Just in Time SALT Triage Training

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Columbus Medical Association & Affiliates

Columbus Medical Association Foundation | Physicians CareConnection | COTS | Physicians Leadership Academy







Background



Las Vegas (2017) and Sandy Hook (20)



Background

The Columbus Dispatch

LOCAL

If the next mass shooting is in Columbus, are paramedics here ready?



Bethany Bruner

The Columbus Dispatch

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With an increasing number of mass shooting incidents across the U.S., including between June 3-5, Columbus Division of Fire emergency medical personnel know









ON THE COVER

The Ohio State University Armed Aggressor Incident: A Recollection of Events

Nicholas E. Kman, MD, FACEP

A t 9:55 AM on Monday, November 28, we received the page that no one wants to get (Figure 1).

The first 2 things I did were to call down to the emergency department (ED) to alert the 3 emergency physicians working and then to check social media to verify the possibility of an actual emergency on campus.

When I saw the tweet giving instructions to "Run Hide Fight" (Figure 2), I immediately headed down to the ED from our administrative offices. I had worked 3 to 11 in the ED the night before. Begrudgingly, I was in early that Monday to catch up on e-mail.

When we arrived in the ED, nurses and residents were already congregating in the trauma bays near the emergency medical services (EMS) entrance. Our ED director had been quickly briefed by our chief medical officer. As in most mass casualty events, we had a paucity of information at the onset. We heard that we were getting as many as 12 patients from an "active

Background

 Kman NE. The Ohio State University Armed Aggressor Incident: A Recollection of Events. Disast public health preparedness. 2017 April;



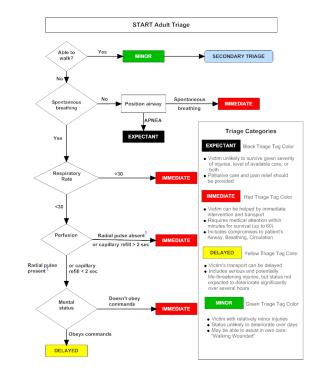




START vs SMART

START is a method of triage

• SMART is a series of proprietary products





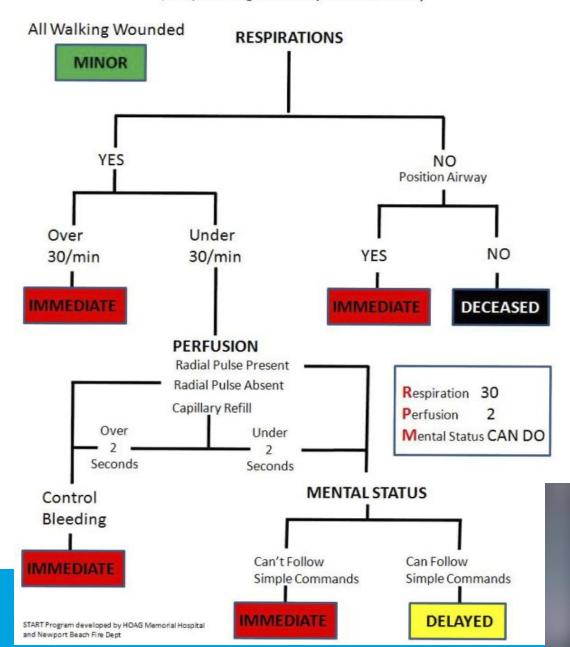
Instructions for use of SMART TAPE





START TRIAGE

(Simple Triage and Rapid Treatment)

