Disaster Triage
START/JUMPSTART

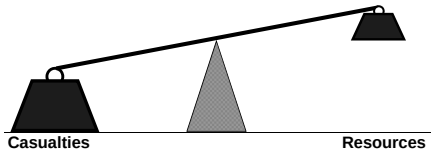
Finger Lakes Regional Training Center

Objectives:

- Define a Mass Casualty Incident and the unique challenges of an MCI
- Understand the differences between day-to-day triage and triage during an MCI
- Increase the region's healthcare providers' awareness of disaster triage

What is the Goal of MCI Management?

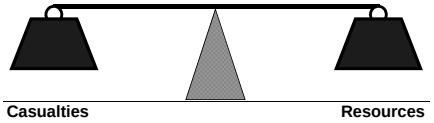
The Problem



Considerations During an MCI Response

- Supply vs. Demand
- Resource Allocation
- Coordination
- Medical Management
- Ethics

The Objective



What Could Be an MCI For You?

- Transportation Accident
- Fire
- Hospital Overloading
- Hospital Evacuation


February 2008: 390 Pile Up


January 2005: 390 Bus Accident

What Could Be an MCI For You?

- Sporting Event
- Hazmat Incident
- Loss of Power
- Severe Weather


Watkins Glen Speedway

Managing Mass Casualty Incidents

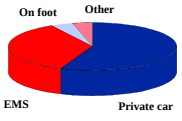
- Would any of those situations lead to shortage of personnel & equipment resources?
- Would decisions and changes need to be made in how you do business?
  - Altered Standards of Care

Hospital Considerations

- Transition from the EMS patient to hospital patient
- Dealing with self presenting patients

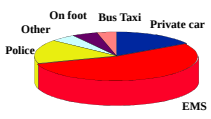
Transportation Distribution

Patient transport - Oklahoma Bombing



Injury prevention database, OK Dept of Health

Patient Transport - 29 US Disasters



Quarantelli, Delivery of Emergency Services in Disasters, Assumptions and Realities

BALI NIGHT CLUB BOMBING

”As bad as the scene was 20 minutes after the blast, it only got worse. Patients who could self-evacuate generally had relatively minor injuries. They arrived on foot, by taxi and by motorcycle, and they were treated as they came in”.

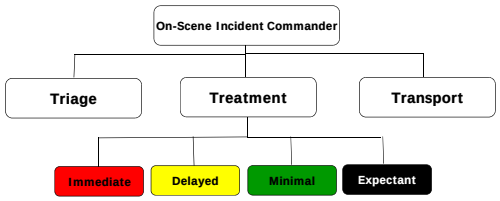
“But then the ambulances started to arrive with the most serious patients—the burn victims”.

October 12, 2002

“By then, though, the operating rooms were completely full. They had to wait”.

Dr. Tjakra Wibawa
Sanglah Trauma Center

Incident Command System



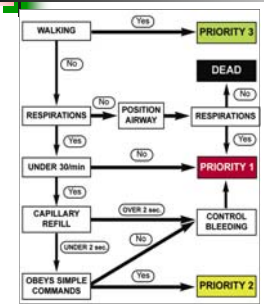
Disaster Triage

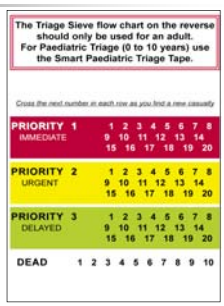
START/JUMPSTART

Types of Triage

- ***Primary***
  - On scene prior to movement or at hospital (self transports)
- ***Secondary***
  - Incident dependent, probably prior to or during transport or upon arrival to hospital

Triage Protocol (START)





Triage Coding

Priority	Treatment	Color
Immediate	1	RED
Urgent	2	Yellow
Delayed	3	Green
Dead	0	Black

Primary Triage

The Scene

Primary Triage

The first attempt at balancing resources and casualties/injured

PRIORITY 3

- Not injured or “Walking wounded”
- Have motor, respiratory, mental function

DELAYED

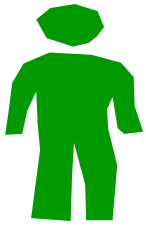
Example

Patient walks over to you and has an obvious broken arm

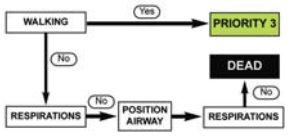
Respirations are 22

Pulse is 124 (Radial)

He is awake, alert, and crying

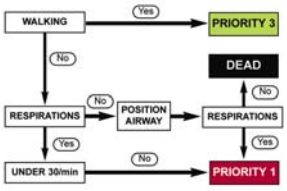


Primary Triage



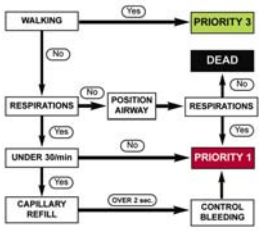
Determining whether there is an airway and breathing

Primary Triage



If breathing, at what rate & is it good enough?

Primary Triage



They have an airway, are breathing.

Are they circulating blood sufficiently?

Circulatory Check...

If you are unable to obtain a capillary refill, check the radial pulse. If absent then control any bleeding and prioritize the patient **PRIORITY 1**.

