# Welcome to

# Triage Online!

# Disaster Management EHS

This online version is for the convenience of those responders who need to recertify in Triage or who just want to review it.

As you are going through the material, pay particular attention to slides that present with this →

# MCI – Mass Casualty Incident

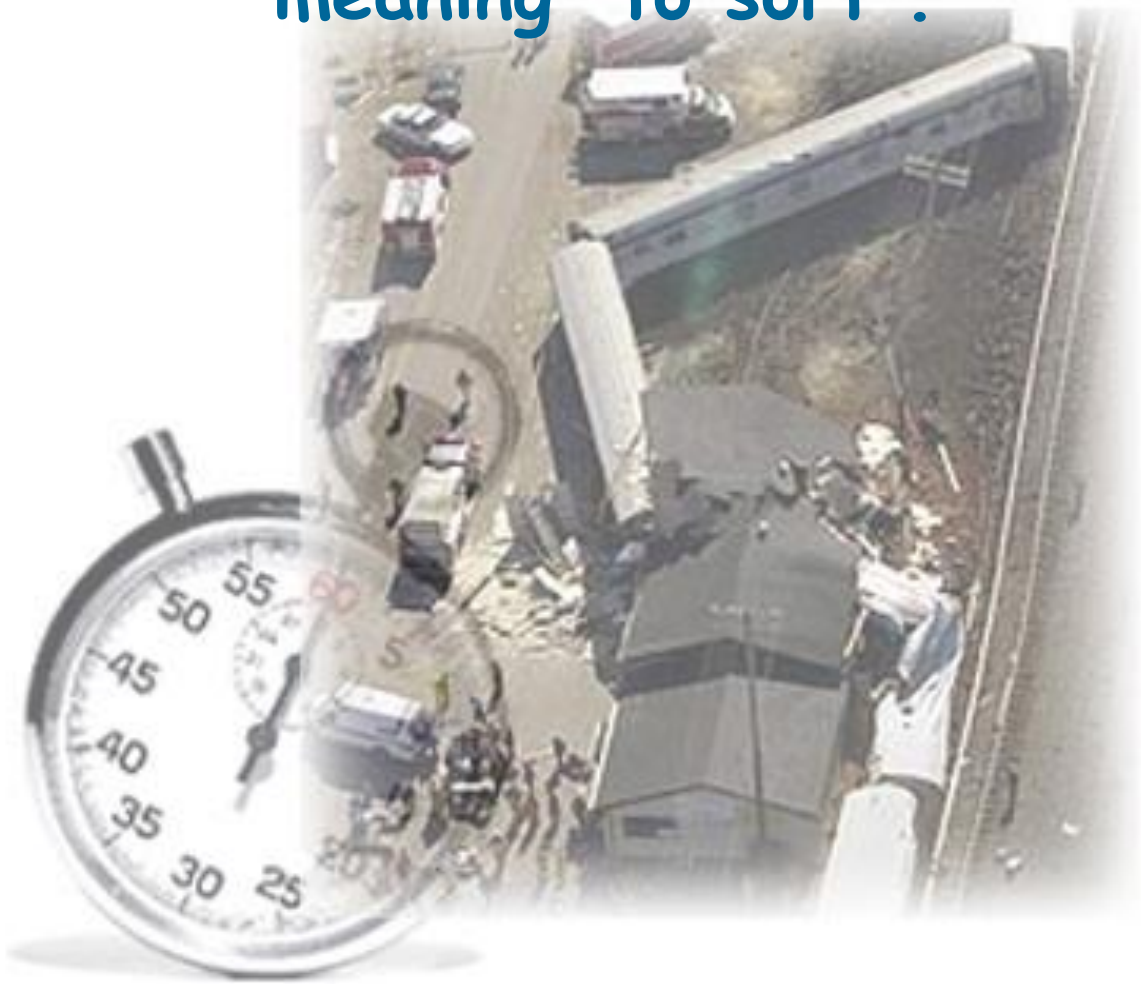
- 62 y/o M, driver, chest pain CAO x 3 RR 24
- 8y/o F CAO x3 shakey
- 31y/o M arm pain CAOx3 good pulse
- 30 y/o F unresponsive, vitals absent
- 41 y/o M altered LOC
- 38 y/o F unresponsive with pulse
- 54 y/o F minor facial trauma CAOx3 RR 40

Who do you transport first and why????

Important Info!

TRIAGE

# Triage, a French word, meaning "to sort".



# Disaster Management EHS

TRIAGE

- Baron Dominique Larrez developed triage based on sorting casualties on the battlefields of Europe in hopes of saving lives that normally would have been lost.

- This allowed him to have more soldiers to place back into action without the necessity of training large numbers of new soldiers during battle.

# Disaster Management EHS

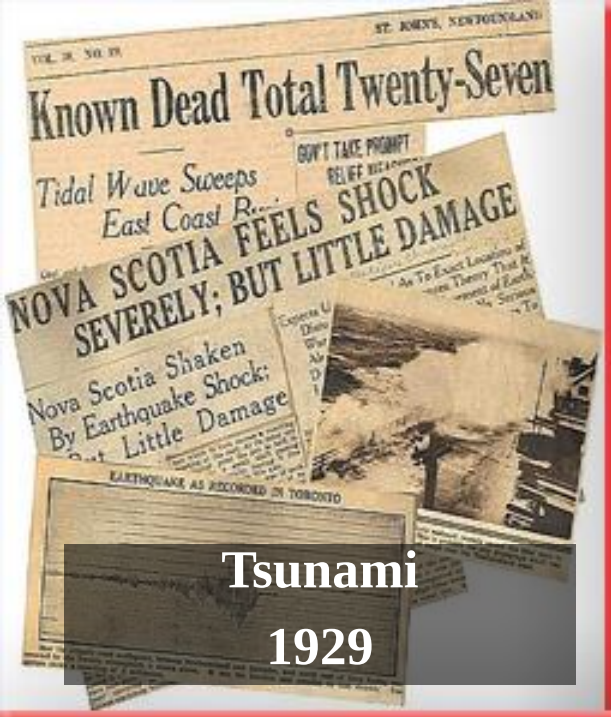
TRIAGE

Used when the need to care for patients exceeds the supply of medical resources.

Does the greatest good for the greatest number.

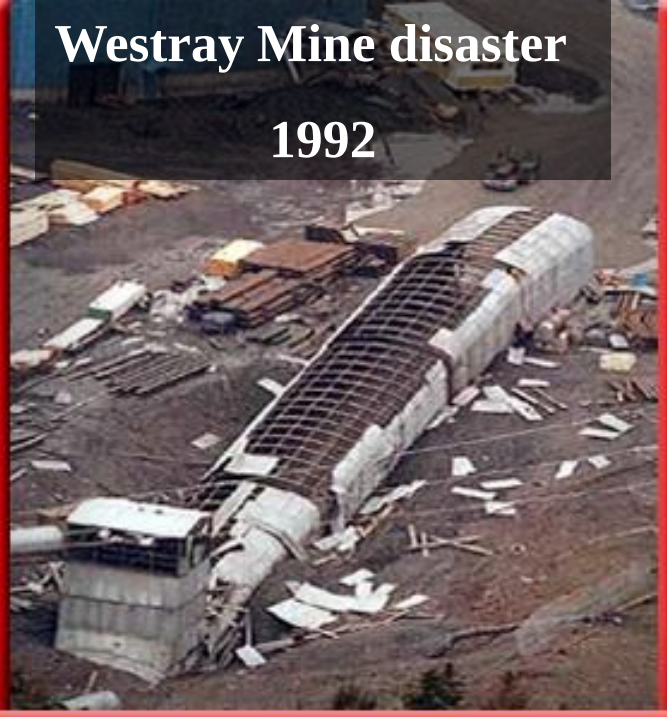
TRIAGE

History shows that many reasons exist to have a standardized approach to triage.



