



Disaster Triage



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NDMS Response Team Training Program

Background



- **NDMS resources are often summoned to provide medical support to a disaster event that has overwhelmed local, state or regional resources.**
- **Although similar in theory, different types of triage are practiced in the field.**



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Introduction

- **NDMS response team members need to understand the concept of triage as well as some common types of triage practiced.**
- **Team members may have to integrate into a triage system already being used, or in some cases perform an initial triage themselves.**



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Objectives

By the conclusion of this session, you should be able to:

- Recognize the similarities and differences between disaster triage and pre-hospital triage.
- Identify the stages of triage.
- Recognize the procedures of the S.T.A.R.T. and S.A.V.E. triage systems.



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Definition of Triage

Medical screening of patients to determine their relative priority for treatment; the separation of a large number of casualties, in military or civilian disaster medical care, into three groups...

Stedman's Concise Medical Dictionary for the Health Professions, 4th ed.



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Disaster Triage

- Multiple victims
- Multiple presentations
 - Trauma
 - Medical
- Normal endpoint not available
- Austere conditions
- Limited resources



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Pre-hospital versus Disaster Triage

Pre-hospital

- Multiple victims
- Additional resources available
- Medical infrastructure intact
- Transport to definitive care
- Single scene

Disaster

- Increased victims
- Limited medical resources
- Long scene times
- Reassessment needed
- Compartmentalized



From Benson, Koenig, Schultz

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Stages of Disaster Triage

• Immediate

- Local providers
- Follows pre-hospital model
- S. T. A. R. T.

• Secondary

- Disaster medical responders
- S. A. V. E.



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S. T. A. R. T.

Simple Triage And Rapid Treatment

- Developed by Newport Beach (CA) Fire and Marine Department
- One of several triage programs available
- Most common protocol used for triage
- Triage victims in less than 30 seconds
- Rapidly find Immediate patients



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S. T. A. R. T. Classifications

- **IMMEDIATE** (Red)
 - Altered RPM
- **DEAD** (Black)
 - Mortal wounds
 - Die despite medical attention
 - Dead when initially assessed
- **DELAYED** (Yellow)
 - Majority of victims
 - RPM "normal"
- **MINOR** (Green)
 - "Walking wounded"
 - May be tagged later



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S. T. A. R. T.

RPM

Primary observations to assess patients

Respiration

Perfusion

Mental Status



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S. T. A. R. T.

• Respiration

- Breathing

- Greater than 30 per minute = Immediate
- Less than 30 per minute = Continue assessment
- Not breathing = Quickly clear mouth and open airway
 - Breathing = Immediate
 - Need airway assistance = Immediate
 - Not breathing = Dead



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Triage Ribbons

- Ribbons
 - Roll
 - Pre-cut strips
- Same colors as tags
- Placed on victim after RPM
- May initially substitute for triage tag
- Supplement to tag



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S. T. A. R. T. Procedure

- Get up and walk!
 - Instruct those patients that can walk to move to a specified location (secondary triage)
 - Classify these patients as Minor
 - Do not force patients with pain on movement to walk
 - Remaining patients will need RPM check



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S. T. A. R. T. Procedure

- Begin where you stand
 - Move from starting point in a systematic manner
 - Stop at each victim and quickly assess RPM
 - **Maximum time** 1 minute per victim
 - Correct life-threatening airway problems
 - Tag patient
 - Move on!




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Transition Phase

- **After S. T. A. R. T. completed**
- **Move victims to secondary triage based on tagging**
 - Resource dependent
 - Safe secondary area available
 - May involve just grouping patients together at scene
 - Provide stabilizing care
 - Re-triage if condition changes




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Transition Phase

- **Transport**
 - If available
 - Where
 - Immediate first
 - Need methodology to track where victims are transported
 - Use triage tag number
 - Bar coding




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S. A. V. E.

Secondary Assessment of Victim Endpoint

- **Benson, Koenig, and Schultz**
 - Pre-hospital and Disaster Medicine, 11(2), 1996
- **Apply limited resources to gain most good**
- **Designed for catastrophic disasters**
- **Provide immediate on-scene care but transport significantly delayed (days)**



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S. A. V. E. Assumptions

- Local providers have triaged victims (S. T. A. R. T.)
- Limited medical and transport resources
- Prolonged evacuation to definitive care
- Patients may deteriorate because of transport delay



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S. A. V. E. Treatment Priority

$\frac{\text{Benefit expected}}{\text{Resources required}} (\text{Probability of survival}) = \text{Value}$



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S. A. V. E. Categories

- Those who will die regardless of care
- Those who will survive whether or not they receive care
- Those who will benefit from limited immediate field intervention



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S. A. V. E. Procedure

- Reassess patient based on S. T. A. R. T. triage
- Assign patients to areas
 - Observation
 - Those that will die
 - Periodic reassessment for improvement
 - Those not needing care
 - Provide basic care
 - Periodic reassessment
 - Treatment area
 - Treated in order of severity and resources



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S. A. V. E. Triage

- Based on two critical questions :
 - "What is victim's prognosis if minimal treatment is provided?"
 - "What is the victim's prognosis with treatment using resources available at the [treatment area]?"
- Morbidity/mortality reduced with treatment
- Do not need inordinate amount of resources



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S. A. V. E. Treatment

- Patients triaged to treatment area are treated in priority according to severity, resources, and time.
- If patient does not respond to treatment, re-tag and send to observation area.
- Patients who would benefit most from early transport should be so designated in the event transport becomes available.



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Summary

- Although similar in theory, different types of triage are practiced in the field.
- Team members may have to integrate into a triage system already being used, or in some cases perform an initial triage themselves.



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Summary

- **S. T. A. R. T.**
 - **Simple Triage And Rapid Treatment**
 - Respiration, Perfusion, Mental Status
 - **Triage Classifications**
 - **IMMEDIATE** (Red)
 - Altered RPM
 - **DELAYED** (Yellow)
 - Majority of victims, RPM "normal"
 - **MINOR** (Green)
 - "Walking wounded", may be tagged later
 - **DEAD** (Black)
 - Mortal wounds, die despite medical attention, dead when initially assessed



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Summary

- **S. A. V. E.**
 - **Secondary Assessment of Victim Endpoint**
 - **Based on two critical questions :**
 - "What is victim's prognosis if minimal treatment is provided?"
 - "What is the victim's prognosis with treatment using resources available at the treatment area?"



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