
SALT Triage

Objectives

- Understand the SALT mass casualty triage method
 - Practice performing mass casualty triage using the SALT triage method
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What is Triage?

- French verb “trier” meaning “to sort”
- Assign priority when resources limited
 - Someone has to go last
- Greatest good for greatest number



Source: DoD Photo Library, Public Domain

Add it looks like this...









History of Triage

- Concept: Dominique Jean Larrey
 - Surgeon-in-chief Napoleon's Army
- 200 years later...
 - Dozens of systems
 - Many types of triage labels/tools
 - No standardization for mass casualty triage in United States



Development of SALT

- Part of CDC sponsored project
- Develop national standard for mass casualty triage
- Sort – Assess – Life Saving Interventions – Treatment/Transport
- Based upon best evidence
- Concept endorsed by: ACEP, ACS-COT, ATS, NAEMSP, NDLSEC, STIPDA

SALT Mass Casualty Triage

Step 1 – Sort:
Global Sorting

Walk
Assess 3rd

Wave / Purposeful Movement
Assess 2nd

Still / Obvious Life Threat
Assess 1st

Step 2 – Assess:
Individual Assessment

LSI:

- Control major hemorrhage
- Open airway (if child consider 2 rescue breaths)
- Chest decompression
- Auto injector antidotes

Breathing

Yes

No

Dead

- Obeys commands or makes purposeful movements?
- Has Peripheral Pulse?
- Not in respiratory distress?
- Major hemorrhage is controlled?

All
Yes

Minor
Injuries
only?

Yes

Minimal

No

Delayed

Any No

Likely to survive given
current resources

Yes

Immediate

No

Expectant

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Global Sorting: Action 1

■ **Action:**

- “Everyone who can hear me please move to [designated area] and we will help you”
 - Use loud speaker if available

■ **Goal:**

- Group ambulatory patients using voice commands

■ **Result:**

- Those who follow this command - last priority for individual assessment

Global Sorting: Action 2

■ **Action:**

- “If you need help, wave your arm or move your leg and we will be there to help you in a few minutes”

■ **Goal:**

- Identify non-ambulatory patients who can follow commands or make purposeful movements

■ **Result:**

- Those who follow this command - second priority for individual assessment

Global Sorting Result

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

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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

Immediate



Photo Source: www.swsahs.nsw.gov.au Public Domain

- 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

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



Photo source: Phillip L. Coule, MD

After Patients are Categorized

- Prioritization process is dynamic
 - Patient conditions change
 - Correct misses
 - Resources change
-

Case Study

- Multiple GSW at Local Sporting Event
 - You and partner respond (one ambulance)
 - 8 casualties
 - The scene is safe and additional assistance has been requested
 - What do you do first:

Initial Sorting of Patients

- Walk
 - 2 patients
- Wave
 - 3 patients
- Still
 - 3 patients

Still

- 29 yr male **Immediate**
 - ❑ GSW left chest, radial pulse present, severe respiratory distress
- 8 yr female **Expectant**
 - ❑ GSW head (through and through), visible brain matter, respiratory rate of 4, radial pulse present
- 50 yr male **Dead**
 - ❑ GSW to abdomen, chest, and extremity, no movement or breathing

Waving

- 14 year male **DELAYED****
 - GSW right upper extremity, active massive hemorrhage, good pulses ****after tourniquet**
- 65 year male **IMMEDIATE**
 - severe chest pain, diaphoretic, obvious respiratory distress, no obvious GSW
- 22 year female **DELAYED**
 - GSW right lower extremity, good pulses, no active bleeding

Walked

- 29 yr male **Minimal**
 - Superficial GSW in the skin of left upper extremity

- 37 yr male **Delayed**
 - GSW left hand. Exposed muscle, tendon and bone fragments, peripheral pulse present

What next?

- Another ambulance arrives and transports 2 of your immediate patients
 - Your partner is providing care to the other immediate patient
 - What do you do next?
 - Re-assess
-

Summary

- SALT Triage
 - Global Sort
 - Individual Assessment
 - Life Saving interventions
 - Assign Category

Questions?

SALT Mass Casualty Triage