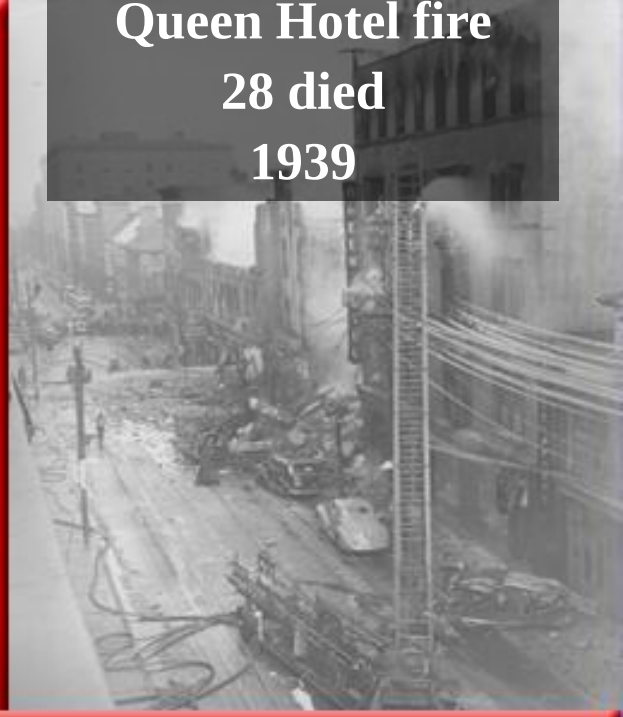

**Tsunami**

**1929**



**Westray Mine disaster**

**1992**



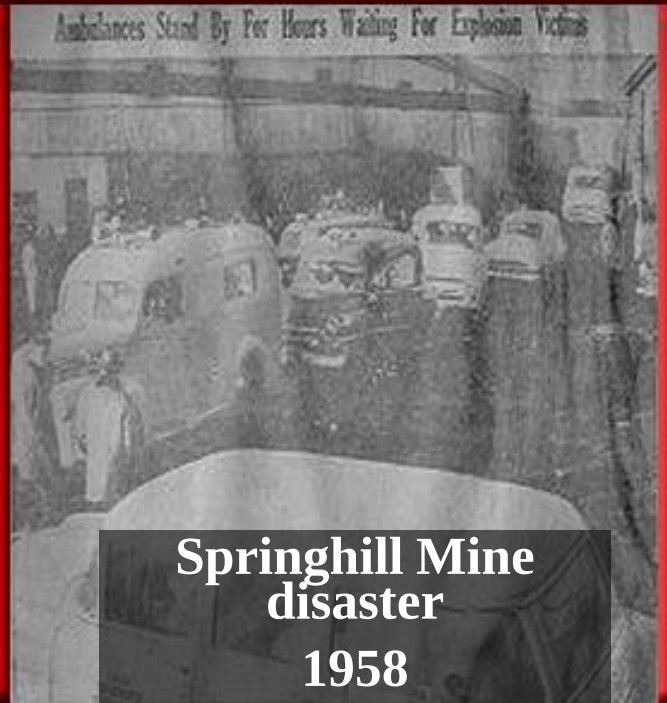
**Queen Hotel fire**

**28 died**

**1939**

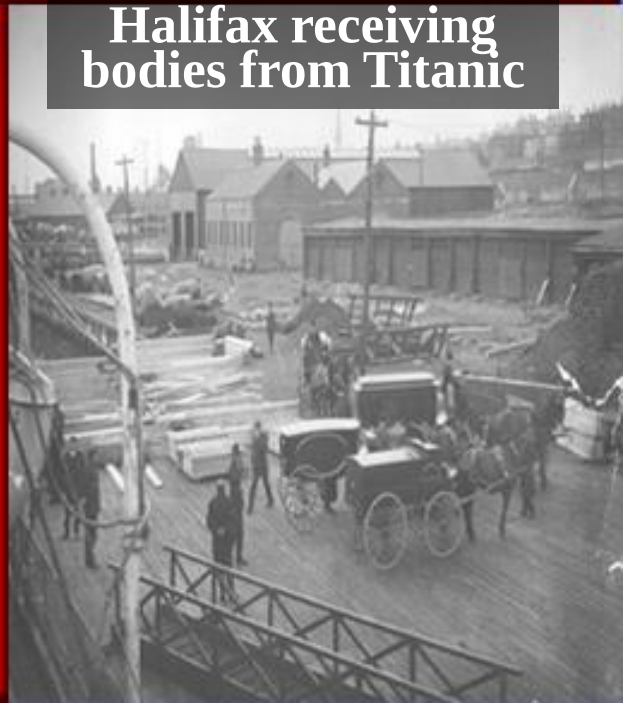
**Explosion on Magazine**

**1945**

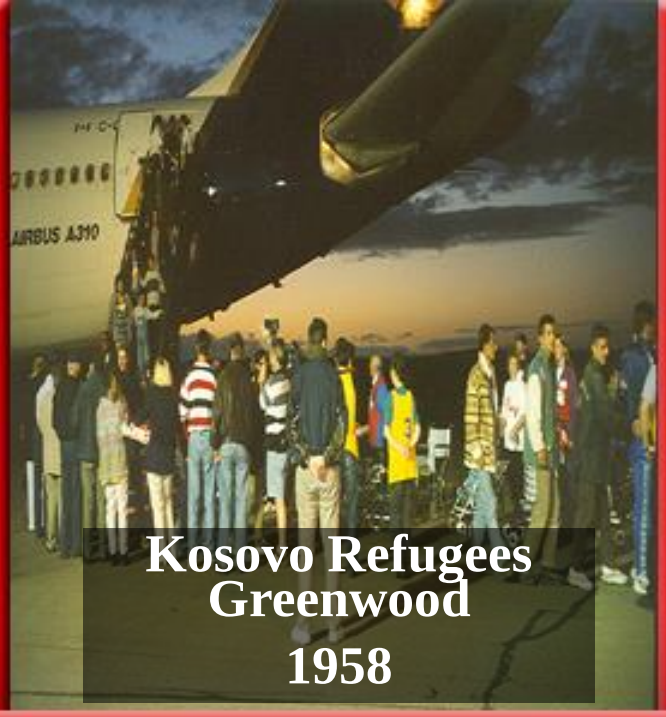



**Springhill Mine disaster**

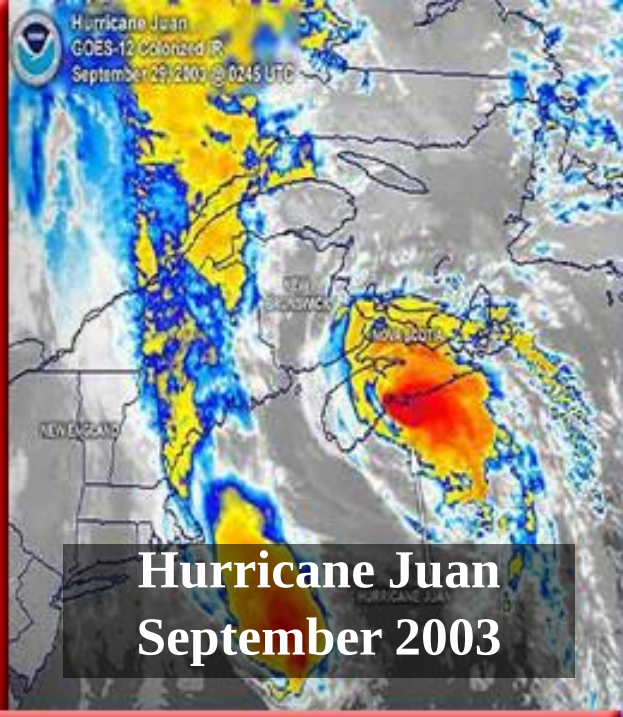
**1958**



**Halifax receiving bodies from Titanic**




Kosovo Refugees
Greenwood
1958




Hurricane Juan
September 2003

747 Halifax Airport
October 2004

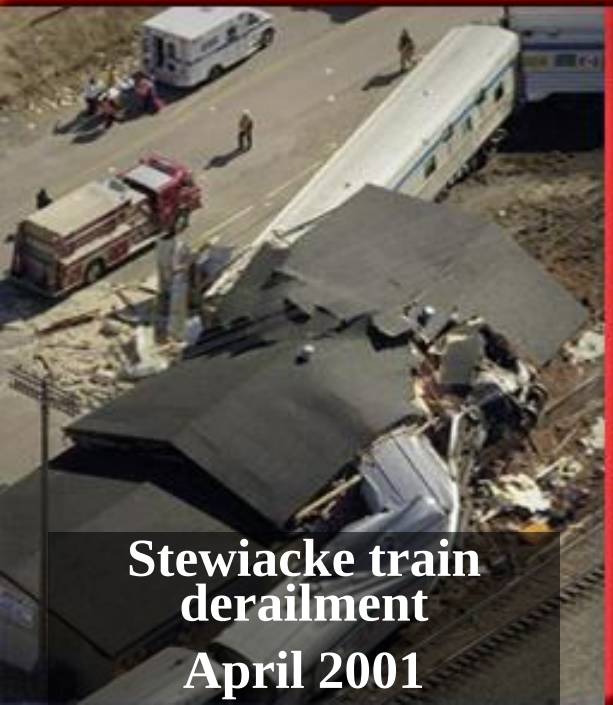
White Juan
Feb 2004

