

# Διαλογή – Triage



# Triage/ Διαλογή





# Mass casualty – earthquake



# Triage



# Triage

Triage refers to the evaluation and categorization of the sick or wounded when there are insufficient resources for medical care of everyone at once

Triage, is a dynamic process, as the patient's status can change rapidly.



# Color-Coding scheme

- **Red tags** - (immediate) are used to label those who cannot survive without immediate treatment but who have a chance of survival.

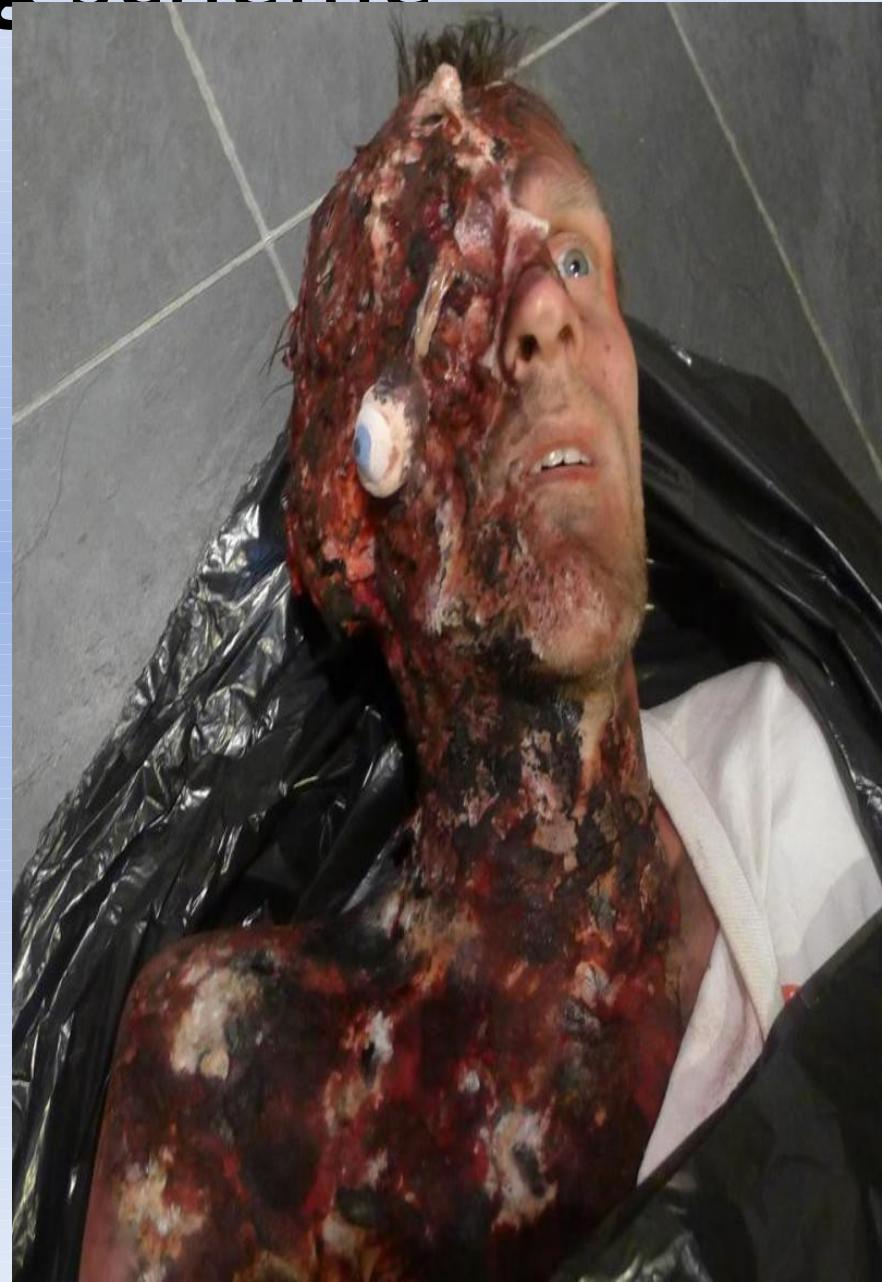


- **Yellow tags** - (observation) for those who require observation (and possible later re-triage). Their condition is stable for the moment and, they are not in immediate danger of death.



# Color-Coding scheme

- **Green tags** - (wait) are reserved for the "walking wounded" who will need medical care at some point.
- **Black tags** - (expectant) are used for the deceased and for those whose injuries are so extensive that they will not be able to survive given the care that is available.



# **Color-Coding scheme**

- White tags - (dismiss) are given to those with minor injuries for whom a doctor's care is not required.
- Grey tags – for those whose injuries are so extensive that they will not be able to survive given the care that is available.

