# Maryland Triage System
## Tag, START, and JumpSTART

# Enabling Objectives

**Upon completion of this training the participant will be able to:**

- **Define TRIAGE and explain when it is appropriate for use**
- **List three reasons a patient triage and tracking system is required for successful operations**
- **Categorize the Triage status of patients utilizing the START and JumpSTART Triage Systems**
- **Explain the design and use of paper Triage Tags**
- **Identify five capabilities of the paper Maryland Triage Tags**

# Triage

**The sorting of and allocation of treatment to patients and especially battle and disaster victims according to a system of priorities designed to maximize the number of survivors**
**(from the French *trier*, to sort)**
**(Merriam-Webster)**
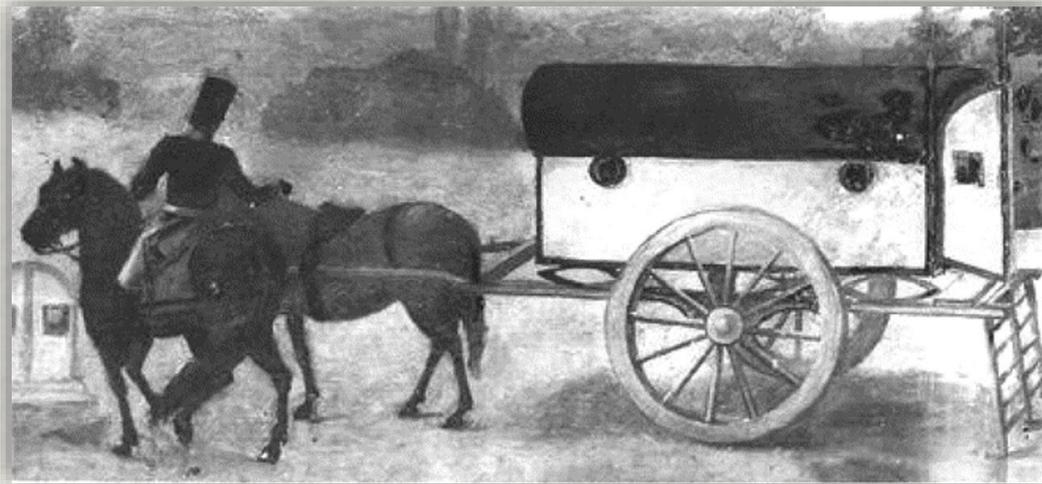


**Developed by Baron Dominique-Jean Larrey, Napoleon's Chief Surgeon, for use by the first ambulance corps—the *ambulances volantes*—during the early 1800s**

# Why Triage and Tag?

- **Sorting of patients to provide for the survival of the most patients**
- **Assignment of resources in the most efficient method**
- **Most severe survivable injuries receive rapid treatment**
- **Accountability of patients**
- **Family reunification**

# Triage: A rapid approach to prioritizing a large number of patients

| Incident Site | → | Casualty Collection Point | → | Triage Unit Leader |
|---|---|---|---|---|
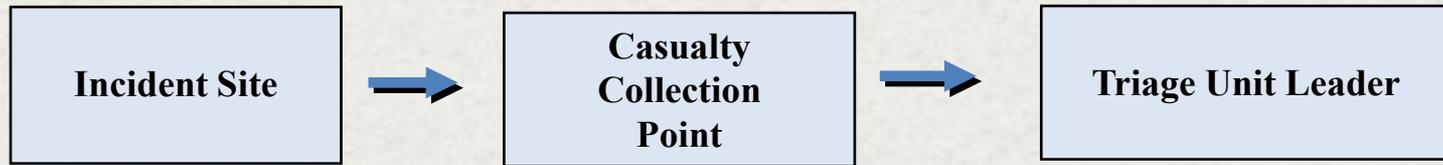
# *S*imple *T*riage *A*nd *R*apid *T*reatment

# *JumpSTART*

# Triage

- Triage should be performed RAPIDLY

- Utilize START/ JumpSTART Triage to determine priority

- 30–60 seconds per patient

- Affix tag on left upper arm or leg



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# *START* – *JumpSTART Triage*

- Clear the "**walking wounded**" with verbal instruction:

  *If you can hear me and you can move, walk to…*

- Direct patients to the **casualty collection point (CCP)** or treatment area for detailed assessment and medical care

- Assign a Green Minor Manager to the area to control patients and manage area

- Tag will be issued at the CCP

- These patients may be classified as **MINOR**

# *START*/*JumpSTART*

Now use START/JumpSTART to assess and categorize the remaining patients...