Kosovo Refugees
Greenwood
1958

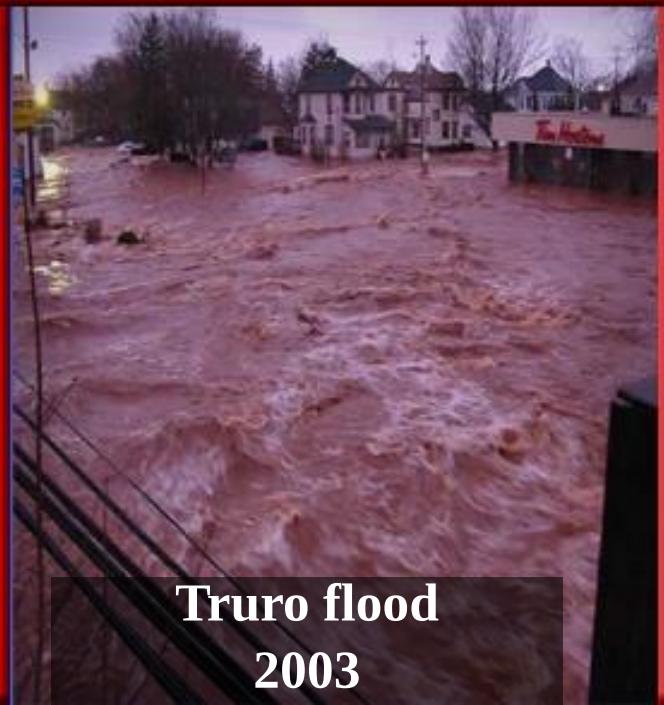
Monastery bus accident
March 13, 2005

Swiss Air
September 02, 1998

G7 Finance Ministers protest
June 14-15, 2002



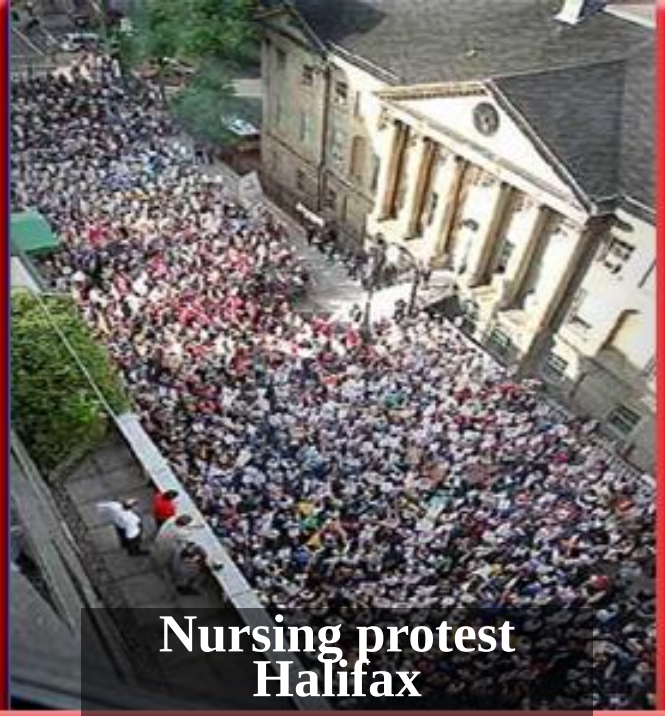
Stewiacke train derailment
April 2001



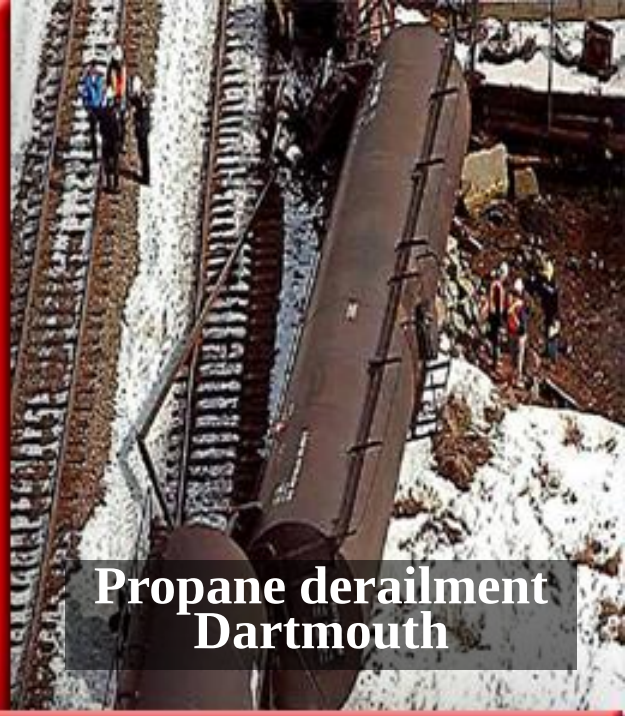
Truro flood
2003

911 planes diverted
September 11, 2001

Sunrise Manor fire



Nursing protest
Halifax



Propane derailment
Dartmouth

1917

Acadian Festival

# What's Next?

**This is why we bother!**

TRIAGE

## *Casualty Severity*

The majority of victims in disasters have minor injuries.