# Mass Casualty Incident

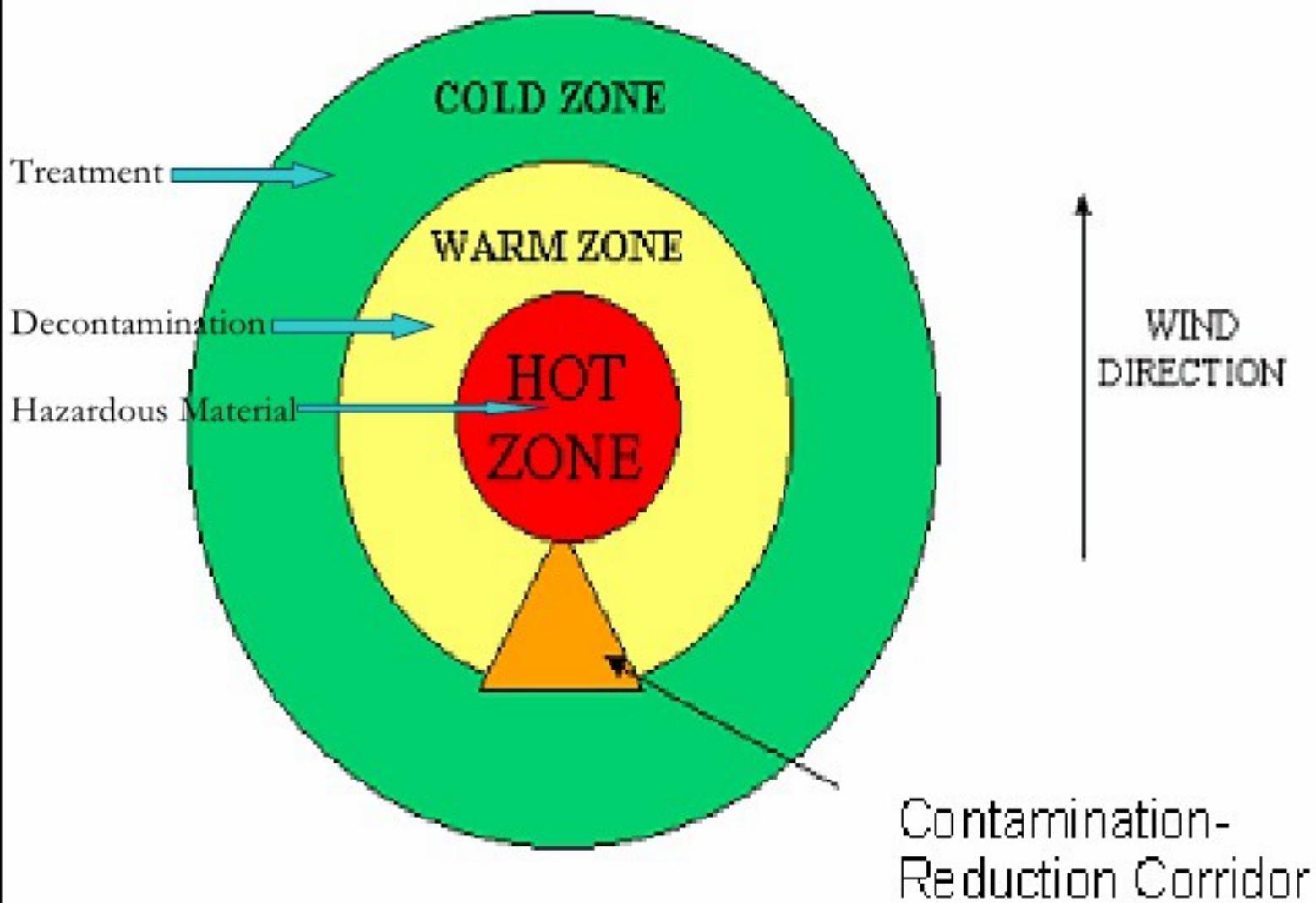
The first person / unit on the scene does:





- S.T.A.R.T (Triage)





# Triage

- MASS triage (divides patients into triage categories *based on their ability to move*)
- S.T.A.R.T. triage (*determines the severity of injuries*)
- ADVANCED triage (more fully assess injury priorities)

# Triage (phase)

- Triage (hot zone)

Διαλογή πρώτης φάσης ή διαλογή επόπτευσης (τόπος συμβάντος)

- Triage (warm zone)

Διαλογή δεύτερης φάσης (Χώρος συγκέντρωσης τραυματιών)

- Triage (cold zone)

Διαλογή τρίτης φάσης (Νοσοκομείο Υποδοχής)

# HOT ZONE

## MASS Triage

## Contaminated Waste

# WARM ZONE

Emergency Treatment  
(if needed)

## Simple Triage

Log-in

Ward Decontamination

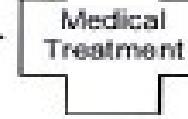
Responders



# COLD ZONE



## Advanced Triage



Medical  
Treatment

Transport

Shielded Areas

Technical Decontamination

# MASS Triage

- Move, Assess, Sort, & Send
- Performed in the hot zone
- Offensive responders wearing appropriate PPE
- Based on the patients ability to move and respond
- Utilize triage ribbons (colored-coded strips) first

