

Mass Casualty Incident Triage

- 6 to 8 Hour Course
- 4 Modules
- Classroom Exercises

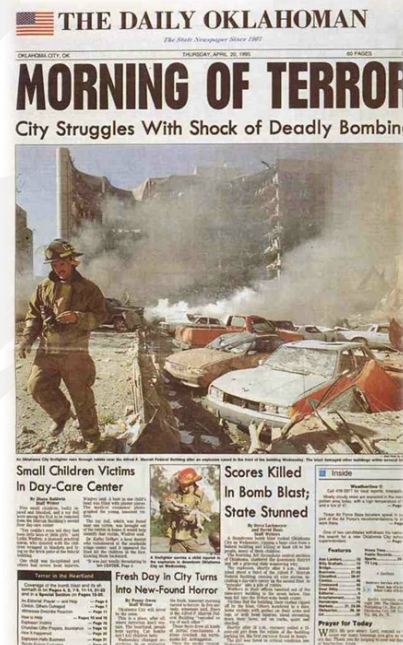


Module 1

Introduction to MCI and Lessons Learned

- Case Studies:
 - Gettysburg
 - WTC Bombing (1993)
 - Oklahoma City Bombing
 - Local Events
- University of Delaware & Ohio State Study
- Three P's of MCI Preparedness:
 - Participation
 - Planning
 - Practice

Module 1: Mass Casualty Incident Triage and Lessons Learned



Module 2

Mass Decontamination

- The Need for Mass Decon
- Case Studies:
 - Tokyo Subway Incident
- Decon Corridor Video
- 5 Steps for Mass Decon:
 1. Size Up
 2. Decon Triage
 3. Decon Setup
 4. Performing Decon
 5. Post Decon

Module 2: Mass Decontamination



Module 3

Medical Branch at Mass Casualty Incidents

- The ICS System
- Triage
- Treatment
- Transportation

Time / Volume Relationship Exercise

Module 3: Medical Branch at Mass Casualty Incidents



**Time/Volume Relationship Formula
Exercise**

Using the Time/Volume Relationship Formula, answer the following 3 questions.

1. Calculate the number of emergency transport units needed (X) at a mass-casualty incident involving 50 total patients (N). The required transportation time (T) is 60 minutes with each unit transporting 2 patients per trip (a). The round trip transport time (t) is 40 minutes.

$$X = Nt / Ta$$
$$X = \frac{\text{number of patients} \times (\text{round trip transport time})}{(\text{required transport time}) \times (\text{number of patients per trip})}$$

Number of emergency Transports needed _____

2. Based on 2 patients per trip during the required 60 minute transportation time, determine how many of the 50 patients requiring emergency transportation can be transported by an EMS agency with 17 transport units available.

$$N = XTa / t$$
$$N = (X \cdot T \cdot a) / t$$
$$N = \frac{(\text{transport units}) \times (\text{required transport time}) \times (\text{patients per trip})}{(\text{Round trip transportation time})}$$

Number of patients transported _____

3. Determine the total amount of time to transport 50 patients, based on 2 patients per trip. There are 17 transport units available and the round trip transport time is 40 minutes.

$$T = Nt / aX$$
$$T = \frac{N \cdot t}{a \cdot X}$$

_____ number of patients x _____ round trip transport time)
_____ # patients per trip) x _____ number transport units)
_____ Total time required to transport

Module 4

Triage

- Lessons Learned form Disasters
- S.T.A.R.T & JumpS.T.A.R.T Triage Method
- Mass Casualty Exercise (PowerPoint)
- Triage Tags
- Chemical Triage* (HazMat Teams)
- Bear-ville Express Exercise (Hands-On)

Module 4: TRIAGE



Personal Property Receipt/
Evidence Tag

Destination _____
Via _____

TRIAGE TAG

S L U D G E M
Solution Location Limb/limbs Dehydration D.I. Address Enrole Mosaic

AUTO INJECTOR 1 2 3 4 5

Yes No Primary Doses
Yes No Secondary Doses

Solution

Blank Trauma
Burn
C-Spine
Cataract
Crushing
Fracture
Laceration
Penetrating Injury