Sheer number of patients can

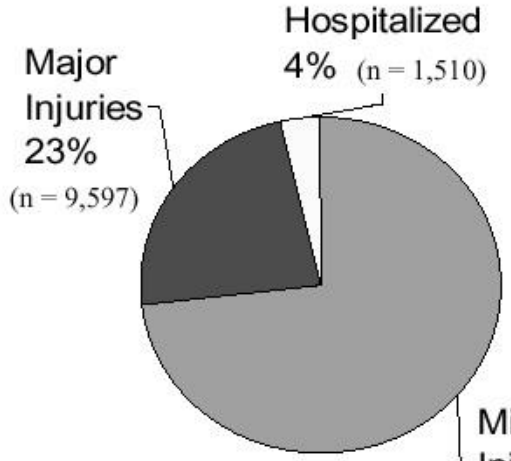
- overwhelm the system;
- impair identification of critical patients;
- impair treatment of critical patients.

TRIAGE

# *Casualty Severity*

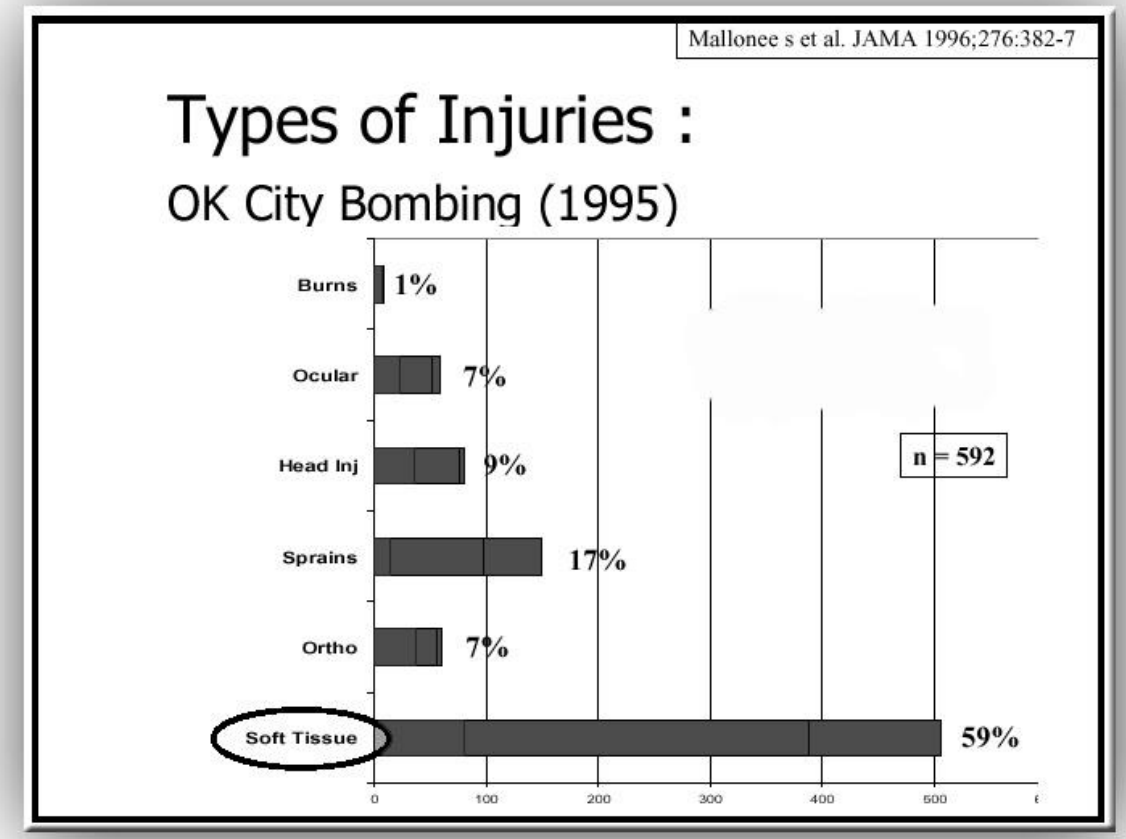
Romo RC. J Wld Assoc Emerg Disast Med 1986;4:1-8

## Casualty Severity - Mexico City Earthquake (1985)



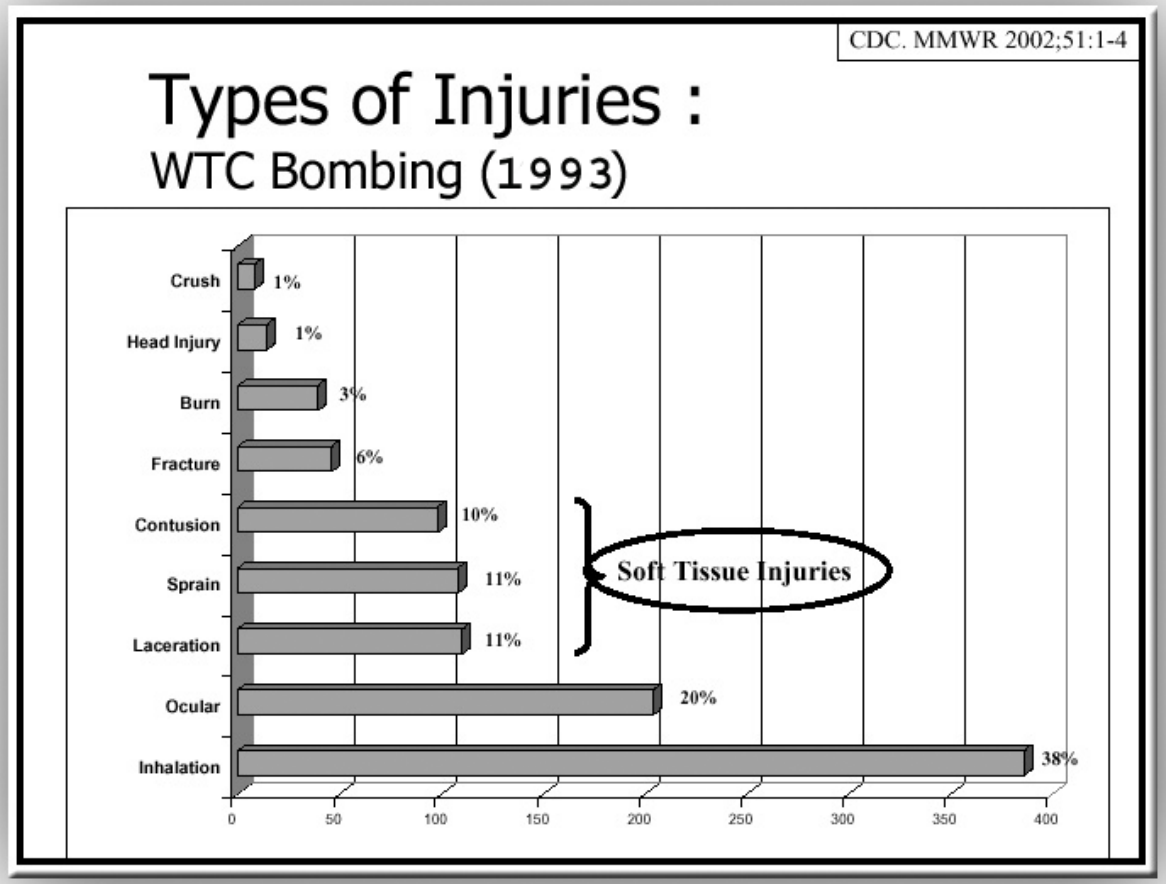
TRIAGE

# *Casualty Severity*



TRIAGE

# *Casualty Severity*



Important Info!

