<td>Registration Deadline</td>
<td>Written exams</td>
<td>Orals exams</td>
<td>NYS/DOH Written Exam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refresher: Written only, CME letter required</td>
<td>Requires one Written exam prior to the Orals below</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic: any one Written before an Orals exam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>12/31/11</td>
<td>1/18 @18:00 1/25 @07:00 1/25 @18:00 ---</td>
<td>Thursday 1/26 @09:00</td>
<td>1/19/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>1/31/12</td>
<td>2/22 @07:00 2/22 @18:00 --- ---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>2/29/12</td>
<td>3/14 @18:00 3/21 @07:00 3/21 @18:00 ---</td>
<td>Tuesday 3/20 @09:00</td>
<td>3/15/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>3/31/12</td>
<td>4/24 @10:00 4/25 @07:00 4/25 @18:00 4/29 @18:00 ---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>4/30/12</td>
<td>5/10 @18:00 5/16 @07:00 5/16 @18:00 5/20 @18:00</td>
<td>Wednesday 5/30 @09:00</td>
<td>5/17/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>5/31/12</td>
<td>6/14 @18:00 6/17 @18:00 6/20 @07:00 6/20 @18:00 ---</td>
<td></td>
<td>6/21/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>6/30/12</td>
<td>7/19 @18:00 7/22 @18:00 7/25 @07:00 7/25 @18:00</td>
<td>Tuesday 7/31 @09:00</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>7/31/12</td>
<td>8/17 @10:00 8/19 @10:00 8/22 @07:00 8/22 @18:00 ---</td>
<td></td>
<td>8/16/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>8/31/12</td>
<td>9/12 @18:00 9/16 @09:00 9/19 @07:00 9/19 @18:00</td>
<td>Thursday 9/27 @09:00</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>9/30/12</td>
<td>10/17 @18:00 10/21 @09:00 10/24 @07:00 10/24 @18:00 ---</td>
<td></td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>10/31/12</td>
<td>11/11 @18:00 11/14 @07:00 11/14 @18:00 11/18 @09:00</td>
<td>Wednesday 11/28 @09:00</td>
<td>11/15/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>11/30/12</td>
<td>12/16 @18:00 12/19 @07:00 12/19 @18:00 12/26 @18:00 ---</td>
<td></td>
<td>12/20/12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

The REMAC Basic Written & Orals examination is for initial certification, or for inadequate CME, or for certifications expired more than 30 days. Seating is limited and registrations must be postmarked by the deadline above. A $100 exam fee by money order is required. Email swansoc@fdny.nyc.gov for instructions.

April 2012 – Journal CME Newsletter