Age _____
 Male Female

Other: _____

VITAL SIGNS

| Time | B/P | Pulse | Respiration |
|------|-----|-------|-------------|
| | | | |
| | | | |

Time _____ Drug Solution _____ z _____ Dose _____

MORGUE

| IMMEDIATE | IMMEDIATE |
|-----------|-----------|
| | |
| DELAYED | DELAYED |
| | |
| MINOR | MINOR |
| | |

CONTAMINATED

EVIDENCE

Bearville Exercise

Equipment:

- Toy Bears with RPM information
- Live Victims for Walking Wounded*
- Triage Tags & Triage Ribbon
- Triage Colored Mats
- Flashlights
- Emergency Lights
- Sound Effects

Incident on the Bear-ville Express



Incident Scenario

On Saturday September 11, 2012 the Bear-ville Express was headed to New York City, when it was attacked by an unknown male. The man walked into a crowded coach car and released a mysterious chemical causing a large vapor cloud to form in the car. The conductor immediately pulled the "Emergency" train brake lever. The sudden stopping motion of the train threw several people from their seats injuring them. Other people escaping the car began to exhibit signs such as; sweating, eyes tearing, vomiting, salivating and some were having seizures. One passenger was able to call 911 and report the accident before he passed out.

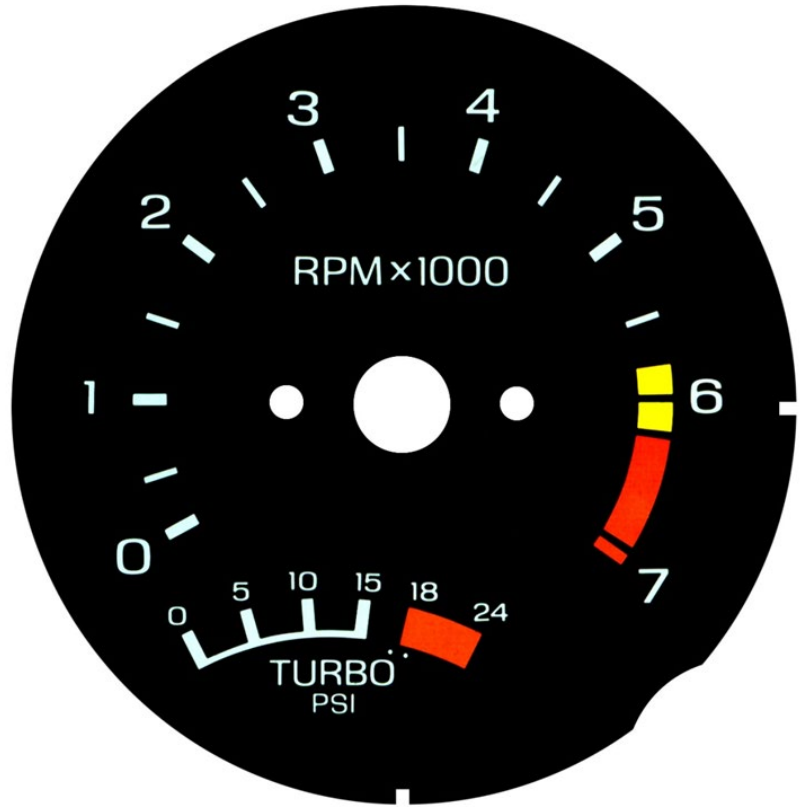
The scene is safe and you are wearing the proper PPE, triage all the victims. After you complete your triage process, report the number and triage categories to your Triage Unit Leader.