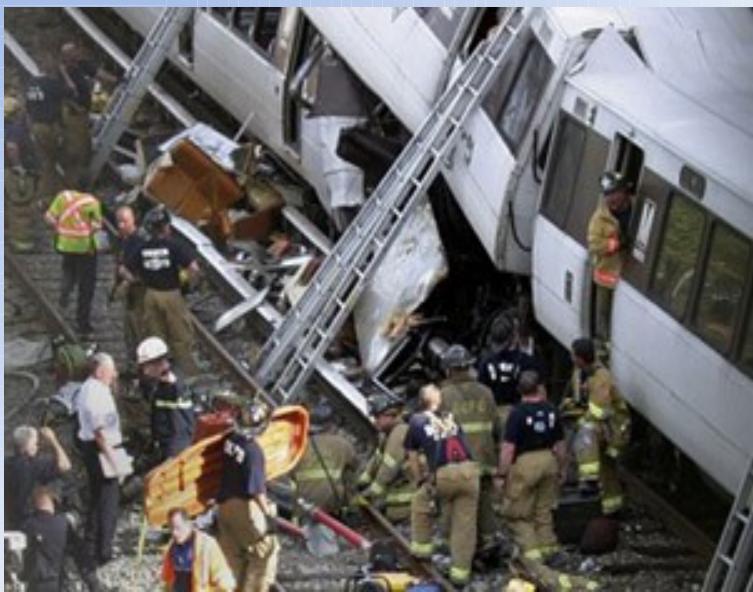


# MASS Triage

- **Move:** “Everyone who can hear me and needs medical attention, please move to a designated area now!”

(Green) Minimal or ambulatory

- **Assess:** Nonambulatory  
“Everyone who can raise an arm or leg.” Doing the most good for the most victims



# MASS Triage

to remaining victims.



# MASS Triage

## Send

- Victims are sent ( evacuated ) both safely & promptly to the decon area / or treatment area.
- Send to hospitals or secondary treatment facilities
- Send to morgue facilities

# Search and rescue/ Έρευνα και Διάσωση



# S.T.A.R.T. Triage

- Simple Triage & Rapid Treatment
- Rapid approach to triaging large numbers of causalities
- Occurs just inside the warm zone prior to decontamination to assess the victims & their injuries
- Initial patient assessment & treatment should take less than one minute for each patient, 30 seconds is preferred

All Walking Wounded

MINOR

## RESPIRATIONS

NO

YES

Position Airway

NO Respirations

Respirations

DECEASED

IMMEDIATE

Under 30/min.

Over 30/min.