USE COLORED RIBBONS ONLY
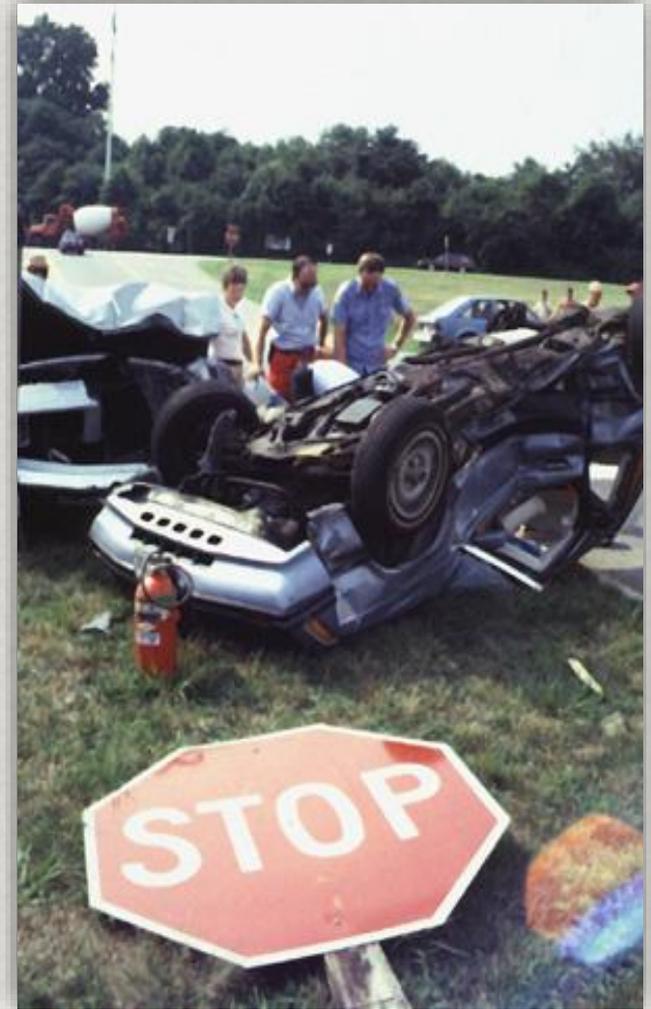
# START/JumpSTART