TRIAGE

## *Triage is a process used at Multiple Casualty Incidents to:*

- ✓ Determine who needs immediate medical treatment in an efficient manor.
- ✓Categorize patients based on the severity of their injuries or illness.
- ✓ Prioritize the need for treatment and transportation.
- ✓ Determine the amount and type of resources needed at the scene.

# Disaster Management EHS

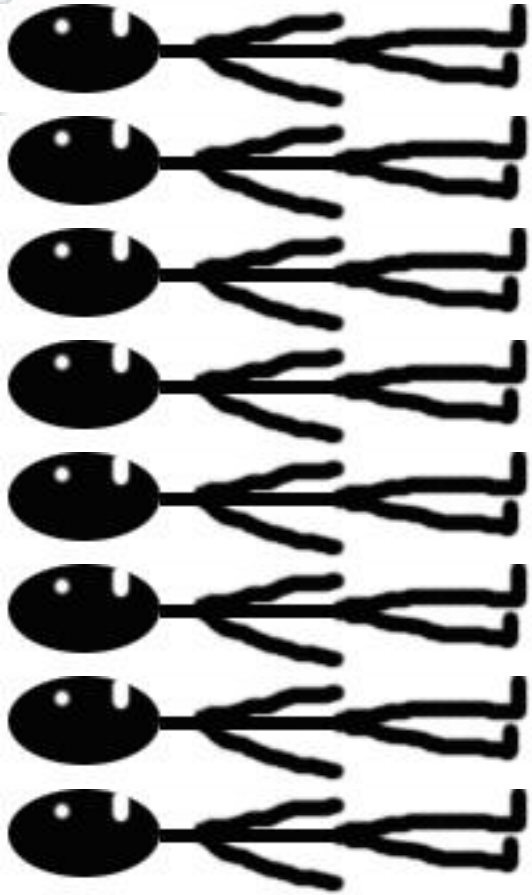
TRIAGE

Triage can be performed for any and all venues:

- MVCs,
- MCIs,
- Disaster sites,
- Hospitals and Health Care Facilities,
- Nursing Homes, and Homes for Special Care . . .

# Disaster Management EHS

Important Info!



TRIAGE

Triage is typically performed when the number of victims exceeds the ability of the rescuers to care for them in a routine manner.

TRIAGE

# *What Can Go Wrong?*

If you do not have a good tool or system for triage, you can expect the following:

TRIAGE

## What can go wrong …

- First Responders will utilize a routine assessment process, used on every call.
- Victims can remain on-scene for extended periods of time.

Important Info!

TRIAGE

## What can go wrong …

- Critical patients may not be treated or transported first.
- Triage by Emotion could occur, where triage is based on those who *appear* to be suffering the most (ie: people covered in blood or complaining the loudest).
- Some patients may be checked several times if tags not applied.

Important Info!

TRIAGE

# *Typical Problems at MCIs*

- **Responders can forget about personal safety**. Don't get caught with tunnel vision, your life depends on it. Your safety is priority!!!

- **Disjointed, chaotic scene**. Organized chaos is possible. Safety First, Unified Command and good communication will organize your chaos ☺.

- **Poor interagency coordination and cooperation**. Working in silos is no longer acceptable. Unified approach is safer and saves lives.

- **Too many patients, too few medics**. That's why its an MCI ☺. Stick with your system.

# *Typical Problems at MCIs*

- **Moving the disaster from the scene to the hospital**. If you have 3 hospitals in one area and you move 50 patients to one of those hospitals, all you have done is moved the disaster to the hospital ☺. Spread the wealth where possible.

- **Bystanders/Family.** Lack of scene security may cause you grief. As the word quickly spreads of the incident, the number of civilians on-site will increase, potentially getting out of control and creating more patients.

TRIAGE

## This early warning to hospitals allows them to:

1. Direct emergency department staff to open beds for the arrival of potential victims.
2. Re-distribute on-duty hospital staff to support the emergency department.
3. Allocate staff in radiology and laboratory services.

# Disaster Management EHS

TRIAGE

4. Open operating rooms and allocate surgical resources

5. Organize medical staff to manage outpatient and inpatient care and facilitate discharge or transfer of existing inpatients.

6. Initiate the internal hospital disaster plan if required.

# Disaster Management
# EHS

TRIAGE

Triage is a crucial first step in patient care at Mass Casualty Incidents.

EHS uses the

**S.T.A.R.T.** system of Triage

# Disaster Management EHS

ACCREDITED

TRIAGE

The main goal of triage is to identify the people who require immediate medical attention as soon as possible.

Delays can be deadly!

TRIAGE

# Simple Triage And Rapid Treatment

The START triage system was developed in 1983 in Newport Beach, California, by the Hoag Hospital and the Newport Beach Fire Department.

Victoria Cleary, EMS Manager for the Newport Beach Fire Department, was one of the co-developers of the START triage system.

TRIAGE

The triage process takes between 30 and 60 seconds per victim. Any longer is too long.

# Disaster Management
## EHS

Important Info!

TRIAGE

During triage, no tools, special equipment, or advanced medical knowledge is required.

Basic lifesaving measures such as airway positioning and halting major bleeding are done as needed.

TRIAGE

## OK, sounds good so far. Walk me through the actual process!

1. **Size up the site**. Triage takes approximately one minute per patient. So, if you have approx 60 patients and one rescuer to do triage, it will take you a **least an hour to complete!!**

   **Solution:** Assign more rescuers to triage. The more rescuers triaging, the faster the medical priorities are found.

TRIAGE

2. **Control.** Assign one of the rescuers as the "Triage Unit Leader".

This person will:

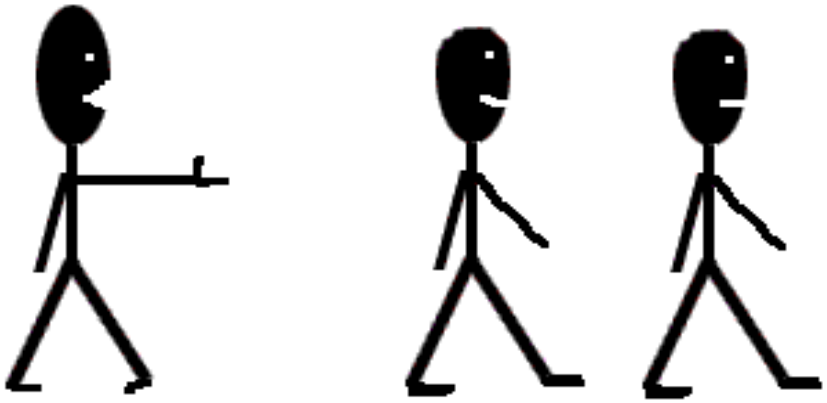
- Direct the other rescuers where to triage
- Collect the corners of the used triage tags and pass into Medical Command
- Ensure rescuers are triaging efficiently (<60 sec)
- Ensure all patients have been triaged and tagged

TRIAGE

3. **Direct anyone that can walk to a designated safe place.**

   These victims will be triaged eventually. The ones lying on the ground will be your priority starting point.