IMMEDIATE

## PERFUSION

Radial Pulse Absent

OR

Over 2 seconds ← Capillary Refill → Under 2 seconds

Radial Pulse Present

Control Bleeding

IMMEDIATE

## MENTAL STATUS

CAN'T Follow  
Simple Commands

CAN Follow  
Simple Commands

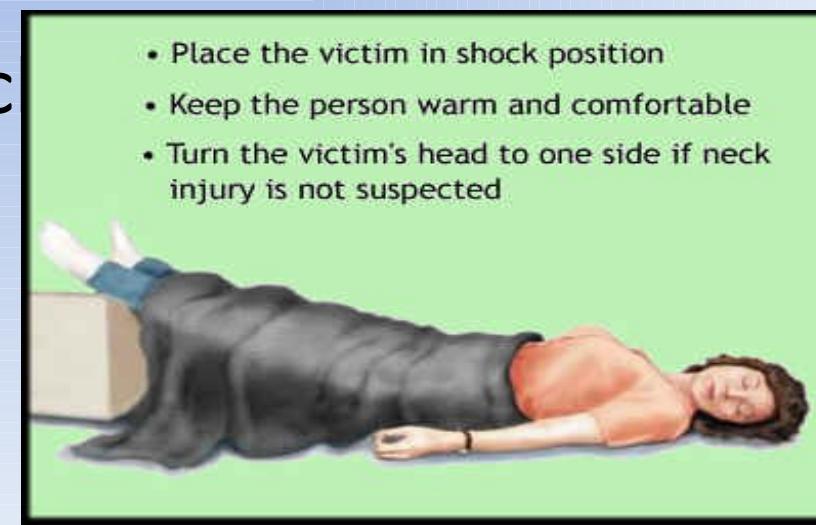
IMMEDIATE

DELAYED

# S.T.A.R.T. Triage

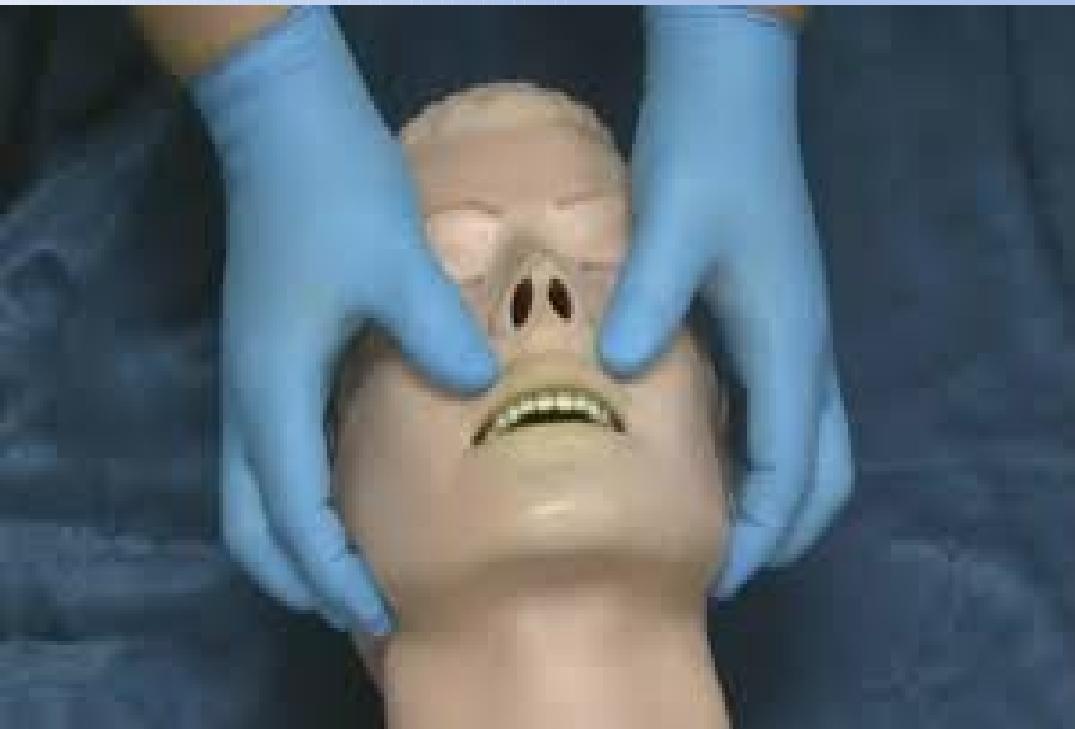
## Treatments

- Open the airway / insert OPA
- Stop the bleeding.
- Elevate the legs for shock



# START Triage

- Respiratory Status

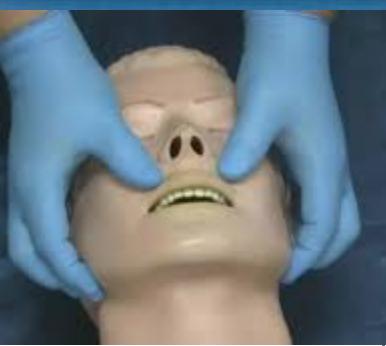


(blood )





min.

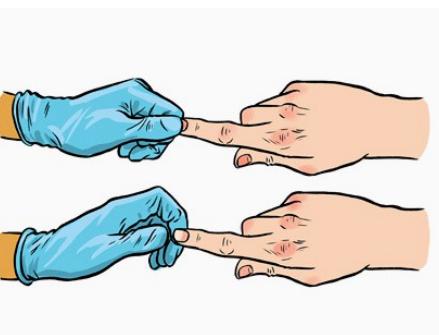


Radial Pulse Absent  
OR

Capillary Refill → Under 2 seconds



IMMEDIATE



RFUSION

Radial Pulse Present

IMMEDIATE



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MENTAL ST.

CAN'T Follow  
Simple Commands

IMMEDIATE

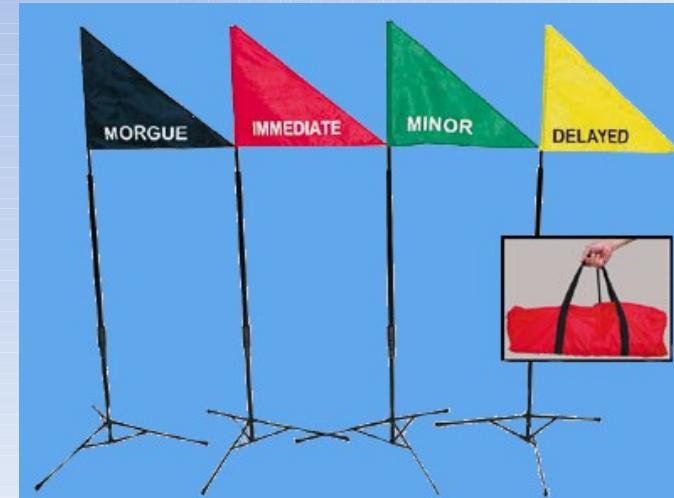
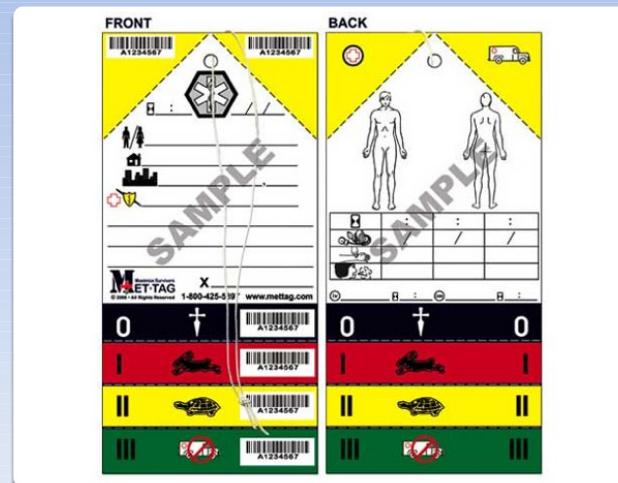


DELAYED

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# Triage

- If borderline decision are encountered, always triage to the most urgent priority
- Example: If unsure whether the patient is green or yellow, the patient should be tagged yellow



# Advanced Triage

- Advanced Triage will be performed on all victims in the Treatment Area by medical teams



