

# Continuing Medical Education - News & Information

November 2011 - Volume 17, Issue 11

**Multi-Agency Edition** 

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(bold = new content)

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## From the Editor

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

Although normally scheduled for April 1, this year's NYC REMAC protocol update were changed to August 1 implementation in the field and on certification exams.

Only the August 1, 2011 protocols are in effect.

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. On successfully completing a REMAC exam, candidates will receive a temporary letter verifying certification. They will soon after be mailed a memo directly from NYC REMSCO requiring a completed application, proof of NY State paramedic certification, 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**

- <u>CPR</u>: clarifies that REMAC follows AHA except as specified
- Advanced Airway Management: adds section making use of ETI and alternative airways equal except in noncardiac arrest situations, limiting ETI to 2 total attempts
- <u>Definition of Unstable Dysrhythmias</u>: 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
- <u>304 Non-Traumatic Chest Pain</u>: 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
- <u>407 Wheezing</u>: removes wheezing from list of assessment criteria; mandates OLMC contact for epinephrine to patients over 33 years-old
- <u>410 Anaphylaxis</u>: mandates OLMC contact for patients over 33 years-old
- 413 Seizures: removes list of signs/symptoms
- <u>414 Poisoning or Drug OD</u>: 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"
- <u>500-A Smoke Inhalation</u>\*\*: changes dopamine admin to Standing Order
- <u>500-B Cyanide Exposure</u>\*\*: removes note on indications; changes dopamine admin to Standing Order
- 501 Resp Arrest: protocol deleted
- <u>503 Non-traumatic Arrest</u>: limits switching from AED to ALS monitor only at the end of CPR cycle
- <u>503-B PEA/Asystole</u>\*\*: removes atropine

- 504-A Suspected MI: moves aspirin to step1; 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
- <u>506 APE</u>: 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
- <u>510 Anaphylaxis</u>: changes methylprednisolone and dexamethasone to Standing Orders
- 515 Non-Cardiogenic Shock & 520 Traumatic Arrest: removes repeat of fluids under Medical Control Options
- <u>521 Head Injuries</u>\*\*: clarifies indication for advanced airway management & moves it to step 2
- <u>528 Burns & 529 Pain Management</u>: adds fentanyl to Medical Control Options
- 531 Severe Nausea/Vomiting: new protocol
- <u>543 Neonate Resus</u>: removes meconium aspiration; moved IV/IO access, epi and fluid bolus admin to Standing Orders; removes Medical Control Options
- <u>550 Peds Resp Arrest</u>: adds note referring to Peds AMS protocol; changes naloxone to weight-base dosing with titration; removes ET admin of naloxone
- <u>551 Peds Obstructed Airway</u>: clarifies procedure with cuffed ET tube
- <u>553 Peds Non-Traumatic Arrest</u>\*\*: increases joule settings
- 559 Peds Traumatic Arrest\*\*

#### **Appendices**

- <u>Appendix B Patient Assessment</u>: 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: REMAC Written exams are approximately: \* Epinephrine use for peds patients 15% Protocol GOP 40% Adult Med. Emerg. \* 12-lead EKG interpretation 10% Adult Trauma 10% BLS \* ventilation rates for peds & neonates 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:

- Journal CME

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 Online CME: www.EMS-CE.com www.MedicEd.com NYS/DOH: www.Health.State.NY.US

www.EMCert.com www.WebCME.com

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	. 10 02/ 000/	Hector Arroyo	.10 201 0020	
Division 3	718-968-9750	EMS Pharmacy	718-571-7620	
Gary Simmonds	710 700 7100	Cindy Corcoran	710 071 7020	
	FDNY EMS Me	dical Directors		
Dr. Glenn Asaeda	718-999-2666	Dr. Dario Gonzalez	718-281-8473	
Field Response Division 5		Field Response Division 2		
OLMC Director, REMAC Coord	linator	USAR/FEMA Director, OEM L	iaison	
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	t Director	EMS Training & Rescue Medic Director		
Dr. John Freese	718-999-2790	Dr. Bradley Kaufman	718-999-1872	
Chief Medical Director	/10-222-2120		/10-777-10/2	
		Field Response Division 4		
Prehospital Research Director		QA, EMD & EMS Fellowship D	orector	
EMS Fellows				
Dr. Pamela Lai	718-999-0364	Dr. Michael Redlener	718-999-0351	

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## FDNY OLMC Physicians and ID Numbers

