Triage!

Mass Casualty Triage

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Objectives

- Define and discuss the purposes and use of triage
- State the 4 Triage Categories
- Compare and Contrast Primary vs Secondary Triage
- Discuss the differences between “START” and “JumpSTART” Triage
Every Disaster is Unique in its:

- Type
- Magnitude & Scope
- Geographic Area
- Number of Victims
- Ages of Victims: Adults vs. Peds
- Types of Injuries
- Damage to Infrastructure
Every Incident is Different!
Every Disaster is Unique!
Unique in the Number of Victims...

Types of Victims

Ages of Victims
Unique in the ... Damage to Infrastructure
and the...Mechanism of Injury
Triage

Triage comes from the French verb “trier”, which means to separate, sift, or select.
“Triage”

“The process of sorting patients and allocating aid on the basis of need for or likely benefit from medical treatment”

Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations
National Academy of Sciences
Goal of Triage

To Tag & Sort
MCI Triage

Multicasualty incident (MCI) triage Differs from Every Day Triage!
Normally – we do the **Best** for each individual

In a Disaster – we do the greatest Good for the **Greatest** Number
Overall MCI Goals

Rapid Initial Survey

‘Situational Intel’

A. Provider Safety

B. Organize the Scene
Overall MCI Goals

Designate those to be transported first

a. Anticipate
b. Communicate ... with evacuation Personnel

Quickly move patients to:

* Local Hospital
* Another County
* Another State
Primary Triage - the first triage of patients into the medical system, often occurs in the field!

- Ribbons

Secondary Triage - a Reevaluation of patient’s condition...initiate treatment...may determine patient’s priority for transport

- Triage Tags – scribes & assistants

Tertiary Triage - evaluates patient’s response to treatments and is ongoing.
Primary Triage

Triage Ribbons

- Appropriate for the Field
- FAST
- Easily Changeable
- Waterproof
Geographic Triage: Medical Treatment Areas

After your initial sorting with the Ribbons:

1. Move everyone to colored Tarps
2. Re-Triage – using the Triage Tags this time
3. Begin Treatment
4. Re-Triage
   Re-Triage
   Re-Triage

It’s an on-going process!
Triage Tags

Available at our: Hospitals, Fire Departments, All Ambulance Units – Public and Private
Triage Tags

- Secondary Triage
- Appropriate for field use
- Time consuming
- Difficult to attach
- Scribe
- Pt Tracking
Triage Systems:

Physiologically Based!!!

1. START – “Adults”

2. JumpSTART – Peds < 8 yo

“Patients that are unable to Physiologically compensate for their injuries are assigned to a higher priority”

-Lou Romig, MD
START Triage

“Simple Triage and Rapid Treatment”

- Most commonly used system for handling multicasualty emergencies in the US
- Developed by the Newport Beach Fire & Marine Departments and Hoag Hospital in Orange County – early 1980’s
- Based on the NATO triage classification system
START – Simple Triage & Rapid Treatment

- Uses physiological parameters
- 60 seconds: START is designed to complete pt assessment within 60 seconds or less
- Goal is to ID pts with Immediate Medical needs
- Each pt assigned to one of 4 colors: red, yellow, green, black
JumpSTART

- For Peds – was developed in 1995
- Parallels the structure of START
- Specifically designed for children, taking into consideration their unique physiology
- 1st objective tool developed to triage children in the multicasualty / disaster setting
- Each pt is also assigned to one of 4 colors: red, yellow, green, black
JumpSTART…

Is an Objective tool which allows:

- Rapid triage, specifically designed for children, taking into consideration their unique physiology.
- Reduces the emotional burden on triage personnel who may have to make rapid life-or-death decisions about injured children in chaotic circumstances.

Jump START is NOT:

- It has not been clinically or scientifically validated with data from actual MCI victims.
- May not be appropriate for children with medical illnesses in a disaster setting.
- Not designed for use in daily EMS or hospital triage.
Which one to use?

If a victim **appears** to be a child, use JumpSTART

If a victim **appears** to be a young adult, use START
4 Colors of Triage

Red – Immediate - Life Threatening Injury
Red – Immediate - Life Threatening Injury

Yellow – Delayed – Serious, non-life threatening Injury

Green – Minor – Walking Wounded
Green – Minor – Walking Wounded

Black – Deceased – Pulseless and non-breathing
Separate the Ambulatory

If you Hear the Sound of my Voice, Walk this Way
Ambulatory – “Minor” Adult Patient

Respirations = 25 Breaths per Minute
Pulse = Palpable
Follows Commands
“If you Hear the Sound of my Voice, Walk this Way”

“If you Hear the Sound of my Voice, Walk this Way”

**Ambulatory Pts** – tagged “minor” and no further assessment until seriously injured patients are treated!

- There are Few Exceptions.....
An Exception…

Any child that is carried by an ambulatory parent, or Adult, must be immediately assessed to determine if they are truly a “Minor” patient … they may actually be an Immediate, or a Delayed!
Additional exceptions...

- Baby / Toddler in the Parent’s arms
- 1. Hearing Impaired
  - Hearing device
  - Bomb Blast Victim
- 2. AFN patient
  - Alzheimer’s
  - Dementia, etc.