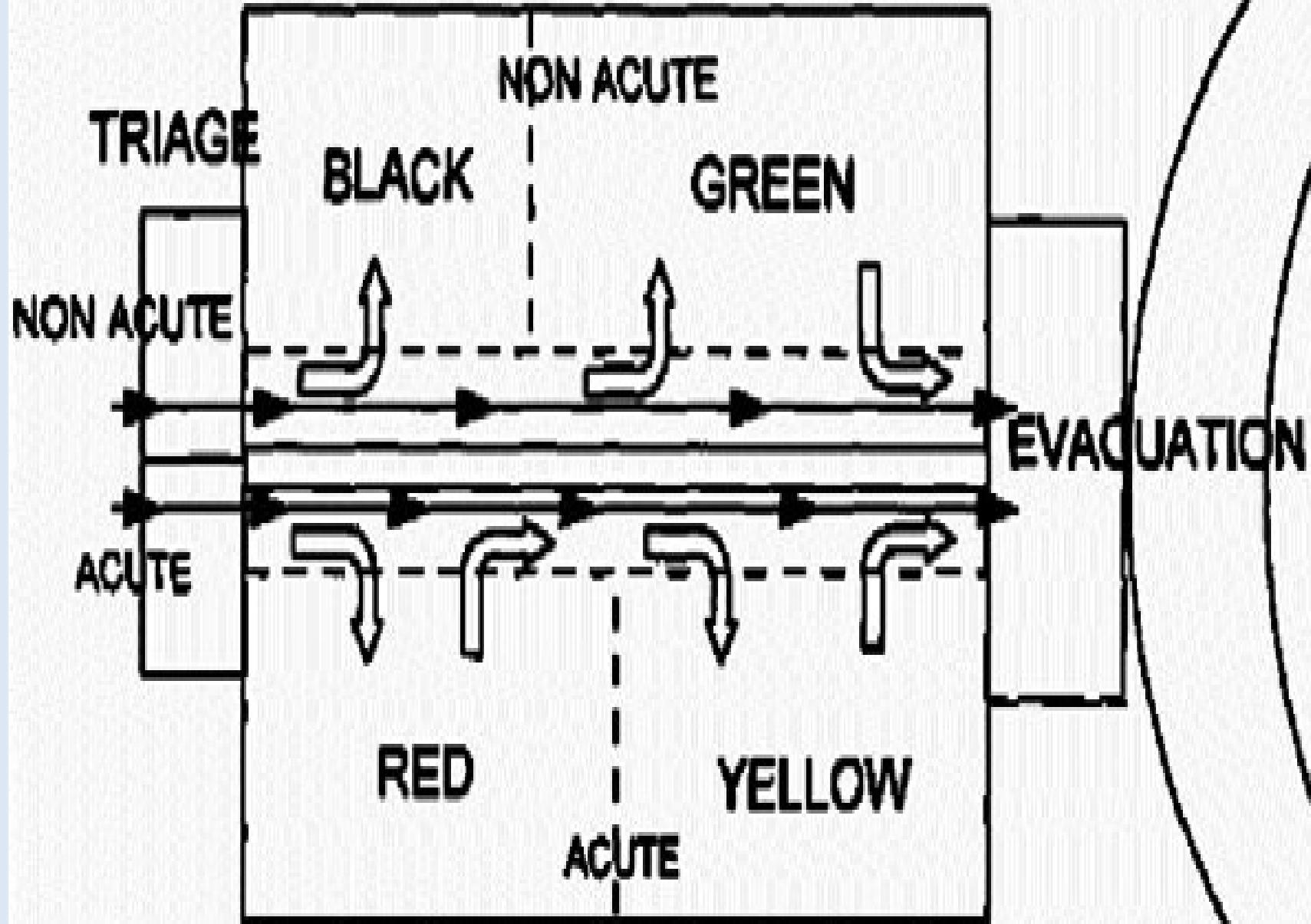


Figure-1: Establishing a mass casualty management system 1995 PAS, WHO, 2001.

# Transport / Μεταφορά



LIFE

# Emergency Department – Triage multicasualty /disaster



# FIVE LEVEL TRIAGE

LEVEL

1

IS THE PATIENT DYING?

Cardiac Arrest, Respiratory Arrest  
Trauma, Anaphylaxis,  
Unresponsiveness-ETOH  
Hypoglycemia, Imminent Childbirth,  
Limb Amputations

LEVEL

2

HIGH RISK SITUATION? IS THIS A PATIENT  
WHO SHOULDN'T WAIT

Confused, Lethargic, Disoriented,  
Severe Pain, Distress, Active Chest  
Pain, Suspicious for Coronary  
Syndrome, Signs of Stroke,  
Immunocompromised with fever,  
Suicidal, Homicidal, Amputations

LEVEL

3

HOW MANY RESOURCES-( 2 or more)  
CONSIDER VITAL SIGNS AS PART OF  
CRITERIA. TEMPERATURE- BIRTH-36 MOS.  
(Consider upgrading to 2)

Danger Zone Vitals?		
Age	Pulse	RR
<3m	>180	> 50
3-8y	>160	> 40
>8y	>100	>20

LEVEL

4

HOW MANY RESOURCES?-(ONE)  
STABLE VITAL SIGNS

Ankle sprain, Strept Throat, UTI,  
Migraines with CT head, Simple  
Lacerations, IV/IM Meds

