



Emergency Medical Services

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OFFICE OF THE DIRECTOR

Utilization of the ESI Triage Score – Pilot Phase

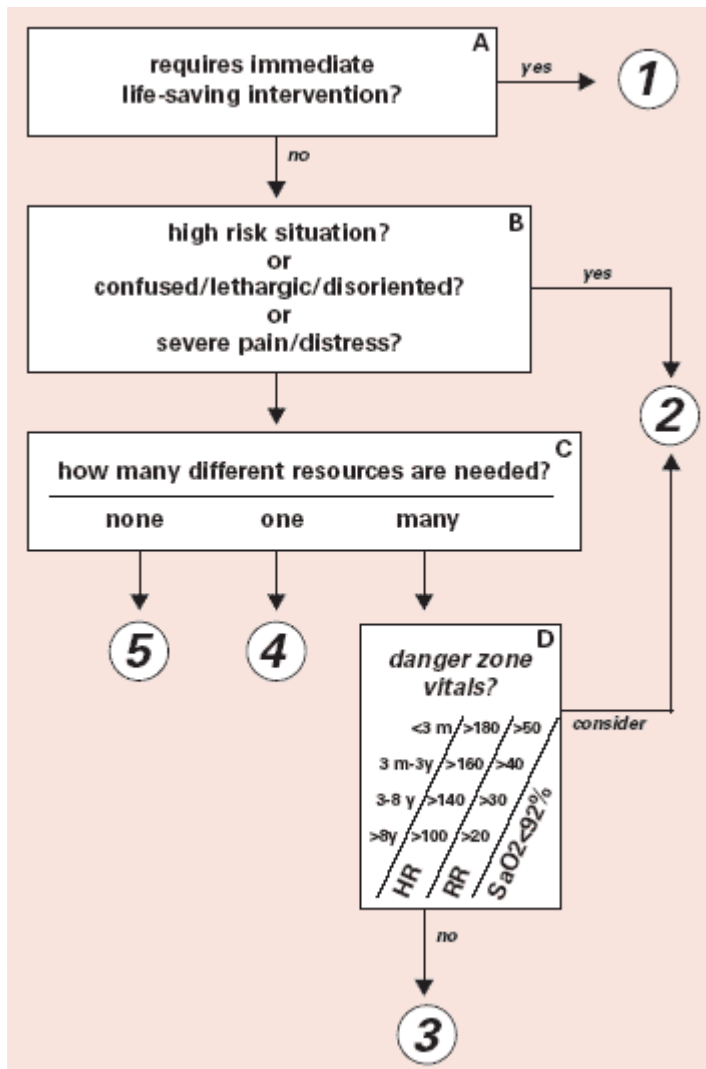
During the May/June 2011 educational sessions, we are learning how to utilize the ESI triage score. This is a validated hospital triage scheme that is utilized by all receiving emergency departments in Wake County.

The plan is to eventually utilize this score to guide us in patient transport and destination decisions. While this score has been extensively studied in the hospital environment, there is very little data about its use in the pre-hospital environment. Thus we are in the pilot phases of this project. This is how we should be utilizing the score during the pilot phase:

- 1) **After you have attended the callback educational session, please begin entering the score in the electronic call report.** This should be the score based on the patient's condition just prior to transport. If the patient's condition changes en route, you should still utilize the score based on the patient's condition at the scene. There is no need to enter the score if your unit is transporting more than one person.
- 2) **The score should be entered in the "run number" section of the ECR.** This section is located on the bottom left portion on the first tab of your patient care report.
- 3) **Patient care should be not altered based on this score.** We are simply learning how to utilize the score at this point – we do not have sufficient data to safely utilize the score to change patient care in the field. We should simply enter the score based on our on-scene assessment and continue to treat the patient as we normally would.
- 4) **Do not attempt to correlate the pre-hospital score with the score assigned by the triage nurse.** Again, at some point in the future, we hope to be able to do this. There is simply insufficient data at this point to attempt such a correlation. We are not yet to the point of a radio report that begins with "I have an ESI Level 5 for you" or to the point of altering patient care based upon our findings.

After our success with cardiac arrest, STEMI, congestive heart failure, and other clinical conditions, many of you have been asking "what's next?" This is what's next: an evidence-based approach to destination and method of transport. We want to provide the right care, at the right time, in the right place. Becoming agile with this score is the first step in this process.

Thank you for all you do to provide prompt, compassionate, clinically excellent care.



A. Immediate life-saving intervention required: airway, emergency medications, or other hemodynamic interventions (IV, supplemental O2, monitor, ECG or labs DO NOT count); and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SPO₂<90, acute mental status changes, or unresponsive.

Unresponsiveness is defined as a patient that is either:

1. Nonverbal and not following commands (acutely).
2. Requires noxious stimulus (P or U on AVPU) scale.

B. High risk situation is a patient you would put in your last open bed.

Severe pain/distress is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	Not Resources
<ul style="list-style-type: none"> • Labs (blood, urine). • ECG, X-rays. • CT-MRI-ultrasound- angiography. (counts as 1 resources) 	<ul style="list-style-type: none"> • History & physical (including pelvic). • Point-of-care testing. • BG check
<ul style="list-style-type: none"> • IV fluids (for hydration or RX admin) 	<ul style="list-style-type: none"> • Saline or heplock.
<ul style="list-style-type: none"> • IV or IM or nebulized medications. 	<ul style="list-style-type: none"> • PO medications. • Tetanus immunization. • Prescription refills.
<ul style="list-style-type: none"> • Specialty consultation. 	<ul style="list-style-type: none"> • Phone call to PCP.
<ul style="list-style-type: none"> • IV or IM or nebulized medications. 	<ul style="list-style-type: none"> • Simple wound care (dressings, recheck). • Crutches, splints, slings.