Designated Area



TRIAGE

4. **While paying attention to safety, proceed to triage.**

   Every person receives a tag.

   Immediate lifesaving procedures are to be done during triage, i.e. if there is significant bleeding, apply dressing (have bystander apply pressure if necessary while you continue on).

   Tag the patient, tear the corner of the tag off and move to next patient.

# Piece of Cake?

Don’t worry, it will come together.

Trust me!

# Triage Tape System

EMC designed a triage tape system which they feel brings a more simplistic approach to triage without compromising care.

The tape is waterproof and does not require the MFR to have a pen!

# Triage Tape

Triage is performed by individual MFRs and Paramedics infrequently, maybe once or twice in a career!

The EHS Triage Tape System takes this into consideration and provides a simple method to recall triage practices.

# Triage Tape

Another difficulty that can be encountered during a disaster is resources delayed at receiving hospitals (charting, etc…)

The triage tape stays attached to the patients Arm or Leg. If patient condition deteriorates the next color is added.

# Triage Tape

Determining what resources we must allocate to the event is extremely important.

This tape system is designed to meet this need.

Important Info!

# Triage

## Triage Tag

EHS Emergency Health Services

Ver 1.6

S.T.A.R.T.

Tag # EHS00001

**Respirations**

**Less than 30/min ?** YES NO

No respirations (adjust airway)

Still not breathing (tag **Black**)

**Mental Status**

**Oriented X 3 ?** YES NO

(Person, Place, Time)

**Green Criteria**

**Minor or No obvious injuries and are mobile**

*Minor Injuries i.e abrasions, small cuts, psychological*

**Yellow Criteria**

**Anything Else is Yellow**

i.e. fractures, large cuts, avulsions, chest pain, spinal pain

* **Infants** 3 months old or less are tagged yellow unless they are Black or Red

* **Black -** Deceased/Non-Salvageable

EHS00001 **DECEASED** Black — Tear Here

EHS00001 **IMMEDIATE** Red — Tear Here

EHS00001 **DELAYED** Yellow — Tear Here

EHS00001 **MINOR** Green

# Front of Tag

Name: | D.O.B. D /M /Y | Site:

Unit # | Address:

Treatment Area: | Amb.Paramedic:

Reg.# | Reg.#

| | Time | B/P | Pulse | Resp | Initials |
|---|---|---|---|---|---|
| Chief Complaint | | | | | |
| Allergies: | | | | | |
| Age: | | | | | |

Time | Treatment/Transport | Initial

# Back of Tag

Not Used!

Black

Red

Yellow

Green

Important Info!

# Triage

## Triage Tag

EHS Emergency Health Services

Ver 1.6

S.T.A.R.T.

Tag # EHS00001

**Respirations**
Less than 30/min ? YES NO
No respirations (adjust airway)
Still not breathing (tag **Black**)

**Circulation**
Is there a Radial Pulse ? YES NO

**Mental Status**
Oriented X 3 ? YES NO
(Person, Place, Time)

**Green Criteria**
Minor or No obvious injuries and are mobile
*Minor Injuries i.e abrasions, small cuts, psychological*

**Yellow Criteria**
Anything Else is Yellow
i.e. fractures, large cuts, avulsions, chest pain, spinal pain

* **Infants** 3 months old or less are tagged yellow unless they are Black or Red

* **Black -** Deceased/Non-Salvageable

EHS00001 DECEASED Black Tear Here

EHS00001 IMMEDIATE Red Tear Here

EHS00001 DELAYED Yellow Tear Here

EHS00001 MINOR Green

← Start from the Top

and move downwards until you have determined what color you want.

Name: | D.O.B. D /M /Y | Site:

Unit # | Address:

Treatment Area: | Amb.Paramedic:

Reg.# | Reg.#

Time

Age:

Black

Red

Yellow

Green

Important Info!