LEVEL

5

HOW MANY RESOURCES?- NONE

Medication Refill, MSE, Illness  
requiring a Prescription

# Canadian Triage and Acuity Scale (CTAS)

## Non disaster

INITIAL TRIAGE ASSESSMENT WITHIN 10 MINUTES*		
Patients should have an INITIAL TRIAGE ASSESSMENT WITHIN 10 MINUTES* at arrival		
<b>TRIAGE LEVEL I - RESUSCITATION</b> <p>Time to NURSE Assessment <b>IMMEDIATE*</b></p> <p>Time to PHYSICIAN Assessment <b>IMMEDIATE*</b></p>	<b>USUAL PRESENTATION</b> <ul style="list-style-type: none"> <li>Code / Arrest</li> <li>Major Trauma</li> <li>Shock/Seizure</li> <li>Newborn Asphyxia</li> <li>Severe Respiratory Distress</li> <li>Altered Mental State (unconscious, drowsy)</li> <li>Seizures</li> </ul>	<b>SENTINEL DIAGNOSIS</b> <ul style="list-style-type: none"> <li>Traumatic Shock</li> <li>Pneumothorax = Traumatic / Tension</li> <li>Facial Burns with Airway Compromise</li> <li>Severe Burns &gt; 20% TBSA</li> <li>Overdose with Hypotension / Unconscious</li> <li>AMI</li> <li>AMI with Complications / CHF / Low BP</li> <li>Status Asthmatics</li> <li>Head Injury - Major / Unconscious</li> <li>Status Epilepticus</li> </ul>
<b>TRIAGE LEVEL II - EMERGENT</b> <p>Time to NURSE Assessment <b>IMMEDIATE*</b></p> <p>Time to PHYSICIAN Assessment <b>15 MINUTES*</b></p>	<b>USUAL PRESENTATION</b> <ul style="list-style-type: none"> <li>Head Injury (Risk Features + Altered Mental State)</li> <li>Severe Trauma</li> <li>Altered Mental State (lethargic, drowsy, agitated)</li> <li>Chemical Exposure - Eyes</li> <li>Anaphylaxis (Severe)</li> <li>Chest Pain - Macular, Non-Traumatic           <ul style="list-style-type: none"> <li>+ Associated Symptoms</li> </ul> </li> <li>Overdose (conscious), Drug Withdrawal</li> <li>ABD Pain (Age &lt;60) with Visceral Symptoms</li> <li>Back Pain (Non Trauma, Non MSK)</li> <li>GI Bleed with Abnormal Vital Signs</li> <li>CVA with Major deficit</li> <li>Asthma Severe (PEFR &lt;40%)</li> <li>Moderate / Severe Dyspnea / Difficulty Breathing</li> <li>Vaginal Bleeding = Acute, Pain scale &gt;5           <ul style="list-style-type: none"> <li>+ Abnormal vital signs</li> </ul> </li> <li>Vomiting and/or diarrhea (with suspicion of dehydration)</li> <li>Sigms of serious infection (septic rash, toxic)</li> <li>Chemotherapy or immunocompromised</li> <li>Fever (age &lt; 3 months) Temp &gt; 38.0 (rectal)</li> <li>Acute Psychotic Episode / Extreme Agitation</li> <li>Diabetes, Hypoglycemia, Hyperglycemia</li> <li>Migraine (Pain Scale 8 - 10/10)</li> <li>Pain Scale 8-10 (CVA, Back, Eye)</li> <li>Sexual Assess</li> <li>Neonate (&lt; 7 days old)</li> </ul>	<b>SENTINEL DIAGNOSIS</b> <ul style="list-style-type: none"> <li>Head Injury</li> <li>Trauma, Multiple Sites, Multiple Rib Fracture, Neck Injury / Spinal Cord</li> <li>Anaphylaxis</li> <li>AMI, Unstable Angina, CHF, Chest Pain NOS, Gastroesophageal Reflux</li> <li>Unspecified Drug / Medicinal Overdose, "d.u.s"</li> <li>AAA, Appendicitis, Cholecystitis</li> <li>Gastrointestinal Bleed, Hypotension</li> <li>CVA</li> <li>Severe Asthma</li> <li>COPO, Group</li> <li>Spontaneous Abortion</li> <li>Ectopic Pregnancy / Puerpera</li> <li>Epilepsy, Meningitis, Sepsis</li> <li>Acute Psychotic Episode / Agitation</li> <li>Hypoglycemia, Diabetic Ketoacidosis, Hyperglycemia</li> <li>Migraine</li> <li>Nasal Cleft, LBP / Strain (Disc), Keratitis, Iritis</li> </ul>
<b>TRIAGE LEVEL III - URGENT</b> <p>Time to NURSE Assessment <b>30 MINUTES*</b></p> <p>Time to PHYSICIAN Assessment <b>30 MINUTES*</b></p>	<b>USUAL PRESENTATION</b> <ul style="list-style-type: none"> <li>Head Injury, Alert, Vomiting</li> <li>Moderate Trauma</li> <li>Abuse / Neglect / Assault</li> <li>Vomiting and/or diarrhea (&gt; 2 years)</li> <li>Diabetes prediabetes</li> <li>Sigms of infection</li> <li>Mild / Moderate Admisis (PEFR &gt; 40%)</li> <li>Mild / Moderate Dyspnea</li> <li>Chest Pain - No Visceral Symptoms (Sharp/MSK)           <ul style="list-style-type: none"> <li>- No Previous Heart Disease</li> </ul> </li> <li>GI Bleed with Normal Vital Signs</li> <li>Vaginal Bleeding Acute, Normal Vital Signs</li> <li>Seizure, Alert on Arrival</li> <li>Acute Psychosis ± Suicidal Intentions</li> <li>Pain Scale 8 - 10 / 10 with minor injuries</li> <li>Pain Scale 4 - 7 / 10 (Headache, CVA, Back)</li> </ul>	<b>SENTINEL DIAGNOSIS</b> <ul style="list-style-type: none"> <li>Head Injury</li> <li>Anterior Dislocated Shoulder, Tibia / Fibula Fracture, Metatarsals, Transmolar Ankle Fracture</li> <li>Pyodermapatia</li> <li>Asthma without Status / COPD</li> <li>Uncontrolled / Crisp, Pneumonia</li> <li>Chest Pain NOS (MSK, GI, Resp)</li> <li>GI Bleed, No complications</li> <li>Spontaneous Abortion</li> <li>Seizure</li> <li>Acute Psychosis ± Suicidal Intentions</li> <li>Migraine, Nasal Cleft, LBP / Strain (Disc)</li> </ul>