Alexandrou, Nikolaos	80282	Isaacs, Doug	80299
Asaeda, Glenn	80276	Jacobowitz, Susan	80297
Barbara, Paul	80306	Jameson, Angus	80309
Ben-Eli, David	80298	Kaufman, Bradley	80289
Cox, Lincoln	80305	Munjal, Kevin	80308
Freese, John	80293	Schenker, Josef	80296
Giordano, Lorraine	80243	Schneitzer, Leila	80241
Gonzalez, Dario	80256	Schoenwetter, David	80304
Hansard, Paul	80226	Silverman, Lewis	80249
Hegde, Hradaya	80262	Soloff, Lewis	80302
Hew, Phillip	80267	Van Voorhees, Jessica	80310
Huie, Frederick	80300	,	

#### November 2011 Journal CME Article

## TRIAGE OVERVIEW: Modified S.T.A.R.T.

t's Monday and a massive snow storm that began after 0900 has blanketed the city making travel treacherous. There are more than 10 inches of snow on the ground, blinding snow drifts and more snow accumulating every hour. It's now 1400 and there are reports of multiple MVAs throughout the city (in all boroughs). EMS call volume has exceeded 3,500 at 1400 hours. Emergency Medical Dispatch (EMD) is holding all calls below category 3. You and your partner have just been directed to return to the Station for chain placement on your ambulance. MCI 10- 33 for a confirmed building collapse at a nearby charter school. There are unconfirmed reports of trapped children and potential for a fire (from ruptured gas lines).

When you arrive you are met with a chaotic scene of more than 100 adults and children with a wide range of obvious traumatic injuries, with multiple removed children collapsed in the snow. As you exit your vehicle, hysterical parents begin to arrive at the scene. The Charter School consists of multiple small schools all housed in this heavily damaged three story building. You and your partner begin to survey the scene you notice approximately 25 bleeding and crying elementary to high school aged kids coming directly toward you. There is a single RMP on scene unsuccessfully attempting to establish crowd control. Additional EMS and Fire resources are delayed pending by the snow blocked streets, their ETA is unknown.

#### WHAT ARE YOUR INITIAL ACTIONS?

#### Introduction:

S.T.A.R.T. (Simple Triage And Rapid Treatment/Transport) is the term utilized to designate the present triage system followed by the FDNY and the New York City Region. This system of triage was developed and implemented in California in 1983 by Hoag Hospital and the New Port Beach Fire and Marine Department and put in place as a method to categorize casualties based on presenting signs and symptoms (respiration, pulse and mental status).

The S.T.A.R.T. system is primarily a trauma-based system, but has been utilized for the triage of adult and pediatric medical patients. It is the predominant triage system in the U.S. and appears to function well. This simple, reproducible triage process allows different EMS providers to come to the same triage category conclusion when assessing a patient based on severity: Red vs. Yellow vs. Black vs. Green. The ultimate goal is to establish patient acuity and transport priority (e.g. Red before Yellow before Green), specifically identifying those patients that require immediate care and expedited transport to a hospital facility. S.T.A.R.T. has the ability to accommodate large numbers of patients and accomplish this in a relatively short period of time.

The word triage comes from the French and means to sort or choose. The general principals of this process remained basically unchanged since its initial development. Initially the concept of triage was developed by Napoleons' field surgeon as a way to "sort" soldiers from the battlefield for priority of treatment, so that they could more rapidly return to battle. Triage has been utilized in the military since its introduction by the French in the Napoleonic Wars, and then by British warships, and in the U.S. Civil War, WWI, WWII, the Korean Conflict, and the Vietnam War. The present concept of triage with its basic principals was imported into the U.S. civilian prehospital arena from the Vietnam

experience. The war experience has demonstrated that triage helped to decrease morbidity and mortality (death and disability) of wounded soldiers.

#### Triage Concepts and Principles:

Triage is the process in which we sort incident victims into groups for placement into a treatment and transportation priority order. In general, triage is really a transportation order activity, and not a process to initiate and provide extended medical treatments (e.g. EKGs, intubation, inhalation treatments, STEMI identification, etc.). Appropriate triage interventions are limited to repositioning the airway and hemorrhage control. One of the goals of triage within the EMS system is to match patient needs to hospital capabilities as best as we can when making destination decisions based on identified triage categories. This is at best an imperfect process, but in the absence of any other system, this allows us to apply standard operating procedures (SOPs) and guidelines during any event regardless of its size or type and can be used by all members of service.