**Categorize the patients by assessing each patient's *RPMs...***

- ✓ **R**espirations

- ✓ **P**ulse/perfusion

- ✓ **M**ental Status

# *START*/*JumpSTART*—**R**PM

# RESPIRATIONS

## Is the patient breathing?

## Yes

Adult – respirations > 30 = **Red/Immediate**

Pediatric – respirations < 15 or > 45 = **Red/Immediate**

Adult – respirations < 30 = check perfusion

Pediatric – respirations > 15 and < 45 = check perfusion

# *START*/*JumpSTART*—**R***PM*

## RESPIRATIONS

<u>Is the patient breathing?</u>

## No

Reposition the airway…

Respirations begin = **IMMEDIATE/RED**

If patient is **APNEIC**

- Adult – deceased = BLACK

- Pediatric: Pulse Present – give 5 rescue breaths
    - respirations begin = **IMMEDIATE/RED**
    - absent respirations – deceased = BLACK
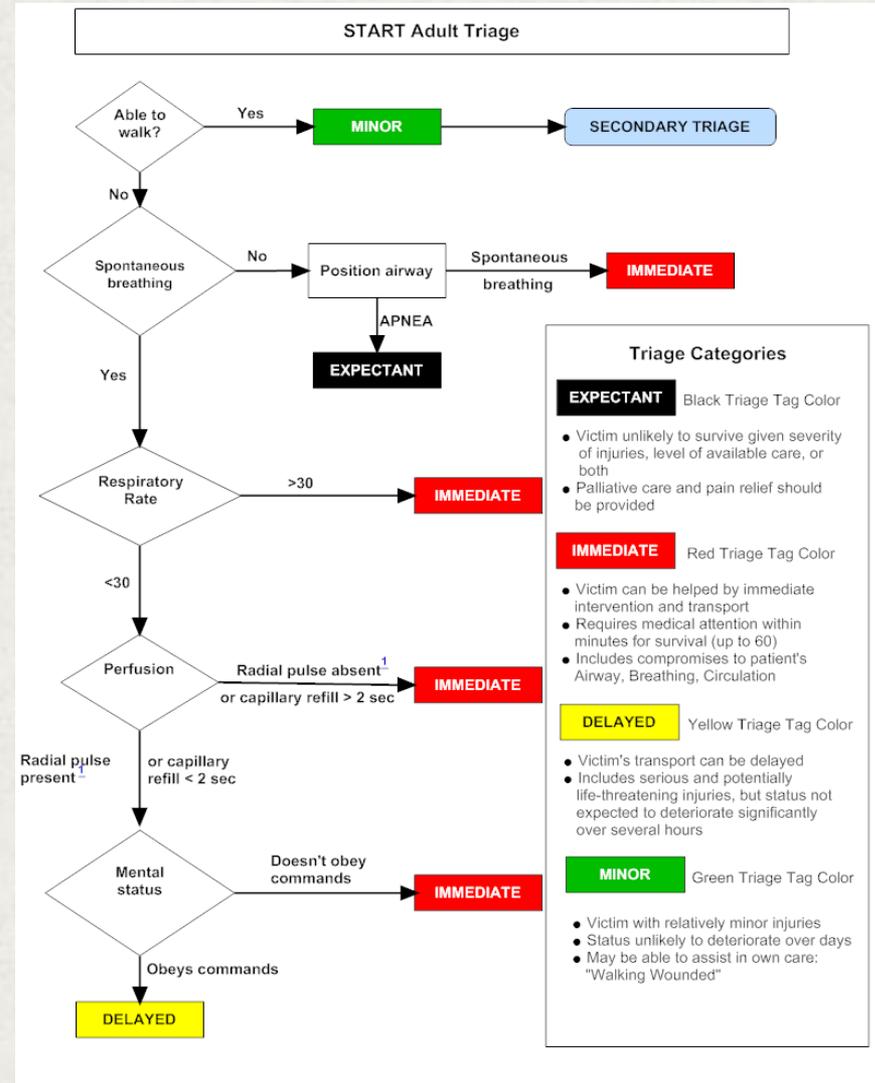
# *START*/*JumpSTART*—R**P**M

## PULSE/PERFUSION

### Is the *RADIAL* pulse present?

### Is capillary refill (CR) *LESS* than < 2 seconds?

### Yes
Check mental status

### No
Adult: Pulse absent or
CR  > 2 seconds patient
= **IMMEDIATE/RED**
Pediatric: No palpable
pulse patient =
**IMMEDIATE/RED**
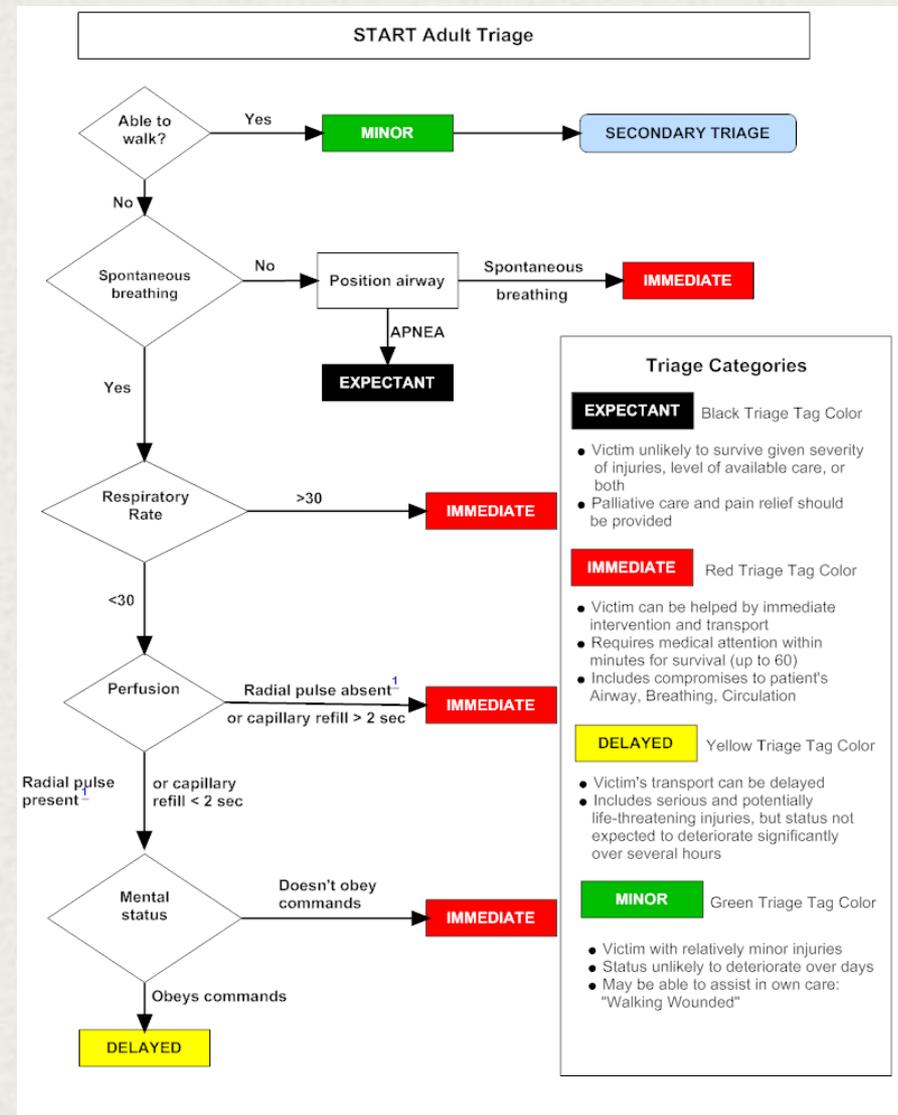
# *START/JumpSTART—RPM*