# Canadian Triage and Acuity Scale (CTAS)

## Non disaster

### TRIAGE LEVEL IV - LESS URGENT

Time to NURSE  
Assessment

**60 MINUTES\***



Time to PHYSICIAN  
Assessment

**60 MINUTES\***

#### USUAL PRESENTATION

Head Injury, Alert, No Vomiting  
Minor Trauma  
ABD Pain (Acute)  
Cesareo  
Chest Pain, Minor Trauma or MSA, No Shortness  
Vomiting and diarrhea (>2 years/no dehydration)  
Suicidal Ideation / Depression  
Allergic Reaction (Minor)  
Corneal Foreign Body  
Back Pain (Chronic)  
URI Symptoms  
Pain Scale 4 - 7  
Headache (Non Migraine / Not Sudden)

#### SUSPECTED DIAGNOSIS

Head Injury, Alert, No Vomiting  
Cottle Fracture, Ankle Sprain  
Appendicitis, Cholelithiasis  
Otitis Media / Otitis Externa  
Chest Pain NOS (MSK, GI, Resp),  
Gastroesophageal Reflux

Suicidal Ideation / Depression  
Urinary  
Corneal Foreign Body  
LBP /Strain  
URI

### TRIAGE LEVEL V - NON URGENT

Time to NURSE  
Assessment

**120 MINUTES\***



Time to PHYSICIAN  
Assessment

**120 MINUTES\***

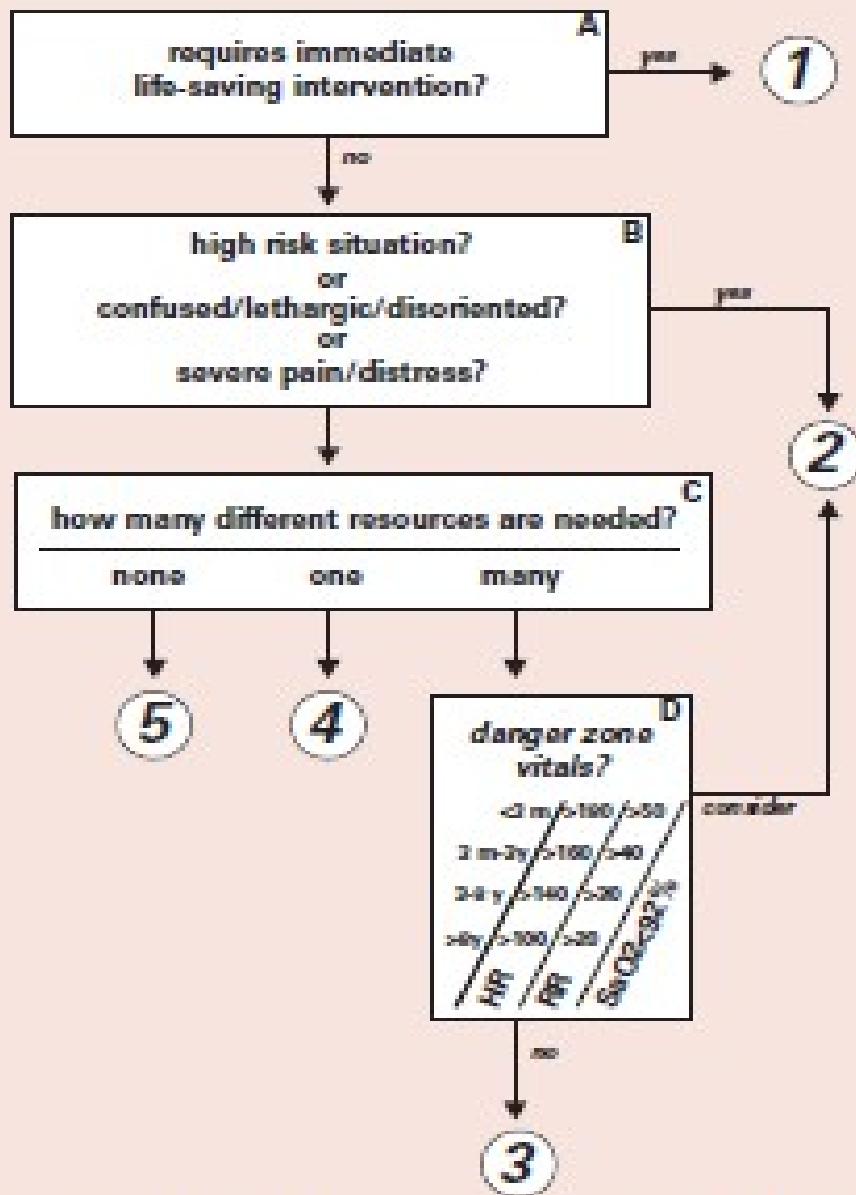
#### USUAL PRESENTATION

Minor Trauma, Not Necessarily Acute  
Sore Throat, No Resp Symptoma  
Diarrhea alone (no dehydration)  
Vomiting alone normal mental status  
(no dehydration)  
Menses  
Minor Symptoma  
ABD Pain (Chronic)  
Psychiatric complaints  
Pain Scale < 4