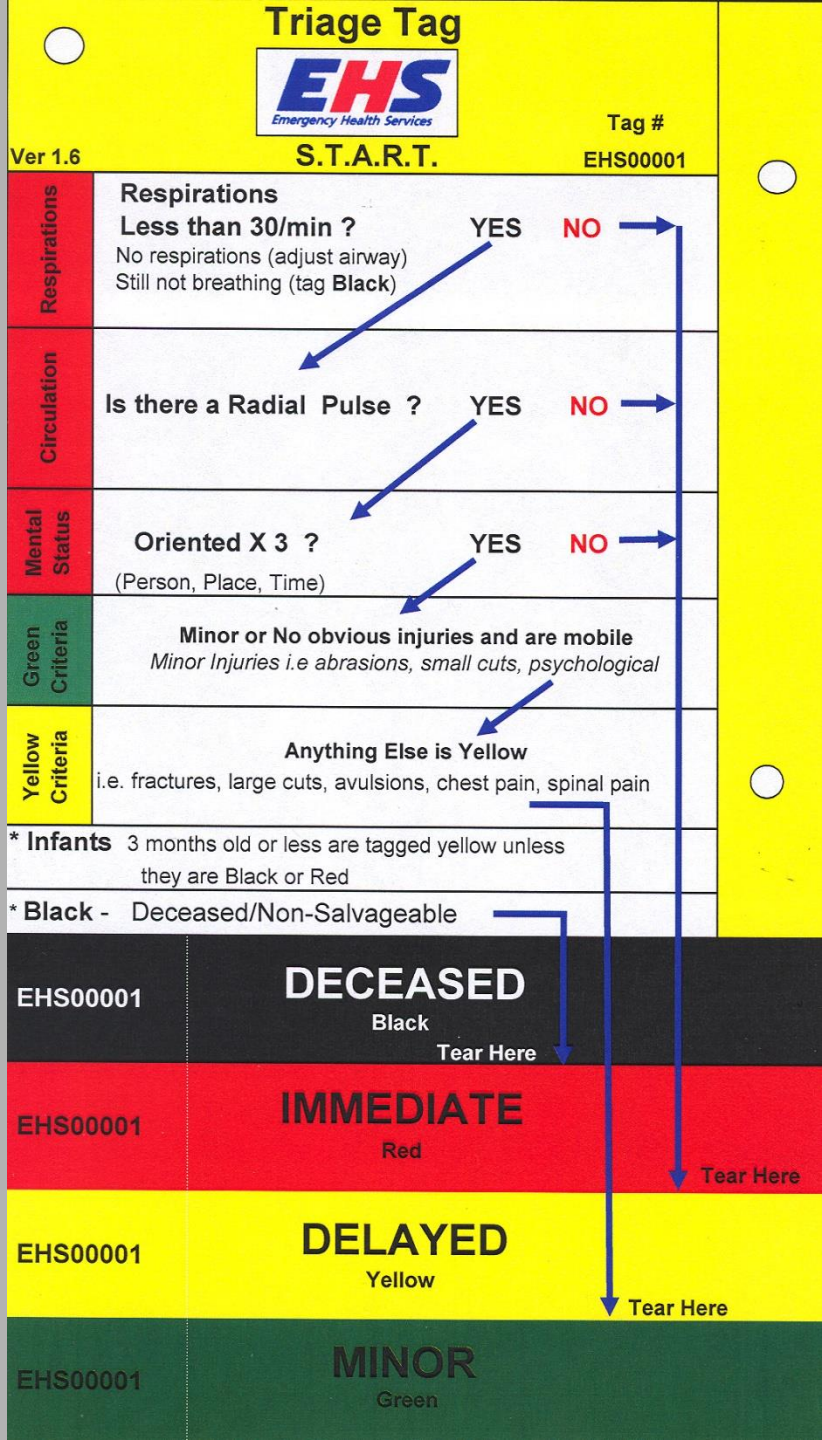
# Triage

**Respirations ➔**

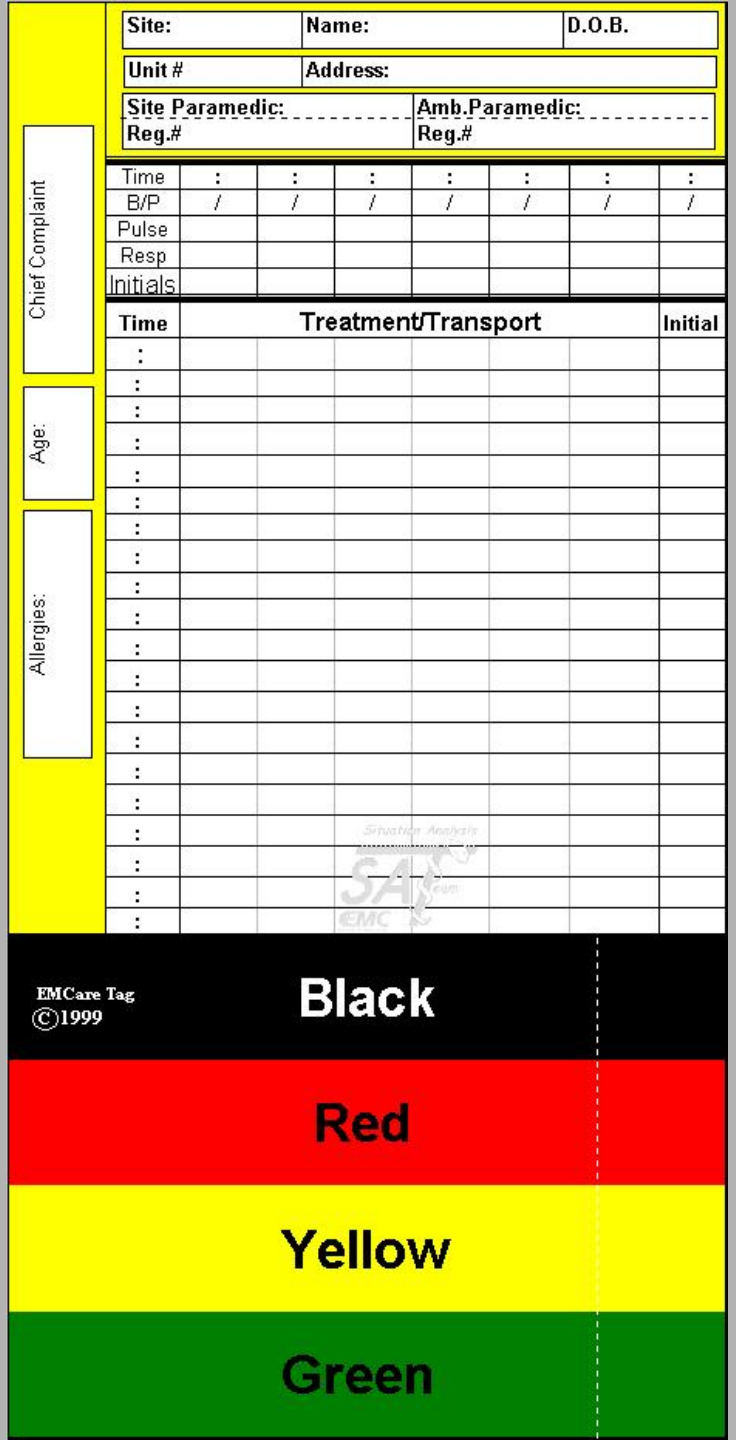
**Circulation ➔**

**Mental Status ➔**

**Special Considerations ➔**



# Back of Tag




The Back of the Tag is not used as it is a guideline to follow when assessing patients.

Important Info!

Front

# Triage Tag

EHS Emergency Health Services

Ver 1.6

S.T.A.R.T.

Tag # EHS00001

**Respirations**

**Respirations**
**Less than 30/min ?** YES NO →
No respirations (adjust airway)
Still not breathing (tag **Black**)

**Circulation**

**Is there a Radial Pulse ?** YES NO →

**Mental Status**

**Oriented X 3 ?** YES NO →
(Person, Place, Time)

**Green Criteria**

**Minor or No obvious injuries and are mobile**
*Minor Injuries i.e abrasions, small cuts, psychological*

**Yellow Criteria**

**Anything Else is Yellow**
i.e. fractures, large cuts, avulsions, chest pain, spinal pain

* **Infants** 3 months old or less are tagged yellow unless they are Black or Red