**MENTAL STATUS…**

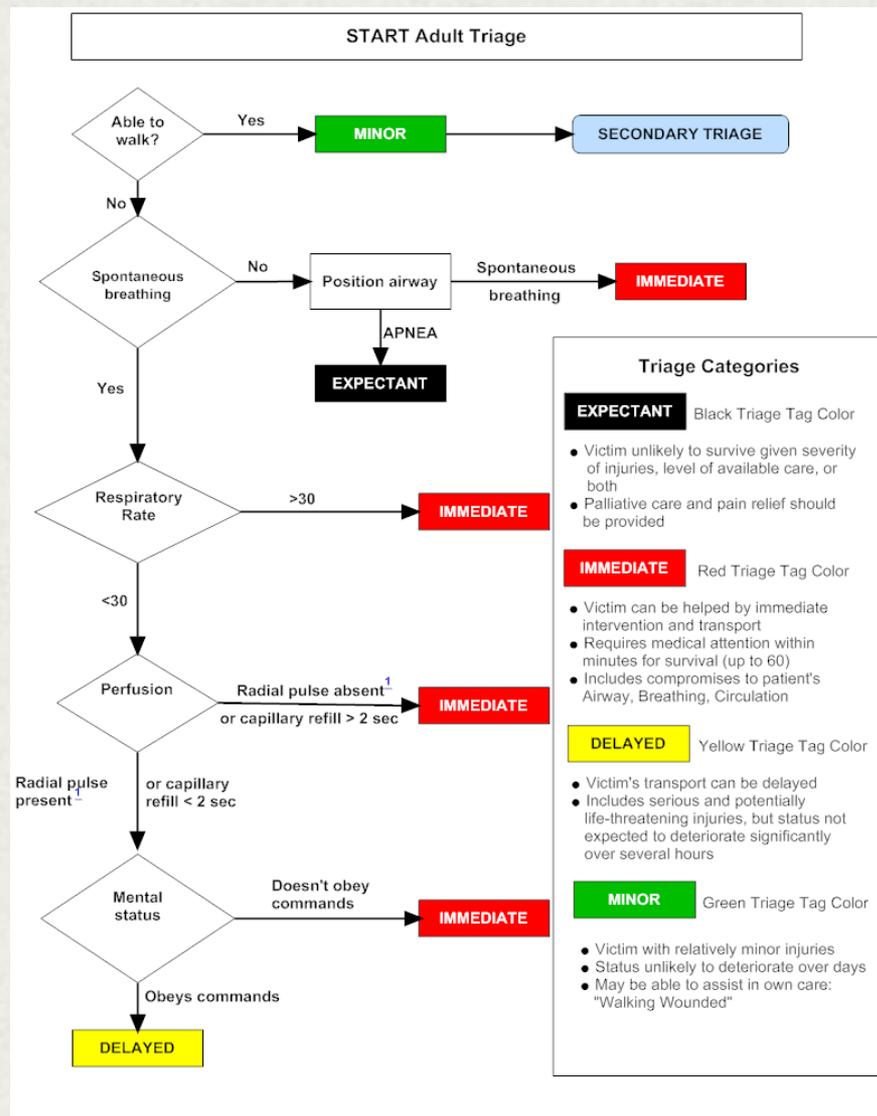Can the patient follow simple commands?