The general goals of triage when EMS pre-hospital resources are overwhelmed are to:

- Establish patient transport priority from an incident based on medical need and therefore meet treatment priority requirements (e.g. access to the operating room vs. airway management).
- Establish treatment priority by identifying those patients that need immediate medical management on the scene when transportation off the scene may be delayed.
- Identify those victims in which treatment and/or transport would be futile (Black Tag victim).

The present S.T.A.R.T. triage process utilizes standardized "color" categories for all patients at any incident: BLACK, RED, YELLOW, and GREEN. Triage procedures and practices are standardized for small or large events and the implementation of "special" triage categories and protocols (e.g. separate pediatric, elderly, COPD, asthma, etc.) only results in confusion and triage errors. This does not including the catastrophic disaster, such as a large scale burn disaster which can produce a very large number of victims or a situation so out of control that standard triage practices cannot be applied. In these situations the operation may only be able to identify salvageable from unsalvageable. The switch to such a triage strategy will be directed by senior on-scene supervisory and/or OMA physician staff.

#### *Limitations of traditional triage and S.T.A.R.T:*

The traditional triage process provides no accommodation for patients with complaints of severe pain or other symptoms that may serve as an early indicator of an evolving medical condition such as an Acute Myocardial Infarction. Our system tends to assume that critical patients, real and up-triaged, should go to a Specialty Referral Center (e.g. Trauma Center) and that it has the capacity of staff, space, and resources to provide optimal care for all of these patients. Trauma-only based triage does not identify groups of patients that may be of greater risk for deterioration or death including the very old or the very young. Clinical indicators such as respiratory rate and/or pulses are considered significant when they already have reached critical values, e.g. a respiratory rate that is too fast or not present. There is

no provision for a rate that is weak, requires significant effort, or is clearly failing but is below the predefined threshold of thirty (30) breaths per minute, e.g. 12 breaths per minute, but gasping or limited by severe bronchospasm. S.T.A.R.T as it currently is provides no special consideration or recognition of the physiology of the pediatric patient – that he/she is not just a "small" adult. And there is no special evaluation tool for the medical patient presenting with chest pain, shortness of breath or stridor, forcing the EMS provider to many times "up-triage" the patient.

Features of a "better" triage system would be applicable to routine emergencies as well as the Mass Casualty Incident (MCI). Such an updated prehospital triage system should also better incorporate the needs of pediatric patients and their unique physiology.

#### **Up-triaging:**

This is the process of assigning a higher triage category to a patient that is not consistent with the established triage process. One such example routinely practiced in the field is the assigning a higher priority (Red Tag) to a pediatric patient in order to expedite transport ("Just in case there is something wrong"). This is not a triage error but rather a conscious decision to alter the triage category in order to expedite the care and transport of an individual for criteria that falls outside the standard triage algorithm.

Listed below are some of the more common up-triaging misconceptions:

- Delayed care and transport of the lower priority patients will not have a significant effect on overall patient outcome.
- There will be unlimited prehospital resources to care for and immediately transport these additional "critical" Redtagged victims.
- The ED will be able to identify the truly critical patients from the "just in case" transports.
- The ED staff is able to handle the extra "critical" patient load and provide the same level of care for all patients, particularly those who are truly critical (Red).
- Additional Red tag patients will, given the number of available vehicles, not delay the transport of the true Red tag patients.
- The up-triaged patient requires a higher level of care (i.e. Specialty Referral Center vs. 911 Receiving Facility).
- Only patients identified by EMS as critical patients will be arriving at the Specialty Referral Center ED; there will not be any non-EMS transports and/or walk-in patients.

#### The realities of up-triaging include:

- Provision of care may be negatively affected by the increased number of "critical" patients.
- The increased number of "critical" patients may exceed the number of patients that a local hospital may be able to care for and result in the redirection of ambulances to another and possibly more distant facility.
- No matter how good an institution is there reaches a point when they cannot provide optimal care for transported patients based on volume, ED space and resources, and hospital staff availability.

- There will be a time delay before the hospital staff is able to identify patients with potential life threatening injuries from those with non-life threatening injuries.
- Up-triaging delays and/or denies critical care to the truly critically injured patient.
- In a situation where resources may be delayed or limited, the priority of transport and/or treatment may be better focused on survivability rather than arbitrary, but well meaning, triage acuity designations.