These patients all need a separate evaluation to verify their “Category”
Consider our Cultural Diversity

What if the victim does not speak or understand English??
Other languages are spoken in Los Angeles County!!!
Separate the Immediate vs Delayed Using “30-2-Can Do”

After separating out the Minor- Ambulatory patients… determine the Red vs the Yellow:

Based on the … RPM ….

a. Respiratory Rate
b. Capillary Refill / Radial Pulse
c. Mental Status / Obey Commands

“30 – 2 – Can Do”
30 - 2 - “Can Do”

R - 30  
Adult Respirations 30 or less

P - 2  
Capillary Refill at 2 seconds or less

M - Can Do  
Adult Mental Status- Can follow simple commands

“If it’s PEDs, use AVPU”
A - Alert to ...
V - Voice
P - Responsive to Pain
U - Unresponsive!
Respirations

30

If the Adult patient is breathing at

> 30 BPM = RED - tag and move on!

If the Adult patient is breathing at 30 BPM or less…continue the assessment!
Capillary Refill

2. Check the Capillary refill at the Nail Bed … if the capillary refill is MORE than 2 seconds, tie a Red Ribbon = “IMMEDIATE”

Stop triaging…Move on to the Next patient!
Yes, Can Do!

*Can the patient follow a simple command?*

If so, Yellow Tag them as ‘Delayed’ b/c they were non-ambulatory.

If No – they **cannot** follow commands, tie a RED Ribbon, stop triaging and Move on the Next Patient.
START – Simple Triage & Rapid Treatment

START only allows for two interventions to be made during the triage process:

1. Direct pressure – for bleeding control
   * preferably applied by a Bystander or another victim

2. Basic airway opening maneuvers

Repeat assessments often – patient’s condition may change!
START – Simple Triage & Rapid Treatment

Triage the remaining victims based on “RPM” – respirations, pulse, mental status

1. No spontaneous respirations –
   A. Reposition airway
      Remains Apneic = Black Tag

2. Respirations > 30 breaths/minute = Red Tag

3. If Cap Refill > 2 sec = Red Tag

4. Cannot Follow Simple Commands = Red Tag

30 - 2 - ‘Can Do’
JumpSTART – Triage children < 8 yo

* developed by Romig – 1995, modified 2001

* respiratory arrest more likely in the Peds pt

* if child has a pulse, but is not breathing...

  A. Reposition the Airway

  B. Give 5 Rescue Breaths

  Still not breathing – label Black

  Breathing Present – label Red
START vs Jump START

**START**
- Adults
  - $R < 30$
  - 2 sec
  - "Can Do"

**Jump START**
- Peds
  - $15 < R < 45$
  - Palpable Pulse
  - AVPU
Pediatric Assessment Triangle

General Impression
(First View of Patient)

Airway & Appearance
(Open/Clear – Muscle Tone/Body Position)

Work of Breathing
(Visible Movement/Respiratory Effort)

Circulation to Skin
(Color/Obvious Bleeding)

American Academy of Pediatrics
Triage of Pediatric Disaster Patients

Minor Acuity

**START**
- Respiratory, Perfusion, Mental Status within Normal Parameters
- Able to Ambulate
  - (use Pediatric Assessment Triangle for those with limitations)
- Minor External Injuries

**JumpSTART**
Triage of Pediatric Disaster Patients

Immediate Acuity

START
- Requires Airway Opening
- RR > 30
- Cap Refill > 2 sec
- Unable to Follow Commands

JumpSTART
- Requires 5 Rescue Breaths
- RR < 15 or > 45
- No Palpable Pulse
- Inappropriate Pain Response

June 25, 2016
Triage of Pediatric Disaster Patients

**Expectant**

- Unable to Ambulate
- Injuries Clearly Incompatible with Survival
- Apneic After Opening Airway
- Apneic After 5 Rescue Breaths

*Always reassess after immediate & delayed patients have been triaged and critical interventions are completed. Decision to terminate efforts must be based on overall situation and resources.*
Prioritize Patient Triage

• Triage unresponsive or actively bleeding patients first
• Triage those with other abnormal findings next
• Triage ambulating and/or responsive, normal appearing victims last
Remember...Triage...

- Determines Priorities

- The Primary Goal => Tag & Sort

Tag & Sort
Tag & Sort
Don’t Forget …

- Consider Patient Tracking issues
- Utilize the Walking Wounded

R 30
P 2
M Can Do

Re-triage * Re-triage * Re-triage
Call for Assistance Early!!!

- Call 911
- Call the M. A. C.
- Volunteers – DHV
  (3 days or more to Mobilize)

- Trauma Centers
- Disaster Resource Centers (DRC’s)
- MOU’s with neighboring counties
- Ambulance Strike Teams
- Pediatric & Burn Surge Policies
- Mass Med Care Plan
- Mass Fatality Plan
For now… Work as a Team!
Conclusions

• Remember…It’s not If, but When…

• Preparation for **Mass Casualty Events** and Natural Disasters benefits and strengthens our Health Care System

Stay Informed
Get Prepared
Work as a Team
“Web-based Pediatric Disaster Triage Learning Platform”

http://surgeworld.lachildrenshospital.net
a.k.a. .... A Video Game!!!!

http://surge-world.lachildrenshospital.net

Look for the Training Module first
Questions?

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References


LouRomig @ jumpstarttriage.com


Video footage courtesy of #Thebabygang