**Yes**

Adult = DELAYED / YELLOW

Pediatric: alert, verbal, or pain response is appropriate
= DELAYED / YELLOW

**No**

Adult = IMMEDIATE / RED

Pediatric – "P" pain causes inappropriate posturing or "U" unresponsive to noxious stimuli = IMMEDIATE/ RED
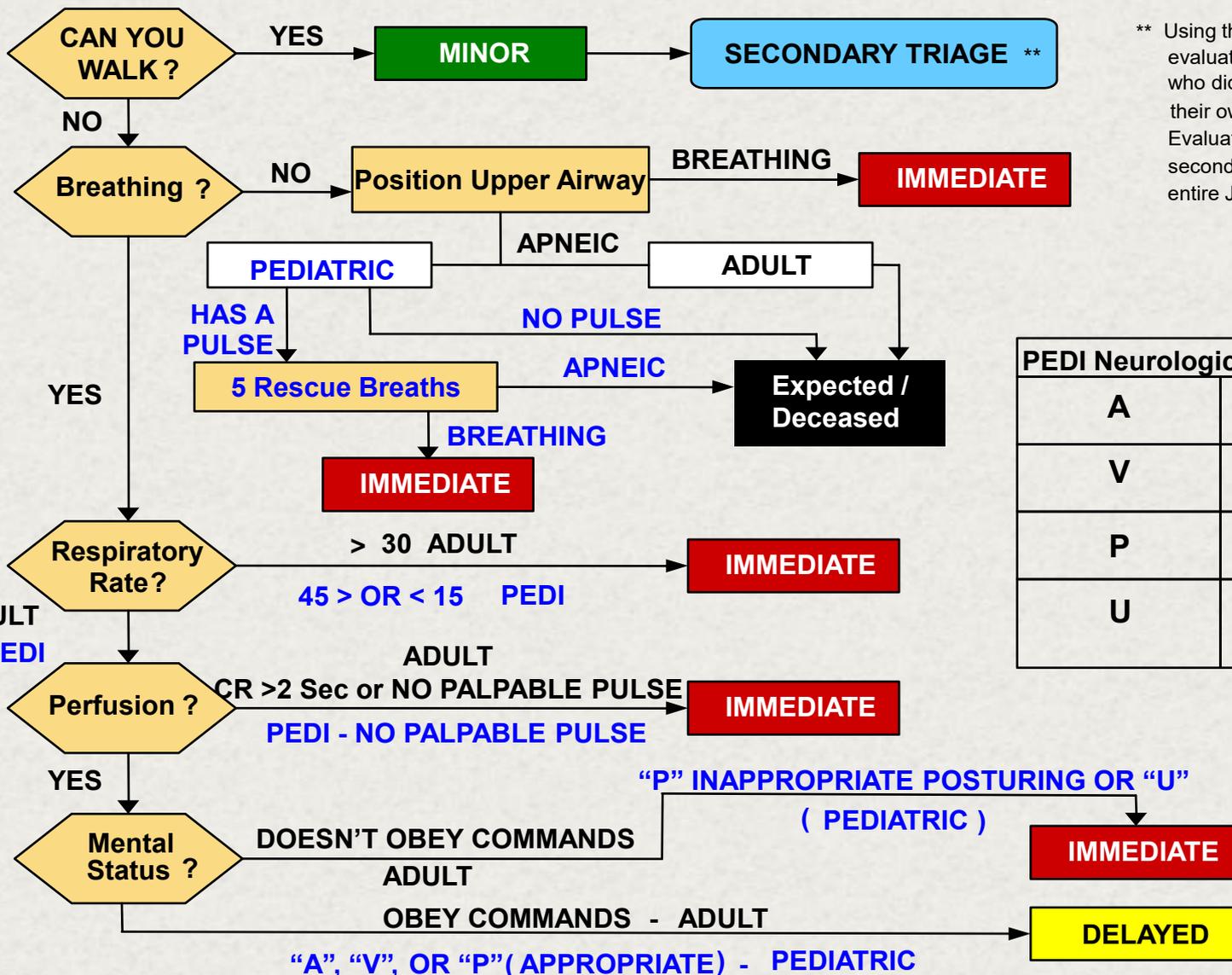


START Adult Triage

# *START*/*JumpSTART*

If the patient is **IMMEDIATE/RED** upon initial assessment...then, before moving the patient to the treatment area, attempt  only life-saving interventions:

**Airway, Needle Decompression, Tourniquet, Antidote**

### *DO NOT ATTEMPT ANY OTHER TREATMENT AT THIS TIME*

# Combined START/JumpSTART Triage

**CAN YOU WALK ?** —YES→ **MINOR** → **SECONDARY TRIAGE** **

** Using the JS algorithm evaluate all children first who did not walk under their own power. Evaluate infants first in secondary triage using entire JS algorithm !