#### S.T.A.R.T. Triage Overview:

Triage, simply stated, is the sorting of patients to identify those most in need of immediate medical care and transport. Triage utilizes color identification (BLACK, GREEN, YELLOW, and RED) to identify victim's transport and treatment priority based on established measurable parameters. These include airway, respiratory rate, radial pulse, mental status, and the ability to walk and follow simple commands. Triage should be initiated at any declared MCI no matter how limited it may appear. Patient tagging should also be initiated any time a color designation is associated with a patient, regardless of the number of patients.

#### The Goal of Triage:

- To provide the greatest good for the greatest number of victims.
- To minimize mortality and morbidity (death and disability) of patients.
- To correctly categorize, and assign color designation.
- To ensure that all categorized patients are tagged.
- To establish transportation/treatment priority.

#### S.T.A.R.T. Triage Categories:

#### **GREEN (Minor):**

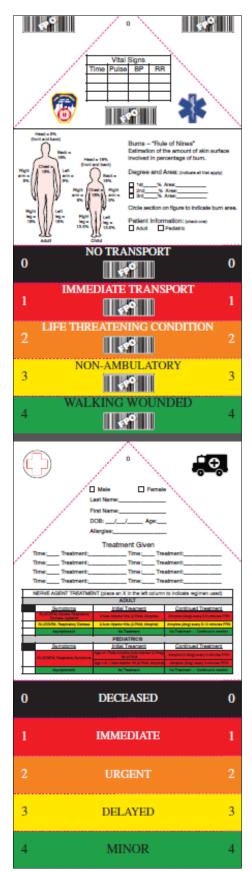
These are patients that are ambulatory at the scene. They have **not** been assessed and are tagged GREEN solely based on their ability to walk and to be directed to a specific location (Casualty Collection Point, CCP). These patients should be sequestered in a safe area and re-evaluated as resources become available.

## **BLACK (Deceased/Expectant):**

These are victims for which medical care and/or transport would be futile when EMS prehospital resources are overwhelmed. They have no spontaneous respirations and are unable to maintain an open airway even after airway repositioning. In addition, these individuals may have an obvious mortal injury (decapitation, massive head trauma, expelled brain tissue, etc.).

#### **RED (Immediate):**

Patients that require immediate medical care and expedited hospital transport. Delay for these individuals may result in increased risk of death (mortality) or injury (morbidity). They are able to maintain an open airway, spontaneously or after repositioning; have respirations equal to or greater than 30 per minute; do not have a palpable radial pulse, or are unable to follow a simple command.



#### YELLOW (Delayed):

These are non-ambulatory patients that remain at the scene. They have an open airway, respirations less than 30, a palpable radial pulse, and are able to follow simple commands. These patients are categorized Yellow solely on their inability to walk or self evacuate.

#### The New FDNY (and Regional) Triage System: Modified S.TA.R.T.

Beginning in 2012, the FDNY will implement *Modified S.T.A.R.T.* This triage system seeks to build upon the previously discussed S.T.A.R.T. model in order to address some of the limitations of that system. *Modified* S.T.A.R.T includes additional aspects that deal specifically with the pediatric patient and those patients who may be identified by providers as having a medically related condition that requires more rapid treatment and/or transport, yet whose examination findings do not allow for their categorization as a Red tag patient.

#### The Pediatric Patient:

For the purposes of triage during an MCI, there is no need to determine a patient's exact age. You are being asked to use your best judgment to identify the pediatric patient. Therefore if a patient looks like a child (toddler, school age, or early adolescent), he/she should be triaged as a child. If a patient looks like an infant (less than 12 months of age), he/she should be triaged as an infant.

All viable infants involved in an event will be RED tagged.

Children without spontaneous respirations (but without a mortal injury) will be given five (5) BVM rescue breaths before they are assigned a triage category (tag color). If they respond, then Red tag the child. If they do not respond, the child should be Black tagged.

Children are different than adults and do not go into respiratory arrest for the same reasons as adults, meaning this is not the endpoint of a chronic disease (e.g. COPD). Rather, children may simply suffer airway occlusion that results in respiratory arrest but is reversible with basic airway opening. Therefore, it is the belief of pediatric experts that children may have the *possibility* of "restarting" their respirations if provided with airway opening and supplemental respirations via BVM. In this case this immediate care may be life-saving. If that care fails to

restore respirations, the cause of the child's respiratory arrest is almost certainly lethal and time and resources should be directed to the care of other patients, including other children, who may survive.