#### SUSPECTED DIAGNOSIS

LBP / Strain  
URI  
Gastroenteritis  
Vomiting  
Disorders of Elimination  
Breast Changes  
Cast Changes  
Constipation  
Symptoms / Neurotic, Personality and  
Nonpsychotic Mental Disorders  
Unspecified Superficial Lesion(s)

**Figure 3-1a. ESI Triage Algorithm**



A. Immediate life-saving intervention required: airway, emergency medications, or other hemodynamic interventions [e.g. supplemental O<sub>2</sub>, monitor, ECG or base DO<sub>2</sub> NOT count]; and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SpO<sub>2</sub><90, acute mental status changes, or unresponsive.

Unresponsive: is defined as a patient that is either:

- (1) nonverbal and not following commands (facultative); or
- (2) requires noxious stimulus (P or U on AVPU scale).

B. High risk situation: is a patient you would put in your last open bed.

Severe pain/distress: is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	Not Resources
<ul style="list-style-type: none"> <li>- lab (blood, urine)</li> <li>- ECG, x-ray</li> <li>- CT/mri-ultrasoundangiography</li> </ul>	<ul style="list-style-type: none"> <li>- holding a patient (giving parent)</li> <li>- front-line care leading</li> </ul>
<ul style="list-style-type: none"> <li>- IV access (parenteral)</li> </ul>	<ul style="list-style-type: none"> <li>- same or replace</li> </ul>
<ul style="list-style-type: none"> <li>- IV or ne or nebulizer medications</li> </ul>	<ul style="list-style-type: none"> <li>- no medications</li> <li>- tobacco: immunization</li> <li>- prescription medications</li> </ul>
<ul style="list-style-type: none"> <li>- specialty consultation</li> </ul>	<ul style="list-style-type: none"> <li>- route: oral to rectal</li> </ul>
<ul style="list-style-type: none"> <li>- simple procedure -1 - pacemaker, Foley cath</li> <li>- complex procedure -2 - conscious sedation</li> </ul>	<ul style="list-style-type: none"> <li>- simple wound care - dressing, incision</li> <li>- crutches, splints, casts</li> </ul>

D. Danger Zone Vital Signs:

Consider upgrade to ESI 2 if any vital sign criterion is exceeded.

Pediatric Fever Considerations:

1 to 28 days of age: assign at least ESI 2 if temp >38.0°C (100.4°F)

1-3 months of age: consider assigning ESI 2 if temp >38.0°C (100.4°F)

3 months to 3 yrs of age: consider assigning ESI 3 if temp >39.0°C (102.2°F), or incomplete immunizations, or no obvious source of fever

# Triage

- 1. You DO NOT decide who lives or dies**
2. The sooner you start Triage the sooner the medical care process starts
3. Triage is an ongoing process that is repeated many times
4. If you forget any of the above rules, go back to rule number 1.



# Let's Practice/ Άσκηση

- A 30 years old woman/ Γυναίκα 30 ετών
- Patient asks for help/  
Ζητάει να τη βοηθήσουμε
  - Respiration 20bpm/  
Αναπνοές 20/min
  - Radial pulse present/  
Ψηλαφητός κερκιδικός σφυγμός
  - Minor abrasions to arm/hands/  
Μικρής έκτασης αμυχές στα χέρια
  - Patient is walking /  
Η ασθενής περπατάει

Πράσινο/ Green

# Let's Practice/ Άσκηση

A 50 years old men / Άντρας 50 ετών

Airway is open/

Αεραγωγός ανοικτός

Breathing 30bpm/

Αναπνοές 30/min

Absent radial pulses /

Μη Ψηλαφητός κερκιδικός σφυγμός

Lying on the road/

Ξαπλωμένος πάνω στην άσφαλτο

KOKKINO/ RED

# Let's Practice/ Άσκηση

- Men 45 years old/ Άντρας ετών 45
- Respirations 22 / Αναπνοές 22/min
- Radial pulse present/  
Ψηλαφητός κερκιδικός σφυγμός
  - Follows commands/ Εκτελεί εντολές
  - Cannot walk/ Δεν μπορεί να περπατήσει
  - Burns to one arm / Έγκαυμα στο ένα χέρι

KITPINO/ YELLOW

# Let's Practice/ Άσκηση

- A 25 yr. old male / Άνδρας 25 ετών
- He is able to follow commands but has trouble hearing/ Εκτελεί εντολές αλλά δεν ακούει καλά
- His Cap Refill is **<2 seconds** /  
Τριχοειδική επαναπλήρωση **<2 seconds**
  - His Radial Pulse is nonexistent/ Μη ψηλαφητός κερκιδικός σφυγμός
  - Can't move due to a left femur fracture/ Δεν μπορεί να κινηθεί εξαιτίας ενός κατάγματος στην Αρ κνήμη
- Respirations are **>30 and he is coughing** /  
Αναπνοές **>30 και βήχει**

KOKKINO/ RED