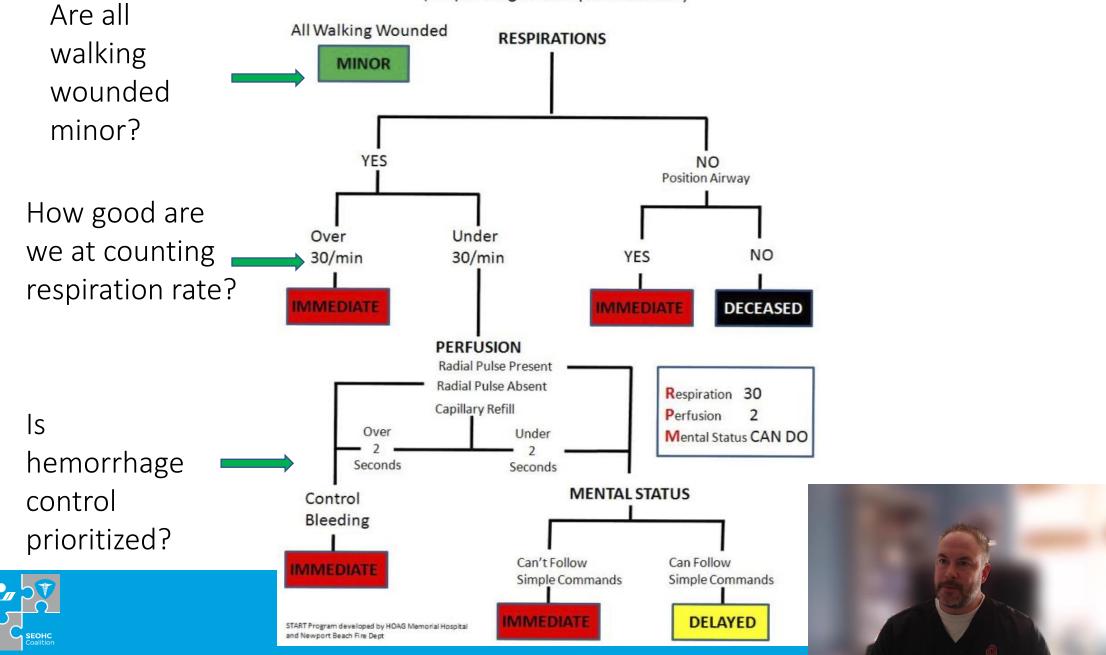




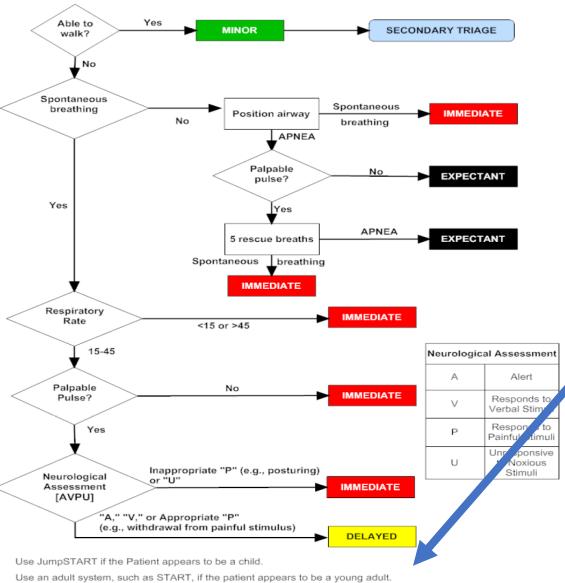


START TRIAGE

(Simple Triage and Rapid Treatment)



JumpSTART Pediatric Multiple Casualty Incident Triage



Now do this in addition to that but don't forget that respirations are now 15-45 and not 30.









SALT Mass Casualty Triage

Concept Endorsed by the American College of Emergency Physicians, American College of Surgeons Committee on Trauma, American Trauma Society, National Association of EMS Physicians, National Disaster Life Support Education Consortium, and State and Territorial Injury Prevention Directors Association

It is recognized that there is a need for a national standard for mass casualty triage, because disasters frequently cross jurisdictional lines involving responders from multiple agencies. After reviewing all of the existing triage systems, a consensus review panel found that there was insufficient evidence to support 1 system over the others. Using aspects of the existing systems and based on best evidence, SALT (Sort-Asses-Lifesaving Interventions-Treatment and/or Transport) was developed as a national all-hazards mass casualty initial triage standard for all patients (eg, adults, children, special populations). SALT was designed to allow agencies to easily incorporate it into their current MCI triage protocol through simple modification.

STEP 1: SORT

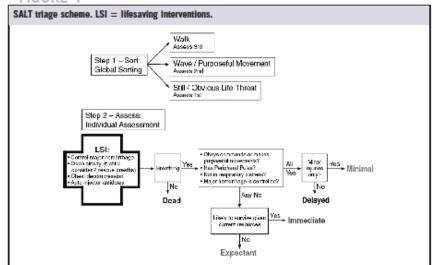
SALT begins with a global sorting of patients, prioritizing them for individual assessment. Patients who can walk should be asked to walk to a designated area and should be assigned last priority for individual assessment. Those who remain should be asked to wave (ie, follow a command) or be observed for purposeful movement. Those who do not move (ie, are still) and those with obvious life-threatening conditions should be assessed first because they are the most likely to need lifesaving interventions (Fig. 1).