#### The ORANGE Patient:

Every one of you has knowledge and experience that allows you to identify patients who may be appropriate for a Green or Yellow tag under S.T.A.R.T. criteria but for whom you know that the nature of their injury or illness requires more rapid treatment and transport.

One example would be the July 2007 steam pipe explosion in Manhattan in which the majority of patients were Yellow and Green tags. But among the Yellow tags were a number of non-ambulatory patients with lower extremity injuries and at least two of them were presenting with severe asthma symptoms, triggered by all of the small particles in the air following the explosion. Those asthma patients had respiratory rates of 12-14, meaning that they did not qualify for a Red tag, and yet their respiratory rate was that low because they could not possibly breathe any faster (the asthma was so severe – they could only speak one word at a time). Up-triaging these patients to Red would not be appropriate because it may delay the transport and treatment of true Red tag patients, particularly in a larger incident and because these patients did not require treatment at a Trauma Center, but merely rapid transport to any emergency department where they could receive care for their medical illness.

And so, to allow you to appropriately categorize such patients, *Modified* S.T.A.R.T. includes a new color:

#### ORANGE (Urgent):

This new triage category helps to identify patients that have potential serious medical problems or signs of potentially life-threatening injuries, which might otherwise not be addressed by the standard S.T.A.R.T. triage process. These are either ambulatory (GREEN) or non-ambulatory (YELLOW) patients that remain at the scene. They have an open airway, respirations less than 30, have a palpable radial pulse and are able to follow simple commands. If, based upon the size and scope of the incident, you as a provider feel that the patient's signs and symptoms warrant more rapid treatment and/or transport than the otherwise appropriate Yellow or Green tag, the patient should be assigned an Orange tag. Examples of patients who may be appropriate for this category include:

Respiratory Distress	Increased Work of Breathing	Chest Pain	Chest Trauma
Labored Respirations	Stridor (new onset)	Change in Mental Status	Head Trauma

Only patients from the Green or Yellow category should be identified as Orange. All Black tagged victims will keep their identified category and a patient should never be down-triaged from Red to the Orange designation. Patients are also not required to first be assigned a Yellow or Green tag as a patient may be identified as Orange even at the point of initial contact with the EMS provider.

#### **Transport Priority:**

Transport priority should be a function of patient acuity as reflected by their triage category. The following is the order for transports from the scene to receiving facilities:

- First transport priority: Red/Immediate/Priority I
- Second Transport priority: Orange/Urgent/Priority II
- Third Transport priority: Yellow/Delayed/Priority III
- Forth Transport priority: Green/Minor/Priority IV

#### **Summary of Modified S.T.A.R.T.**

The S.T.A.R.T. procedure has worked well for many years but it is hoped that the *Modification* of our triage system will improve the patient designation and transportation process. This change, based on the existing S.T.A.R.T. process will allow for enhanced and improved EMS triage without instituting a completely new and different process. The use of the Orange category will allow for the quick triage (identification) of victims with medical and/or airway problems that may be identified during triage, without a significant change in the triage times (30 to 60 seconds per person on average).

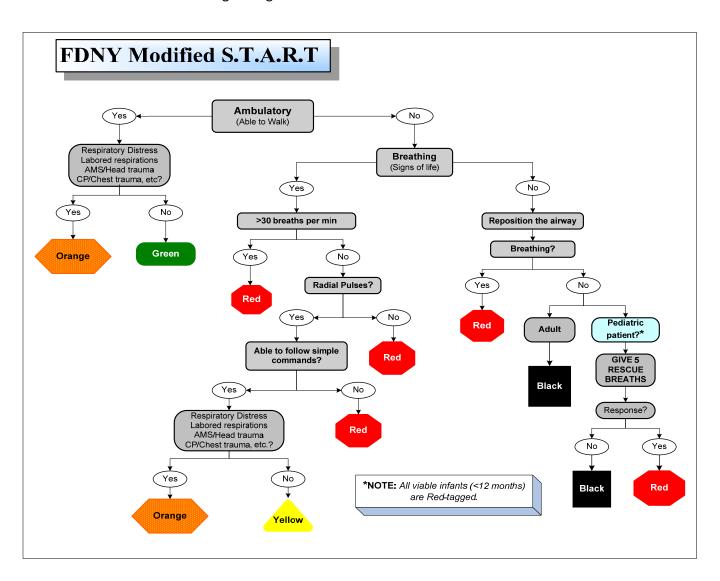
This new procedure will better control and limit the up-triage of patients. In the past we have unofficially (but as a matter of practice) moved patients out of concern to another category to expedite their care and transport; Modified S.T.A.R.T. will eliminate the need for this practice. The transportation decision process of Trauma Center vs. 911 Receiving Facility will be much easier as to allow us to better select hospital destinations by matching patient need with hospital capability because Orange tagged patients are primarily medical and therefore it is unlikely that these patients will need to be transported to a Trauma Center; conversely Red tagged patients are primarily traumatic and therefore it is likely that these patients will need to be transported to a Trauma Center.