D. Danger Zone Vital Signs. Consider uptriage to ESI 2 if any vital sign criterion is exceeded.

Pediatric Fever Considerations:

1. 1 to 28 days of age: assign at least ESI 2 if temp >38.0 C (100.4F)
2. 1-3 months of age: consider assigning ESI 2 if temp >38.0 C (100.4F)
3. 3 months to 3 yrs of age: consider assigning ESI 3 if: temp >39.0 C (102.2 F), or incomplete immunizations, or no obvious source of fever.

©ESI Triage Research Team, 2004 (Refer to teaching materials for further clarification)

ESI notes from May/June 2011 call back

ESI is the **emergency severity index**, which is an acuity assessment score that is used by many hospitals. There are five categories. You **must** follow the criteria, NOT your instinct, when you assign scores.

For EMS, we use our initial assessment to get an ESI, not what we fixed the patient to. You can make a note on your report, if the score changes dramatically.

Remember to check the list to see what is a **resource** and what is **not a resource**.

Some examples of what fits where:

Class 1 = Resuscitated codes, STEMIs, acute CVAs (maybe), apnea, patients we had to intubate, severe respiratory distress, patients who can't protect their own airway (including severely drunk patients), patients in decompensated shock, ODs that score P or U on AVPU, anaphylaxis, SVT, VT, or unconscious hypoglycemic patients.

Class 2 = CP w/cardiac hx, possible PE, newborn with a fever, ectopic pregnancy, suicidal/homicidal, needle stick in HCW, acute change in LOC, head injury, severe pain—what you objectively assess—if you'd give your last bed to the patient, pain >7 and it required immediate intervention (use vital signs to help with this), kidney stone (writhing in pain), burns, complicated fractures, oncology patients w/severe pain, sexual assault patients, combative patients, and known alcoholics w/minor head injury.

Class 3 = Needs 2 or more resources—see the list. This includes vital signs in the danger zone—see chart. This includes most abdominal pain patients, asthma, uncomplicated fractures, and headaches.

Class 4 = Needs one resource—see the list.

Class 5 = Needs no resources—see the list.

Competency Triage Questions

1. EMS arrives with a 76-year-old male found on the bathroom floor. The family called 911 when they heard a loud crash in the bathroom. The patient was found in his underwear and the toilet bowl was filled with maroon-colored stool. Vital signs (VS) on arrival: blood pressure (BP) 70/palp, heart rate (HR) 128, respiratory (RR) 40. His family tells you he has a history of atrial fibrillation and takes a "little blue pill to thin his blood."
2. A 63-year-old cachectic male is brought in from the local nursing home because his feeding tube fell out again. The patient is usually unresponsive. He has been in the nursing home since he suffered a massive stroke about 4 years ago.
3. "I think I need a tetanus shot," a 29-year-old female tells you. "I stepped on a rusty nail this morning and I know I haven't had one for years." No past medical history (PMH), no known drug allergies (NKDA), no medications.
4. A 72-year-old female with obvious chronic obstructive pulmonary disease (COPD) and increased work of breathing is wheeled into triage. Between breaths she tells you she "is having a hard time breathing and has had a fever since yesterday." The SpO₂ monitor is alarming and displaying a

saturation of 84 percent.

5. “Why the hell don’t you just leave me alone?,” yells a 73-year-old disheveled male who was brought to the ED by EMS. He was found sitting on the curb drinking a bottle of vodka with blood oozing from a 4-cm forehead laceration. He is oriented to person, place, and time and has a Glasgow Coma Scale (GCS) of 14.
6. EMS arrives in the ED with a 57-year-old female with multiple sclerosis. She is bedridden and her family provides care in the home. The visiting nurse sent her to the ED because her Foley catheter came out this morning. No other complaints. Vital signs are within normal range, currently on antibiotics for a UTI.
7. “How long am I going to have to wait before I see the doctor?,” asks a 27-year-old female with a migraine. The patient is well known to you and your department. She rates her pain as 20/10 and tells you that she has been like this for 2 days. She vomited twice this morning. PMH: migraines, no allergies, medications include Fioricet.
8. A young male ambulates into triage and tells you that he has been shot. As he rolls up the left leg of his shorts you notice two wounds. He tells you that he heard three shots. He is alert and responding appropriately to question. Initial VS: T 98.2°F, HR 78, RR 16, BP 118/80.
9. A 26-year-old female walks into the triage room and tells you that she needs to go into detox again. She has been clean for 18 months but started using heroin again 2 weeks ago when her boyfriend broke up with her. She had called several detox centers but was having no luck finding a bed. She denies suicidal or homicidal ideation. She is calm and cooperative.
10. EMS radios in that they are in route with a 17-year-old with a single gun shot wound to the left chest. On scene the patient was alert, oriented and had a BP of 82/palp. Two large bore IVs were immediately inserted. Two minutes prior to arrival in the ED the patient’s HR was 130 and BP was 78/palp.
11. “Nurse, I have this pressure in my chest that started about an hour ago. I was shoveling that wet snow and I may have over done it,” reports an obese 52-year-old male. He tells you his pain is 10 out of 10 and that he is nauseous and short of breath. His skin is cool and clammy. VS: BP 86/50, HR 52 and irregular.
12. This patient is the restrained driver of an SUV involved in a high-speed, multicar accident. Her only complaint is right thigh pain. She has a laceration on her left hand and an abrasion on her left knee. VS: BP 110/74, HR 72, RR 16, no medications, no allergies, no PMH.