STEP 2: ASSESS

The individual assessment should begin with limited rapid lifesaving interventions:

- Control major hemorrhage through the use of tourniquets or direct pressure provided by other patients or other devices
- Open the airway through positioning or basic airway adjuncts (no advanced airway devices should be used)

FIGURE 1

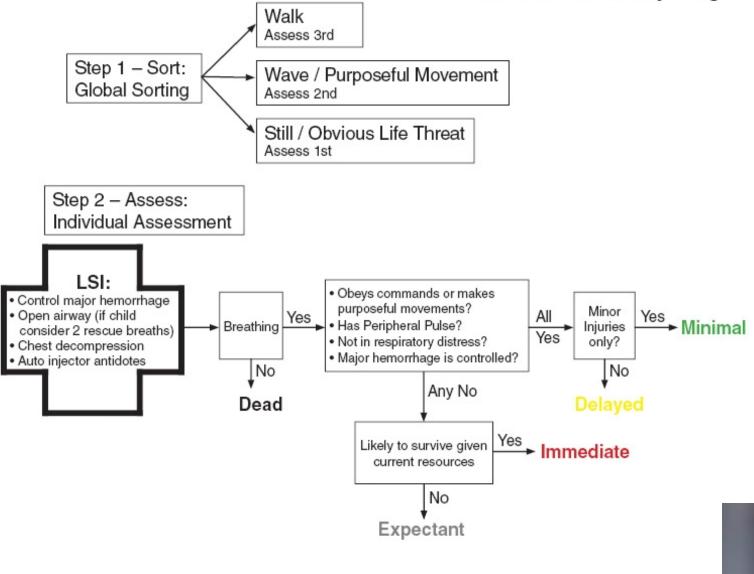






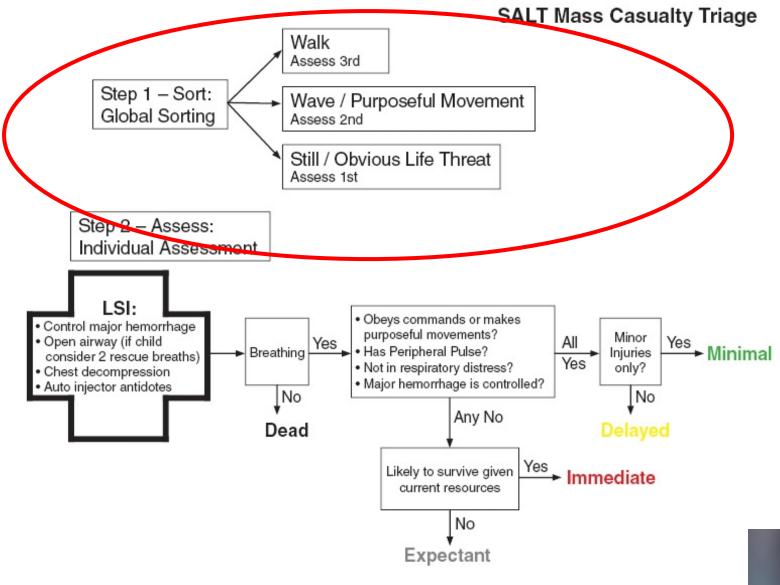
Disaster Medicine and Public Health Preparedness

SALT Mass Casualty Triage

















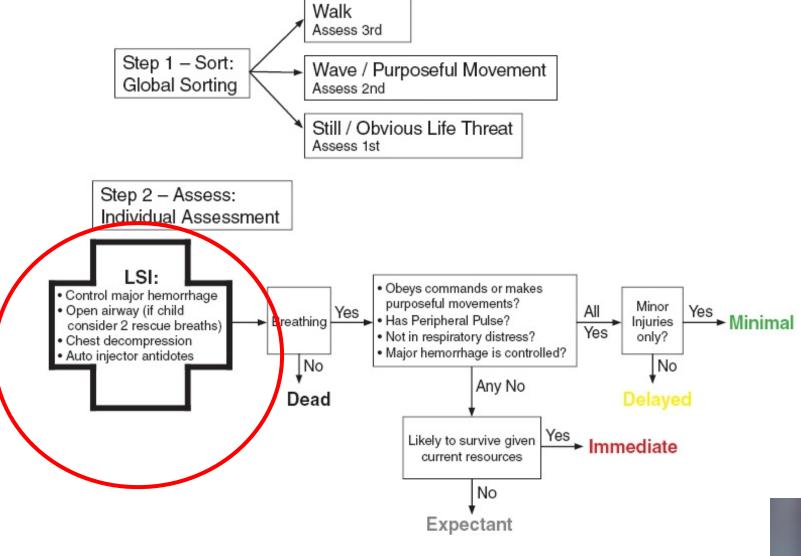
Global Sorting Result

- Casualties now prioritized for individual assessment
 - Priority 1: Still, and those with obvious life threat
 - Priority 2: Waving/purposeful movements
 - Priority 3: Walking