One of the additional goals is to better separate the Red and Yellow triage categories and avoid the designation of a delayed patient as immediate but still transport off the scene early on in the event. Additionally we will be better able to assess children and optimize their rescue potential.

Finally, keep in mind that in the case of a catastrophic event, there may come a point in an incident that transport resources are overwhelmed or there is a delay due to factors beyond our control. This may require an administrative decision to alter transport priority procedures. This will be under the authority of FDNY/EMS senior officer in consultation with the on-scene OMA physician. Patient tagging will not be affected, but transport priority may change. For example, the Transport Officer may direct you to remove the Orange Tagged patients before the Red Tagged ones and therefore alter the traditional transport priority. What is important for you to recognize about these situations is that your role and responsibilities specific to triage will not change. Triage occurs just as it always does, and it is only the treatment and/or transport decisions that may change.

#### Summary:

Modified S.T.A.R.T. allows us to better utilize EMS prehospital resources and therefore limit the competition for limited and finite hospital resources which may include the availability of physicians, nurses, hospital beds, or even operating room space, in order to improve overall patient outcome. This will also allow us to more quickly remove the sickest and most injured patients from the incident scene. Treatment and transportation operations are geared toward decreasing the overall mortality (death rate) of the incident survivors while providing all patients with appropriate and rapid definitive medical care based on their triage designation.



Triage's ultimate purpose is to provide optimal prehospital resources to those most in need when the number of injured and ill patients at any incident exceeds the on-hand available resources. Patient categorization decisions are the responsibility of you, the prehospital provider and should not be made at the receiving facility, for example transporting an obviously dead child to a hospital during a Mass Casualty Incident. Failure on your part as the first responder, to make a difficult triage decision is a bad decision; this hurts more than it helps. Triage personnel should only respond with Triage Tags a single pediatric BVM (remember new pediatric Black Tag criteria). Victim removal from the scene requires

only carrying devices and hemorrhage control. Patient monitoring and advanced airway devices should not be brought

to the scene. Patient distribution is a prehospital function based on your assessment of the situation as the initial

prehospital resource on scene utilizing the prehospital triage process.

As a prehospital care provider using *Modified* S.T.A.R.T., your ultimate goals are:

• Not to identify patients that require extensive prehospital medical care, but rather indentify the ones needing

acute hospital based medical/surgical intervention. In this situation, less emergency medical care on scene may

be better and rapid transport to a definitive care facility is best.

• To transport as quickly as possible all critical (immediate and urgent) patients to the most appropriate receiving

facility (Trauma vs. Non-Trauma Center). Transportation must be equitable so that no one facility is

overwhelmed and potentially becomes non-operational because of EMS operations.

Until transport becomes overwhelmed, triage should be used as a transport priority function and not a

treatment (EKGs, advanced airways, defibrillation, etc.) operation!

Optimize the use of available prehospital and hospital resources.

• In a situation where resources may be delayed or limited, to set the priority of transport and/or treatment,

focusing on survivability rather than arbitrary, but well meaning, triage acuity.

• To establish a transportation order process and not utilize unnecessary extension or expansion of medical

services in the prehospital setting. The designation of Casualty Collection Points (CCPs) is meant to gather

individuals for transport not necessarily for medical treatment at the cost of delayed transport.

To use the Orange category to allow for the better separation of the Red and Yellow tagged victims or the "sick"

Walking Wounded, Green tagged patients, previously up-triaged to expedite transport off scene to presumably

improve outcome.

To better utilize resources in order to transport the most critical patients to the appropriate medical facility first.

Modified S.T.A.R.T. is a dynamic and flexible process that utilizes clinical judgment and implements expedited

transport and care to the most appropriate medical facility. This process is driven by that transportation priority and not

by expanded on-scene medical care. Yet while the prehospital sector may not be able to provide definitive medical care

for the critically injured MCI casualty, which can best accomplished in the hospital setting, the use of this updated triage

system may allow for more appropriate transportation decisions and better allocation of on-scene resources when

prehospital care is required by the lack of available transport vehicles.