Simple Triage and Rapid Treatment

S.T.A.R.T





START Triage

- **R**espiratory Rate
- **P**erfusion
- **M**ental Status

Respiratory Rate

Over 30
Immediate

Under 30
R → PM

Not present after
repositioning head
Dead

Perfusion: Capillary Refill

Capillary Refill > 2 seconds

Immediate

Capillary Refill < 2 seconds

RP → M



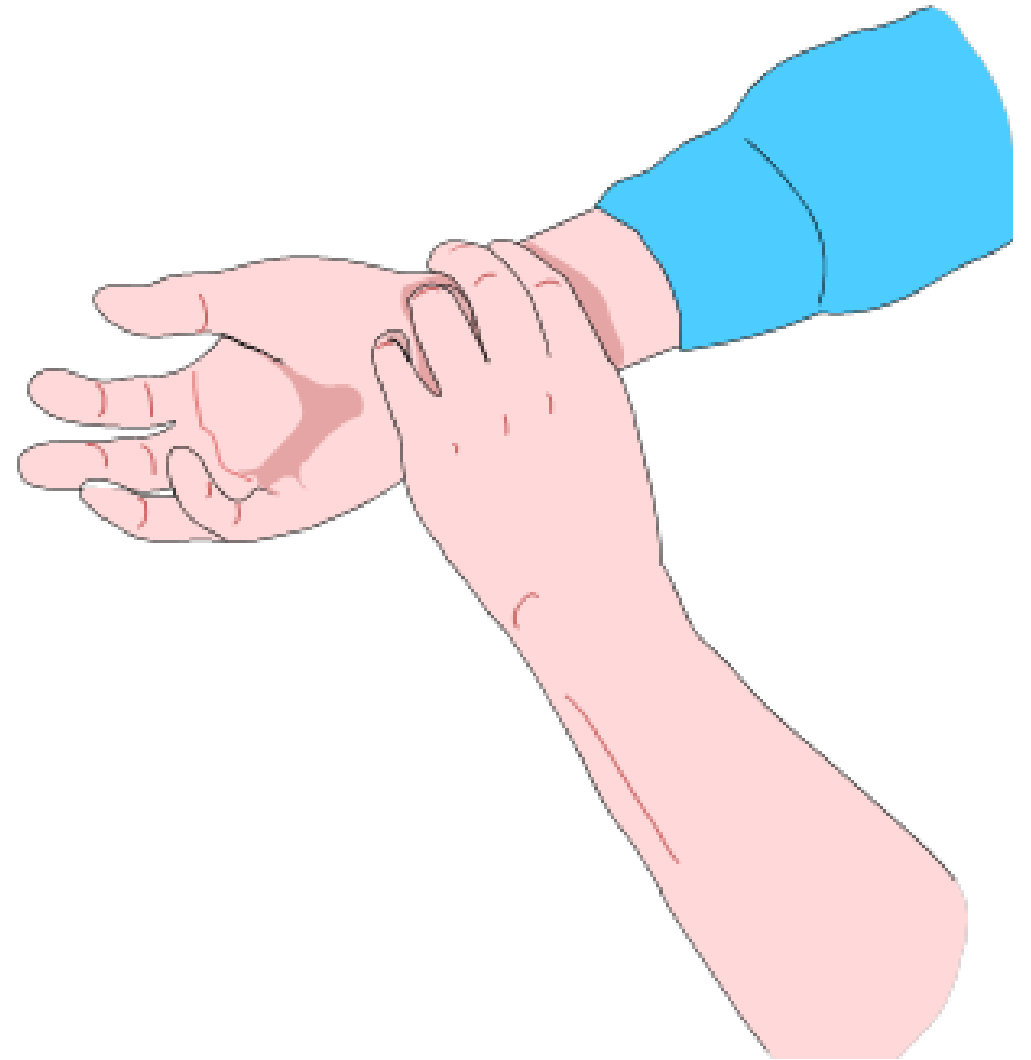
Perfusion: Radial Pulse

Radial pulse not present

Immediate

Radial pulse present

RP → M



Mental Status



Unable to respond appropriately

Immediate

Responds appropriately

Delayed

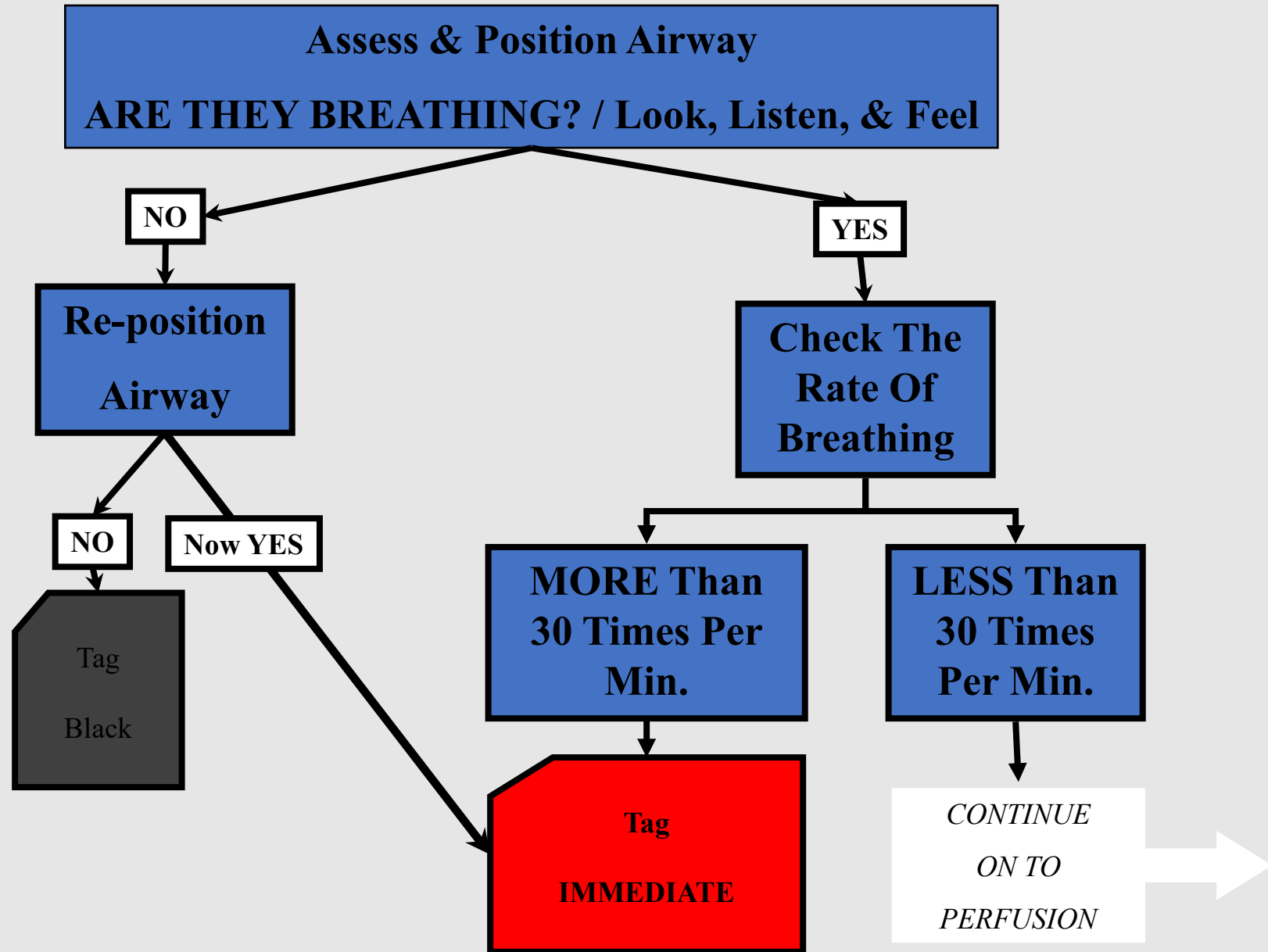
Respond to questions:
Person, Place, and Time