SALT Mass Casualty Triage











Step 2: Assessment-Life Saving Interventions (LSI)

- Control major hemorrhage with tourniquets
- Open the airway through positioning or basic airway adjuncts (no advanced airway devices should be used)
- If the patient is a child, consider giving 2 rescue breaths
- Chest decom
- Autoinjector

SALT Mass Casualty Triage Walk Assess 3rd Step 1 - Sort: Wave / Purposeful Movement Global Sorting Assess 2nd Still / Obvious Life Threat Assess 1st Step 2 – Assess: Individual Assessment LSI: · Obeys commands or makes Control major hemorrhage purposeful movements? Minor Yes Minimal · Open airway (if child All Yes Has Peripheral Pulse? Injuries Breathing consider 2 rescue breaths) Yes · Not in respiratory distress? only? Chest decompression · Major hemorrhage is controlled? Auto injector antidotes No No Any No Dead Delayed Likely to survive given Yes Immediate current resources No Expectant

Step 2: Assessment

- ♦ If the answers are **NO** and the patient **IS** likely to survive given current resources, tag them as **IMMEDIATE** (red)
- ♦ If the answers are **NO** and the patient is **NOT** likely to survive given current resources, tag them as **EXPECTANT** (gray)
- ♦ If the answers are YES, but injuries are not minor and require care, tag patient as DELAYED (yellow)
- ♦ If the answers to all of those questions is YES and the injurie patient as MINIMAL (green)

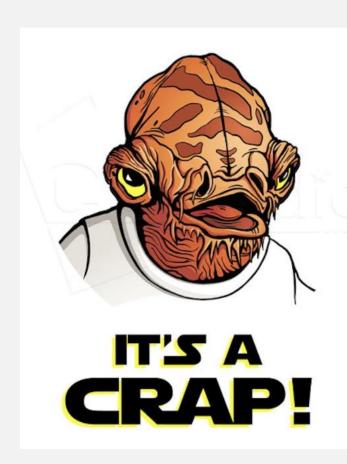


Dead

- ■Patient is not breathing after opening airway
 - ☐ In Children, consider giving two rescue breaths
 - ☐ If still not breathing must tag as dead
- ■Tag dead patients to prevent re-triage
- ■Do not move
 - ☐ Except to obtain access to live patients
 - ☐ Avoid destruction of evidence
- ■If breathing conduct the next assessment





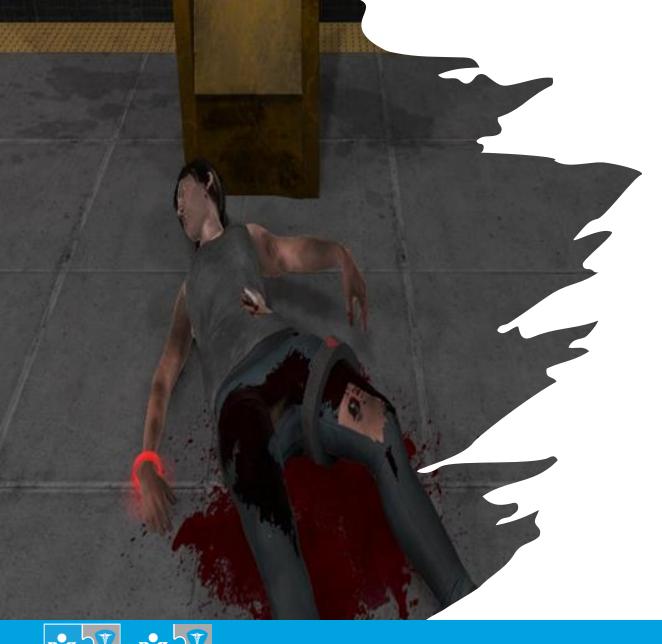


Step 2: Assessment

- ♦ A mnemonic for the four Assessment Questions is **CRAP**:
 - ♦ C Follows **Commands**
 - **♦** R No **Respiratory Distress**
 - ◆ A No (uncontrolled) **Arterial bleeding**
 - ♦ P Peripheral Puls







Immediate

- ■Serious injuries
- ■Immediately life threatening problems
- High potential for survival
- **■**Examples
 - ☐ Tension pneumothorax
 - ☐ Exposure to nerve agent
 - Severe shortness of breath or seizures





Immediate

- ■No to any of the following
 - ☐ Has a peripheral pulse?
 - Not in respiratory distress?
 - ☐ Hemorrhage is controlled?
 - ☐ Follows commands or makes purposeful movements?
- ■Likely to survive given available resources