Written by:

Dario Gonzalez MD, F.A.C.E.P

**FDNY Office of Medical Affairs** 

## CME JOURNAL 2011 J0 11: TRIAGE OVERVIEW

- 1) Triage allows EMS personnel to accomplish the following:
  - a) ability to establish Transport Priority from the incident based on medical need and therefore meets their Treatment Priority requirements (i.e. access to the operating room vs. airway management).
  - b) ability to identify those patients that need immediate medical management on the scene, when transportation off the scene may be delayed: Treatment Priority.
  - c) ability to identify those victims in which Treatment and/or Transport would be futile (Black Tag victim).
  - d) a & c only
  - e) all of the above

#### 2) Uptriaging is:

- a) identifying a patient that may be held on scene until they feel better.
- b) the process of separating pediatric patients into transport groups.
- c) the process of assigning a higher/greater triage category to a patient that is not consistent with the established triage process.
- d) for example, the downgrading of a high priority (Red Tag).
- e) rarely practiced in the prehospital setting.

#### 3) Uptriaging Misconceptions:

- a) assumes that delayed care for some and transport for the lower priority patients will not have a significant effect on the overall patient outcome.
- b) assumes unlimited prehospital resources to care and immediately transport these additional "critical" RED tagged victims.
- c) assumes that the ED will be able to identify the truly critical patients from the "just in case" transports **and** hospital staff is able to handle the extra critical patient and provide the same level of care.
- d) up-triaged patient requires a higher level of care (i.e. Specialty Referral Center vs. 911 Receiving Facility).
- e) all of the above
- 4) Features of the Orange Tag victim include all of the following **except**:
  - a) chest pain
  - b) increased work of breathing
  - c) infant less than 12 months of age
  - d) stridor
  - e) change in mental status

#### 5) Triage:

- a) is a static process.
- b) establishes transport priority.
- c) requires the movement to the hospital of Black Tag children.
- d) is utilized only during MCIs with five or more victims.
- e) requires that all transports (except the Green) go to the nearest Trauma Center.

- 6) During a mass casualty events the paramedic's primary initial role is:
  - a) cardiac assessment and determine need for STEMI transport.
  - b) to establish advanced airway for those in respiratory distress.
  - c) for patients in arrest initiate appropriate applicable Cardiac Arrest REMAC Protocol.
  - d) to triage victims appropriately.
  - e) to immediately transport the severely injured to the closest hospital.
- 7) As the first arriving paramedic unit your initial response is to:
  - a) establish a helicopter LZ.
  - b) establish communication with the incident commander.
  - c) communicate the scope and nature of the event.
  - d) b, c
  - e) only b
- 8) During triage a victim has a respiratory rate of 32 with audible wheezing. You should:
  - a) initiate a single nebulizer treatment and prepare for transport.
  - b) establish SPO2 to determine need for capnography.
  - c) begin cardiac monitoring and prepare for a potential advanced airway.
  - d) immediately establish access using the intraosseous route.
  - e) continue to triage victims.
- 9) While triaging an individual with a respiratory rate of 28, + radial pulse and inability to communicate with slurred speech, the paramedic should:
  - a) prepare to transport to a Stroke Center.
  - b) establish the blood sugar level and treat as needed as per REMAC Protocol.
  - c) triage as a Red Tag.
  - d) obtain a twelve lead EKG for possible notification.
  - e) contact telemetry for Discretionary Orders.
- 10) For victims with inhalation injuries secondary to thermal exposure from a incendiary device:
  - a) establish high concentration oxygen.
  - b) immediately transport to nearest Burn Center or Hyperbaric Center.
  - c) establish prior history of respiratory disease prior to transport for triage purposes.
  - d) triage as per *Modified* S.T.A.R.T. procedure.
  - e) determine percent body surface burn (using the Rule of Nines) to provide Receiving Facility notification.

# Journal CME Credit Answer Sheet

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 <u>not</u> issued. You are strongly advised to keep a copy for your records.

Note: if your information is <u>illegible</u>, <u>incorrect</u> or <u>omitted</u> you <u>will not</u> 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 this month.

November 2011 CME Quiz					
1.					
2.	Required for				
3.	BLS & ALS				
4.	providers				
5.					
6.					
7.	Required for				
8.	ALS				
9.	providers only				
10.					