Walking Wounded

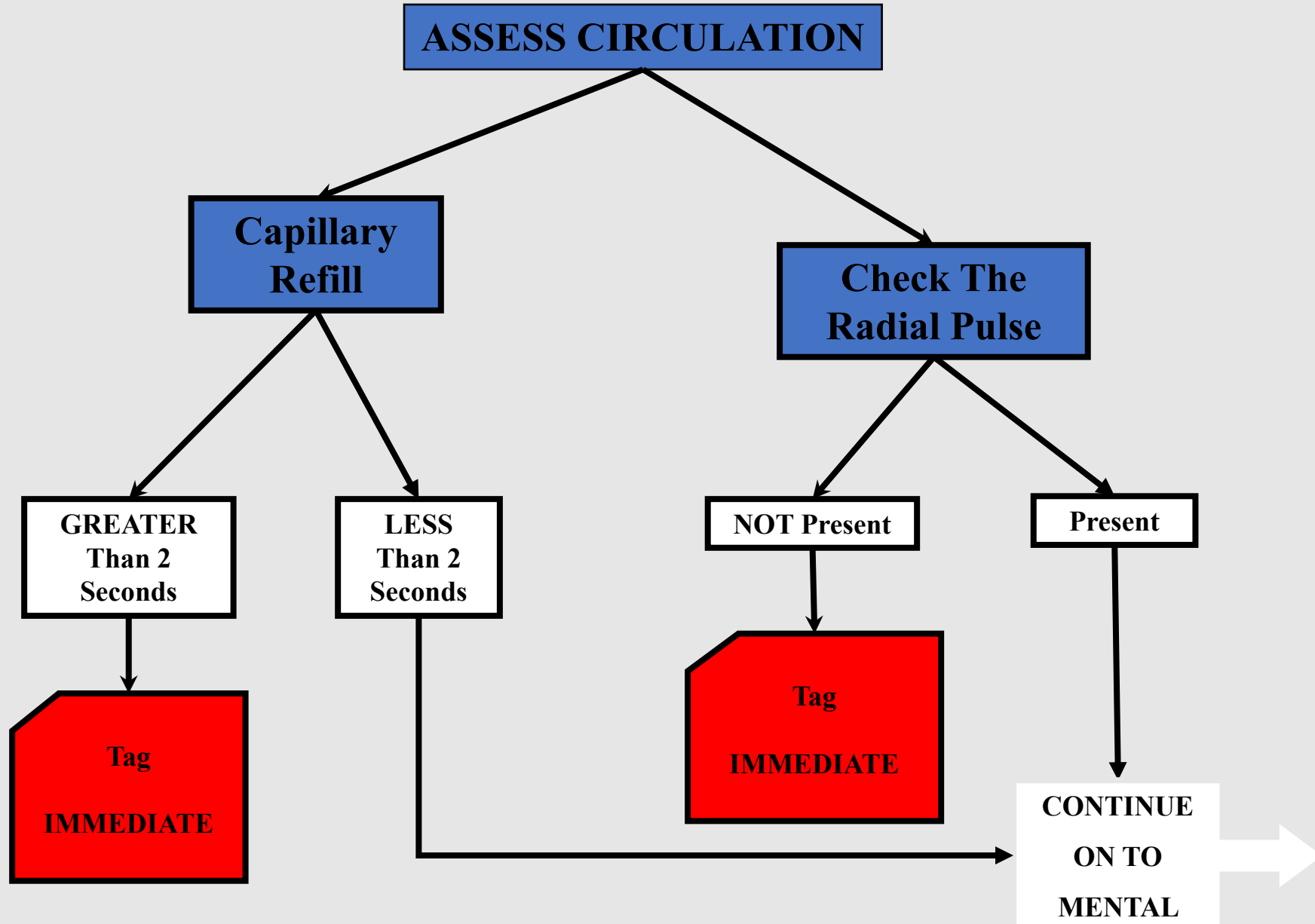


- Have ambulatory come to you
- Tell them what to do and where to go
- Make sure they do not leave the scene