NO ↓

**Breathing ?** —NO→ **Position Upper Airway** —BREATHING→ **IMMEDIATE**

APNEIC

**PEDIATRIC** ——— **ADULT**

**HAS A PULSE**    **NO PULSE**

**5 Rescue Breaths** —APNEIC→ **Expected / Deceased**

BREATHING ↓

**IMMEDIATE**

YES ↓

**Respiratory Rate?** —> 30  ADULT / 45 > OR < 15   PEDI → **IMMEDIATE**

< 30 ADULT
15 - 45 PEDI
↓

**Perfusion ?** —ADULT CR >2 Sec or NO PALPABLE PULSE / PEDI - NO PALPABLE PULSE → **IMMEDIATE**

YES ↓

**Mental Status ?** —DOESN'T OBEY COMMANDS ADULT

**"P" INAPPROPRIATE POSTURING OR "U"** ( PEDIATRIC ) → **IMMEDIATE**

OBEY COMMANDS - ADULT → **DELAYED**

**"A", "V", OR "P"( APPROPRIATE ) -** PEDIATRIC

| PEDI Neurological Assessment | |
|---|---|
| A | Alert |
| V | Responds to Verbal Stimuli |
| P | Responds to Painful Stimuli |
| U | Unresponsive To Noxious Stimuli |

Http ://www . starttriage . com          Http ://www . jumpstarttriage . com

# Fast Triage – Ribbon Applied First



**Apply ribbon to upper arm or upper thigh**

# RED Triage Category (Immediate)

## Adult

Respirations > 30 BPM
CR > 2 seconds or
no palpable radial pulse
Cannot follow simple
commands

Pneumothorax
Hemorrhagic Shock
Closed Head Injury

## Pediatric

Respirations < 15 or > 45
CR > 2 seconds or no palpable
radial or brachial pulse
Inappropriate "Pain"
(e.g., posturing) or
"Unresponsive"

# YELLOW Triage Category (Delayed)

Adult: respirations, capillary refill, and mentation are normal

- Isolated burns

- Extremity fractures

- Stable other trauma

- Most patients with medical complaints



Pediatric: "A," "V," or appropriate "P"
(e.g., withdrawal from pain stimulus)

# GREEN Triage Category (Minor)

- "Walking wounded"
- Psychological casualties
- Always look for children being carried and assess them

# GREY **Triage Category (Expectant)**

- This category is not currently in use and <u>must not</u> be utilized until approved by MIEMSS

- It is included on the paper tags in anticipation of national recognition and acceptance in the future

- GREY is for the patient that is not likely to survive even with emergent interventions

# BLACK Triage Category (Deceased)

- Obvious mortality or death (pulseless and apneic)
  - Decapitation
  - Blunt trauma arrest
  - Injuries incompatible with life (future GREY)
  - Brain matter visible (future GREY)

# Revised Paper Triage Tag



FRONT

BACK

# Triage Tag Sections

- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**

- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

**\* Triage tags should be used in all MCI scenarios, even when handheld device is employed**

MIEMSS TRIAGE TAG
DO NOT REMOVE

| PATIENT INFORMATION | | | |
|---|---|---|---|
| ☐ UNDETERMINED | AGE | WGT | KG / LBS |
| ☐ MALE ☐ FEMALE | DOB | | |
| NAME | | | **PATIENT NUMBER** |
| | | | \* M D 4 2 0 7 7 1 \* |
| ADDRESS | | | |
| CITY | ST | ZIP | PHONE |

- **PATIENT INFORMATION**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

| | EVALUATION | TIME | RED | YELLOW | GREEN | GREY | BLACK |
|---|---|---|---|---|---|---|---|
| TRIAGE STATUS | INITIAL | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | SECONDARY | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | HOSPITAL | | ☐ | ☐ | ☐ | ☐ | ☐ |

The paper triage tag includes a **GREY** category for *future use* based on *anticipated* national acceptance.