## Citywide CME – November 2011

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

Boro	Facility	Date	Time	Торіс	Location	Host	Contact
BK	Kingsbrook	TBA	TBA	TBA: call to inquire →	ED Conference Room	Dr Hew	Manny Delgado 718-363-6644
	LICH	TBA	TBA	TBA: call to inquire →	Avram Conference Rooms	Dr Brandler	Aaron Scharf 718-780-1859
	Lutheran	4 <sup>th</sup> Wed	1730-1930	Call Review <b>RSVP</b> →	Call for location →	Dr Chitnis	Dale Garcia 718-630-7230  dgarcia@lmcmc.com
MN	NY Presbyterian	12/13	1700	Call Review: Stroke <b>RSVP</b> →	Weill Cornell Campus TBA	Dr Williams	RSVP: <u>ssamuels@nyp.org</u> Ana Doulis 212-746-0885 x2
	NYU School of Medicine	TBA	TBA	TBA: call to inquire →	Schwartz Lecture Hall 401 E 30 Street	TBA	Jessica Kovac 212-263-3293
QN	FDNY-BOT		led until r notice				
	NYH Queens	Thursdays	0800-0900	Call Review/Trauma Rounds	East bldg, courtyard flr	Dr Sample	Mary Ellen Zimmermann RN 718-670-2929
	Mt Sinai Qns	last Tues	1800-2100	Lecture or Call Review	25-10 30 Ave, conf room	Dr Dean	Donna Smith-Jordan 718-267-4390
	Parkway Hosp	3 <sup>rd</sup> Wed	1830-2130	Call Review	Board Room, 1st flr		pabruzzino@capitolhealthmgmt.com
	Queens Hosp	2 <sup>nd</sup> Thurs 4 <sup>th</sup> Thurs	1615-1815	Call Review	Emergency Dept		718-883-3070
SI	RUMC	TBA	1400	TBA: call to inquire →	MLB conf room	TBA	William Amaniera 718-818-1364
	SIUH North	12/5	0800-1600	Peds Symposium <b>RSVP</b> →	Regina McGinn Center 475 Seaview Ave	RN Cohen	Andrea Kleboe 718-226-7878

## 2011-2012 NYC REMAC Examination Schedule

Month	REMAC Refresher Exam (Written only - CME letter required)		REMAC Basic Exam (Written & 3 Orals Scenarios)			NYS/DOH
WOITH	Registration Deadline	Exam Date (on Wednesdays)	Registration Deadline	Written @18:00	Orals @09:00	Written Exam
October 2011	9/30/11	10/26/11	Thursday 10/6/11	Thursday 10/20/11	Tuesday 10/25/11	
November	10/31/11	11/16/11				11/17/11
December	11/30/11	12/21/11				12/15/11
January 2012	12/31/11	1/25/12	Wednesday 1/4/12	Wednesday 1/18/12	Thursday 1/26/12	1/19/12
February	1/31/12	2/22/12				
March	2/29/12	3/21/12	Wednesday 2/29/12	Wednesday 3/14/12	Tuesday 3/20/12	3/15/12
April	3/31/12	4/25/12				
May	4/30/12	5/16/12	Wednesday 5/9/12	Wednesday 5/23/12	Wednesday 5/30/12	5/17/12
June	5/31/12	6/20/12				6/21/12
July	6/30/12	7/25/12	Wednesday 7/4/12	Wednesday 7/18/12	Tuesday 7/24/12	
August	7/31/12	8/22/12				8/16/12
September	8/31/12	9/19/12	Wednesday 8/29/12	Wednesday 9/12/12	Thursday 9/20/12	

The **REMAC Refresher Written examination** is offered monthly for paramedics who meet CME requirements <u>and</u> whose REMAC certifications are either current or expired <u>less</u> than 30 days. To enroll, call **718-999-7074** before the register registration deadline above. Candidates may attend an exam no more than 6 months prior to expiration. Refresher exams are held at 07:00 or 18:00 hours at FDNY-EMS Bureau of Training, Fort Totten, Queens.

The **REMAC Basic Written & Orals examination** is for initial certification, <u>or</u> for inadequate CME, <u>or</u> for certifications expired <u>more</u> than 30 days. Registrations <u>must</u> be postmarked by the deadline above. Email <u>swansoc@fdny.nyc.gov</u> instructions. You are encouraged to <u>register at least 30 days</u> prior to the exam as seating is limited. A \$100 exam fee by <u>money order</u> is required.