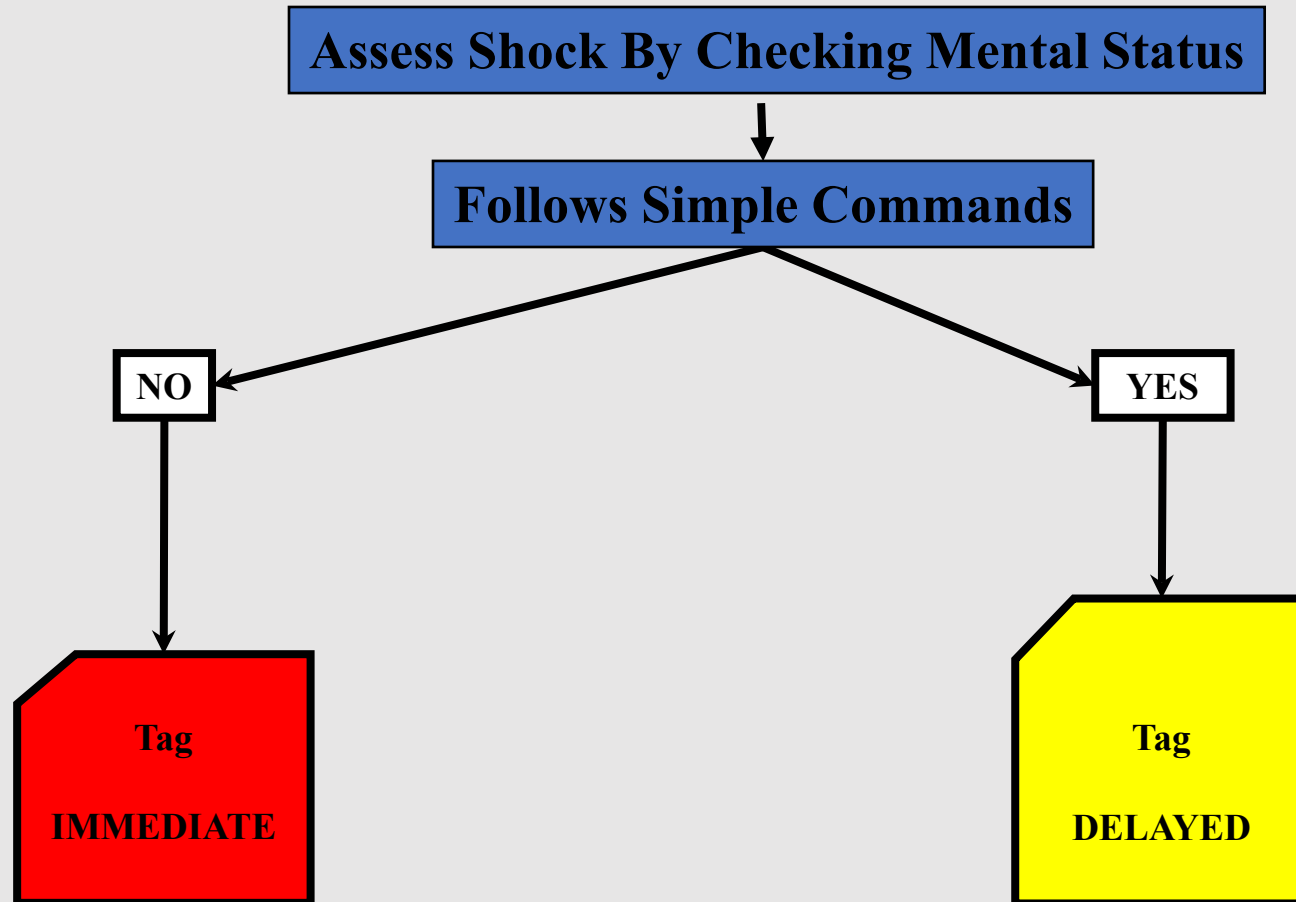
Respiratory Rate



Perfusion



Mental Status

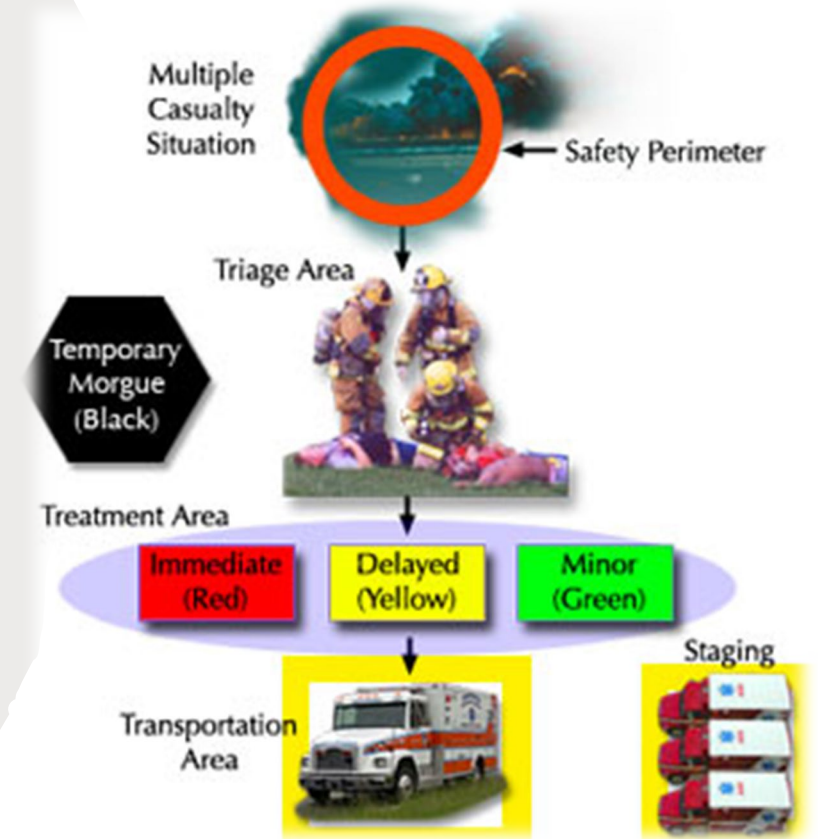


Remember To
Assess The
MINOR
Injured
"The Walking
Wounded"



Mass Casualty Exercise 1

- Your partner assumes Incident Command while you begin triage operations.
- Triage the next 5 patients
- Remember - RPM



Patient states he can't move or feel his legs

Respirations are 26

Pulse is 110 (Radial)

He is awake and oriented

What Triage Category?

TRIAGE TAG

1234567

S L U D G E M
Salivation Lacrimation Urination Defecation G.I. Distress Emesis Miosis

AUTO INJECTOR 1 2 3 4 5

Yes No Gross Decon
Yes No Secondary Decon

Solution

Blunt Trauma
Burn
C-Spine
Cardiac
Crushing
Fracture
Laceration
Penetrating Injury

Age _____
 Male Female

Other: _____

VITAL SIGNS

| Time | B/P | Pulse | Respiration |
|------|-----|-------|-------------|
| | | | |
| | | | |
| | | | |

| Time | Drug Solution | Dose |
|------|---------------|------|
| | | |
| | | |
| | | |

MORGUE

IMMEDIATE *1234567*

IMMEDIATE *1234567*

DELAYED *1234567*



Patient Accountability

TRIAGE TAG *1234567*