**IT WILL NOT BE USED IN THE TRIAGE OF PATIENTS UNTIL APPROVED BY MIEMSS.**

- **Patient information**
- **TRIAGE STATUS**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

**MIEMSS** DATE: _____  TRIAGE TAG  DO NOT REMOVE

CHIEF COMPLAINT

- Head Injury
- Blunt Trauma
- Burn
- Laceration
- C-Spine
- Penetrating Trauma
- Fracture
- Amputation
- Medical _____
- Cardiac
- Diabetic
- Psychiatric
- Haz-Mat Exposure
- Respiratory
- OB/GYN

COMMENTS

- **Patient information**
- **Triage status**
- **CHIEF COMPLAINT**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

**TRIAGE TAG**
**DO NOT REMOVE**

MIEMSS
DATE:

PATIENT INFORMATION
- UNDETERMINED
- MALE  FEMALE
AGE  WGT  KG./LBS
DOB
PATIENT NUMBER
NAME
ADDRESS
CITY    ST    ZIP    PHONE

TRIAGE STATUS

| EVALUATION | TIME | RED | YELLOW | GREEN | GREY | BLACK |
|---|---|---|---|---|---|---|
| INITIAL | | | | | | |
| SECONDARY | | | | | | |
| HOSPITAL | | | | | | |

CHIEF COMPLAINT
- Head Injury
- Blunt Trauma
- Burn
- Laceration
- C-Spine
- Penetrating Trauma
- Fracture
- Amputation
- Medical ____
- Cardiac
- Diabetic
- Psychiatric
- Haz-Mat Exposure
- Respiratory
- OB/GYN

COMMENTS

TRANSPORTATION AGENCY/UNIT    DESTINATION    TIME ARRIVED

TREATMENT
HOSPITAL
OTHER
OTHER
OTHER

TRANSPORT RECORD
- UNDETERMINED
- MALE  FEMALE
AGE
DOB
PATIENT NUMBER
NAME
CHIEF COMPLAINT
DESTINATION    HOSP NOTIFIED
TRANSPORTATION AGENCY/UNIT    TRANSPORT TIME

TRIAGE STATUS
RED  YELLOW  GREEN
GREY  BLACK

- **Patient information**
- **Triage status**
- **Chief complaint**
- **TRANSPORTING UNIT**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **PEEL-OFF BAR CODES**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

**MIEMSS**

TRIAGE TAG
DO NOT REMOVE

- Detachable as a tear-off and as a peel-off sticky label

- Used to document patient movement

- Must be affixed to Transport Tactical Worksheet with the unit, priority, and destination marked and initialed.

**Commonly called the "Ticket"**

- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **TRANSPORT RECORD**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

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**Removable wrist band has been added with an area for DOB and name**

- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **Family contact**
- **WRIST BAND**

| | TIME | RESP | PULSE | MENTAL STATUS | BP | SpO$_2$ |
|---|---|---|---|---|---|---|
| **VITAL SIGNS** | | | | A V P U | | |
| | | | | A V P U | | |
| | | | | A V P U | | |

- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **VITAL SIGNS**
- **Medical history**
- **Treatment**
- **Family contact**
- **Wrist band**

MIEMSS — TRIAGE TAG DO NOT REMOVE

| | TIME | RESP | PULSE | MENTAL STATUS | BP | SpO$_2$ |
|---|---|---|---|---|---|---|
| **VITAL SIGNS** | | | | A V P U | | |
| | | | | A V P U | | |
| | | | | A V P U | | |

**MEDICAL HISTORY**

ALLERGIES

MEDICATIONS

PAST MEDICAL HISTORY

| TIME | TREATMENT RECORD | INITIALS |
|---|---|---|
| | ☐ BVM | |
| | ☐ ET_____ (Depth) | |
| | ☐ Oxygen by _____ at _____ LPM | |
| | ☐ Bleeding Control | |
| | ☐ TOURNIQUET @ _____ | |
| | ☐ Spinal Immobilization | |
| | ☐ Extremity Splint | |
| | ☐ IV Started: ___ Site ___ : ___ Gauge | |
| | ☐ IO_____ (Site) | |
| | ☐ Gross Decon | |
| | ☐ Final Decon | |
| | | |
| | | |
| | | |

FAMILY MEMBER INVOLVED?  NAME OF FAMILY MEMBER INVOLVED
☐ YES  ☐ NO

EMERGENCY CONTACT  PHONE

TRIAGE TAG

Maryland Emergency Medical Services      Maryland Emergency Medical Services

**MEDICAL HISTORY**

- ALLERGIES
- MEDICATIONS
- PAST MEDICAL HISTORY

- • Patient information
- • Triage status
- • Chief complaint
- • Transporting unit
- • Peel-off bar codes
- • Transport record
- • Vital signs
- • **MEDICAL HISTORY**
- • Treatment
- • Family contact
- • Wrist band