* **Black -** Deceased/Non-Salvageable

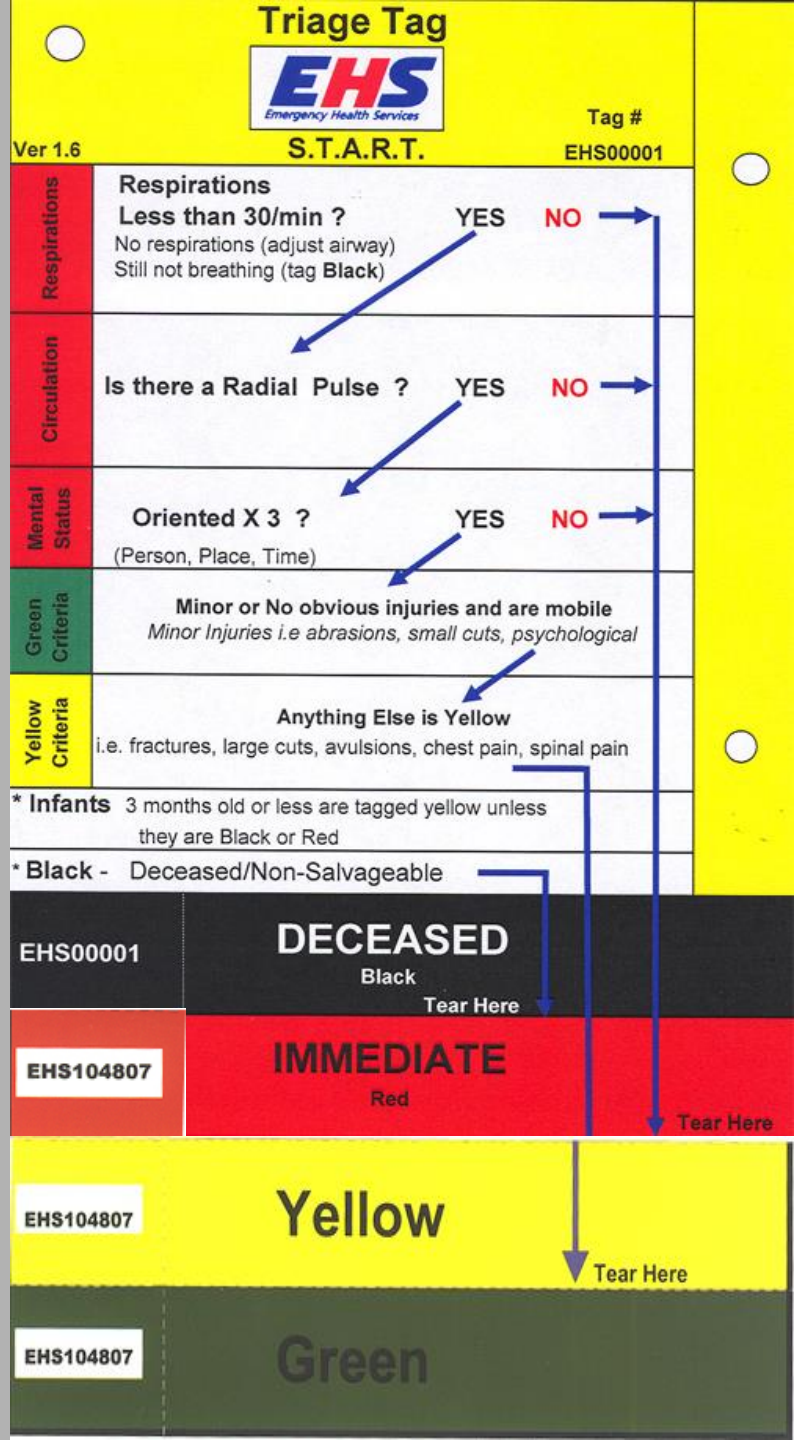
**DECEASED**

Important Info!

Triage

# Example

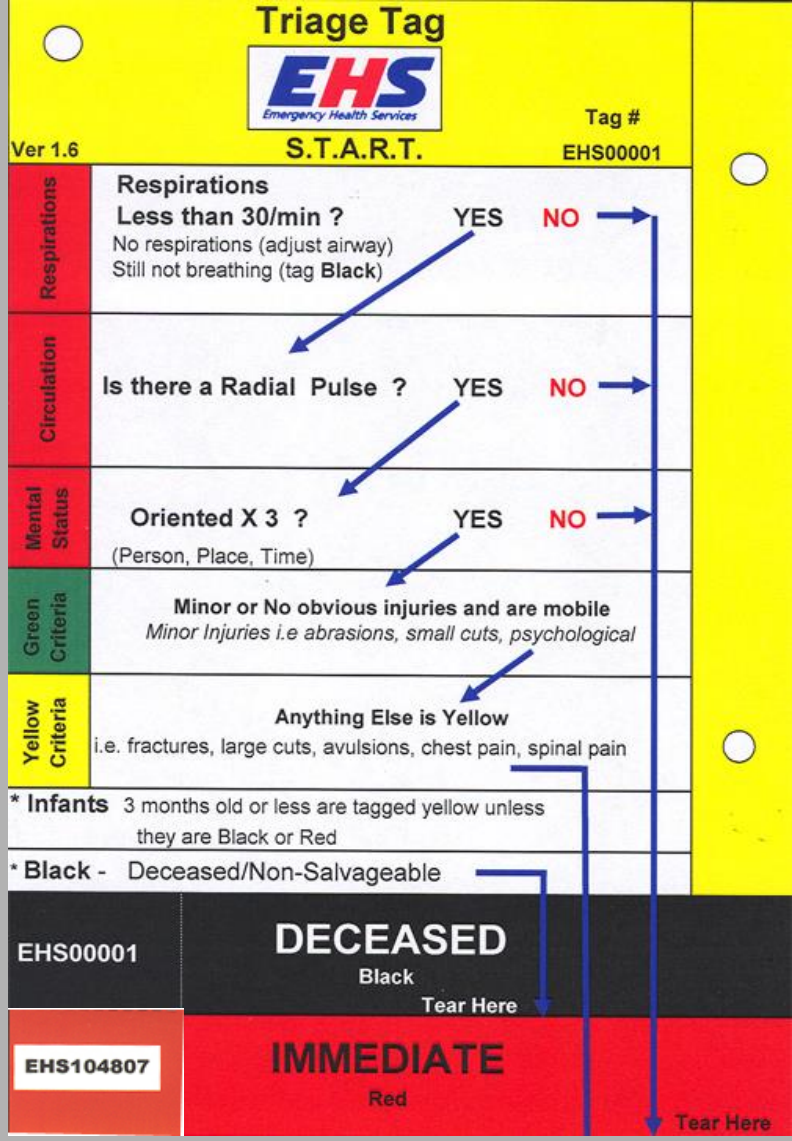
**When a patient has been triaged *RED*……**



Important Info!

Triage

"Red" example continued…




**Tie a Red band of Tape to the Patients Arm. If Arm cannot be used, Tie to Leg**

TRIAGE

# Comfy?

Try some of these practice cases…

Important Info!

TRIAGE

**39 yo Male**

**Resp: 42**

**Orientated x 3**

**Fractured arm**

RED

Why? Because Respirations are over 30

**88 yo female**

**Resp: 26** **Good pulses**

**Orientated x 3** **shaking, scared**

GREEN

TRIAGE

**44 yo female**

**No respirations after airway adjusted**

BLACK

Why? Not breathing after airway adjusted

**33 yo female**

**Resp: 20 Good pulses**

**Orientated x 3**

**Multiple abrasions, minor head bleeding**

GREEN

Important Info!

TRIAGE

**67 yo male**

**Resp: 50 Good pulses**

**Orientated x 2**

**Fractured hip**

RED

Why? Respirations over 30 and Orientation is 2

**78 yo female**

**Resp: 28 Good pulses Orientated x 2**

**Confused with minor abrasions**

RED

Why? Orientation is 2

TRIAGE

**79 yo female**

**Resp: 28** **Good pulses**

**Orientated x 3** **Broken arm**

YELLOW

Why? Broken arm

**84 yo male**

**Resp: 26** **Good pulses**

**Orientated x 3** **Hysterical**

GREEN

Important Info!

TRIAGE

# Tip # 1

If you are not sure what color to tag them, always tag up!

I.E.

Green or Yellow???, Green or Yellow???,

Green or Yellow???, Green or Yellow???

Tag them <u>Yellow</u>!

# Tip # 2

Everyone who was involved in the incident receives a tag!

# MCI – Answers

TRIAGE

| | | |
|---|---|---|
| 38 y/o F | RED | unresponsive but has a pulse |
| 41 y/o M | RED | altered LOC CAO x 2 |
| 54 y/o F | RED | minor injuries, but RR 40 |
| 62 y/o M | RED | chest pain, cardiac hx |
| 31 y/o M | YELLOW | arm injury |
| 8 y/o F | GREEN | no c/c, just shaken up |
| 30 y/o F | BLACK | deceased |

Important Info!

TRIAGE

# Putting it all together