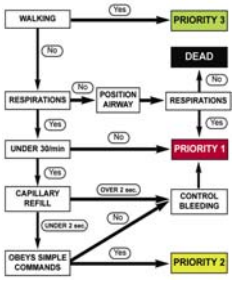
Primary Triage

A

B

C

Mental Status



PRIORITY 1

- Opening airway, starts to breathe
- Breathing is greater than 30 or less than 10
- Delayed capillary refill time (> 2 seconds)
- Absent radial pulses
- Bleeding that needs to be controlled
- Does not follow instructions

Immediate

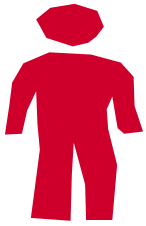
Example

Patient has an open head
Wound, bleeding controlled

Respirations are 16

Pulse is 88 (Radial)

He is unconscious



PRIORITY 2

- Did not move out, when asked
- Airway OK
- Breathing within 11 and 29
- Capillary refill less than 2 seconds or radial pulses present
- Can follow instructions to move unaffected limb

Urgent

Example

Patient states he can't move or feel his legs

Respirations are 26

Pulse is 110 (Radial)

He is awake and oriented

EXPECTANT/DEAD

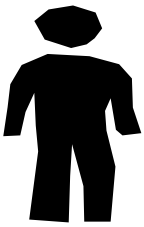
- Still require resources
- Focus of care is comfort
- Psychologically most challenging for healthcare providers

Examples

Patient gurgles but can't maintain an open airway and Is not breathing

Weak Carotid Pulse

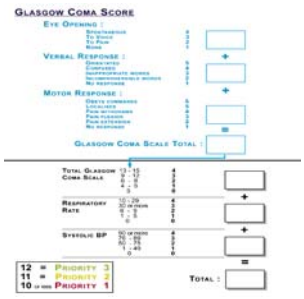
She is unresponsive



Secondary Triage

- Generally used when there is an extended duration event
- After initial color coding triage
- Healthcare professionals who respond to the scene or PH/Hospital response teams may be utilized to further determine who gets transported from scene first

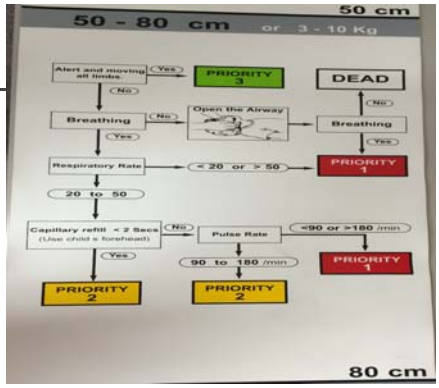
Secondary Triage



Pediatric Triage

- Children are involved in mass casualty incidents
- The over prioritizing of children will take valuable resources away from more seriously injured adults
- Triage systems based on adult physiology will not provide accurate triage

The SMART Tape ™



SMART Tag Triage System

SMART Triage Pack Contents

- Dynamic Tags (20)
- Dead Tags (10)
- Pencils
- Cylume Sticks
- Patient Count Card/Protocol
- SMART Pediatric Tape

Scenarios

Scenario #1

An improvised explosive device is detonated at a large outdoor sporting event. At least 50 people are confirmed injured. EMS is on scene, but patients begin to arrive at your hospital before EMS.

Triage and “Tag” the following patients.

Patient #1

Apneic

Pulse-less

Missing LUE

Patient #2

RR 4

Absent Radial pulse

Brain matter exposed

Unresponsive to tactile stimuli

Patient #3

Abd. Tenderness and minor penetrating trauma

Ambulating

A & O x 3

RR 24

Strong radial pulse

Patient #4

Multiple penetrating injuries, blood in ears

RR 20

Airway clear

Strong Radial pulse

Responds only to pain

Patient #5

Extremity fractures, blood in ears

Unable to walk

A & O x 3

RR 26

Strong radial pulse

Patient #6

Small child, screaming

Minor lacs, blood in ears

RR 30

Moving all extremities

Patient #7

Amputated fingers
Walking
A & O x 3
Dizzy
RR 24
Smells like beer

Patient #8

Sitting
Chest pain, SOB
No trauma noted
RR 34
Shallow
Weak radial pulse

Patient #9

Blood in nose,
mouth and ears
Not breathing

Patient #9

Blood in nose, mouth and ears

Not breathing

What would you do?

Patient #10

Some penetrating trauma

Unresponsive

Apneic

No radial pulse

Patient #11

Arterial bleed from leg

RR 34

No radial pulse

Responsive to pain

Patient #12

Ambulatory
Minor lacs
Crying
RR 24

Patient #13

Not walking
Deviate trachea
RR 40
Weak radial pulse
+JVD
Cyanosis

Patient #14

Open fracture of RUE
Non-ambulatory
RR 26
Strong radial pulse
A & O x 3

Patient #15

Lying on the ground
RR 36
Coughing
Strong radial pulse
A & O x 2
100% TBS burns
(partial and full)

Patient #16

Unable to stand
RR 24
Strong radial pulse
A & O x 1
Slurred speech
R sided weakness

Patient #17

Lying on the ground
RR 30
Avulsion RUE
Arterial bleed
A & O x 2
“I’m thirsty”

Patient #18

Open fractures BLE
RR 28
Strong radial pulse
A & O x 3
Blood in ears

Patient #19

Standing, hysterical & screaming
RR 36
Strong radial pulse
A & O x 3
Blood in ears

Patient #20

Child
Cyanotic from nipple line up
Apneic
No brachial pulse

What is the goal of **Disaster Triage** training?

- Increase familiarity/proficiency of the START and Jump START triage methodologies
- Increase familiarity with the SMART Tag Triage System
- Train with a standardized methodology and system

Questions?? Thank You!

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