Expectant

- ■No to any of the following
 - ☐ Has a peripheral pulse?
 - □Not in respiratory distress?
 - ☐ Hemorrhage is controlled?
 - ☐ Follows commands or makes purposeful movements?
- ■Unlikely to survive given available resources







Expectant

- ■DOES NOT MEAN DEAD!
- ■Important for preservation of resources
 - ☐ Should receive comfort care or resuscitation when resources are available
- ■Serious injuries
 - □Very poor survivability even with maximal care in hospital or pre-hospital setting
- **■**Examples
 - □90% body surface area burn
 - ☐ Multiple trauma with exposed brain matter





Delayed

■Serious injuries

☐ Require care but management can be delayed without increasing morbidity

or mortality

■Examples

☐ Long bone fractures

□40% BSA exposure to Mustard gas



Photo Source: Phillip L. Coule, MD (from SALT Triage https://www.ndlsf.org/salt)







Delayed

- ■Yes to all of the following
 - ☐ Has a peripheral pulse?
 - □Not in respiratory distress?
 - ☐ Hemorrhage is controlled?
 - ☐ Follows commands or makes purposeful movements?
- ■Injuries are **not** Minor and require care







Minimal

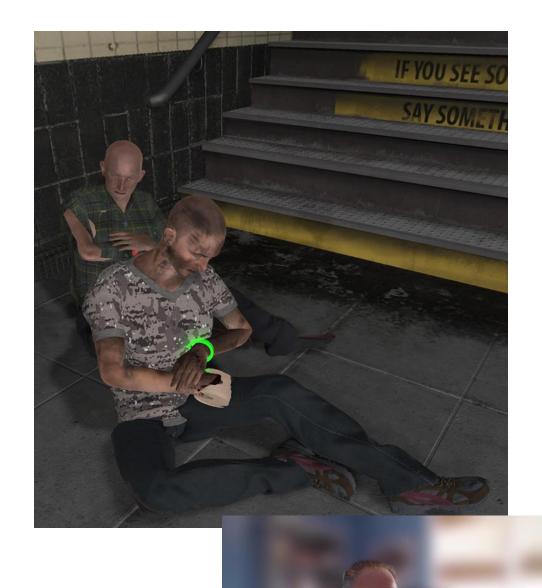
- **Yes** to **all** of the following
 - ☐ Has a peripheral pulse?
 - □Not in respiratory distress?
 - ☐ Hemorrhage is controlled?
 - ☐ Follows commands or makes purposeful movements?
- ■Injuries **are** Minor





Minimal

- ■Injuries require minor care or no care
- **■**Examples
 - Abrasions
 - ☐ Minor lacerations
 - ☐ Nerve agent exposure with mild runny nose







Transport

- ♦ Transport priority is determined in the Treatment Area or by the Transport Group
- ♦ Do not overload any hospital, regardless of transport distance to other hospitals.
 - ♦ In an MCI, many trauma patients will need to be transported to non-Trauma Centers.
 - ◆ All hospitals will accept and stabilize trauma patients during N



Ribbons, Tape, or Slap Wraps





Final Pearls

- SALT triage
 - Global sorting of patients using voice commands allows providers to start with the presumed sickest patients (not just the first person you come to!).
 - Life-saving interventions are considered **first** during individual assessment (Stop the Bleed).
 - Expectant category is included, but retriage is certainly necessary.
 - Assessment must not req timing vital signs and inst criteria.

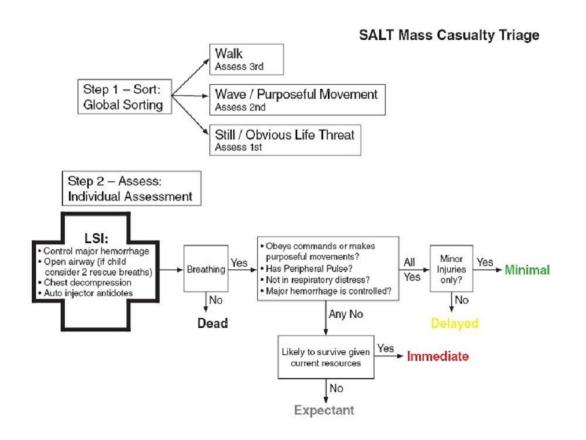
Use of SALT Triage in a Simulated Mass-Casualty Incident

E. Brooke Lerner, PhD, Richard B. Schwartz, MD, Phillip L. Coule, MD, Ronald G. Pirrallo, MD, MHSA





Thank You!



www.cotshealth.org/salt

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