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Other: _____

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|------|-----|-------|-------------|
| | | | |
| | | | |
| | | | |

| Time | Drug Solution | Dose |
|------|---------------|------|
| | | |
| | | |
| | | |

MORGUE

| | |
|-------------------------------|-------------------------------|
| IMMEDIATE *1234567* | IMMEDIATE *1234567* |
| DELAYED *1234567* | DELAYED *1234567* |
| MINOR *1234567* | |

TRIAGE TAG *1234567*

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MORGUE

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|-------------------------------|-------------------------------|
| IMMEDIATE *1234567* | IMMEDIATE *1234567* |
| DELAYED *1234567* | |

TRIAGE TAG *1234567*

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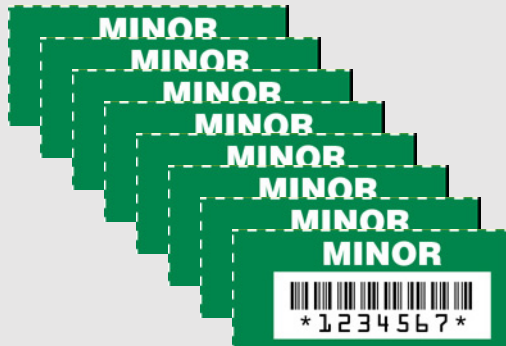
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| | | | |
| | | | |
| | | | |

| Time | Drug Solution | Dose |
|------|---------------|------|
| | | |
| | | |
| | | |

MORGUE

| |
|-------------------------------|
| IMMEDIATE *1234567* |
|-------------------------------|



Incident on the Bear-ville Express