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- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **TREATMENT**
- **Family contact**
- **Wrist band**

- **Patient information**
- **Triage status**
- **Chief complaint**
- **Transporting unit**
- **Peel-off bar codes**
- **Transport record**
- **Vital signs**
- **Medical history**
- **Treatment**
- **FAMILY CONTACT**
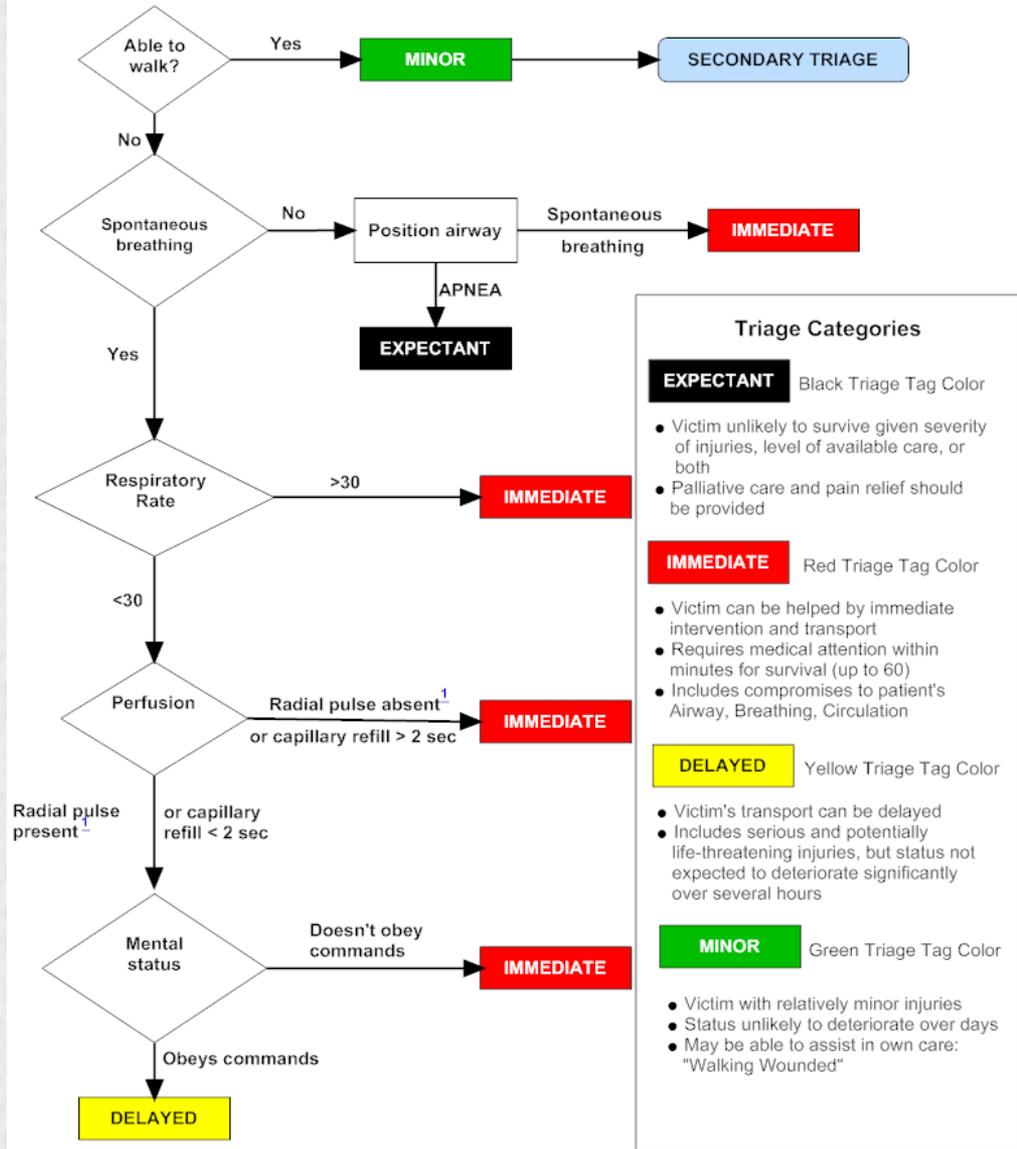- **Wrist band**

# Triage Summary

- **Triage allows for effective and efficient care, helping to increase the survivability for as many patients as possible**
- **Assignment of resources will increase efficiency**
- **Most severely injured patients will receive rapid treatment and transport in logical order**
- **Ensures accountability of all patients**
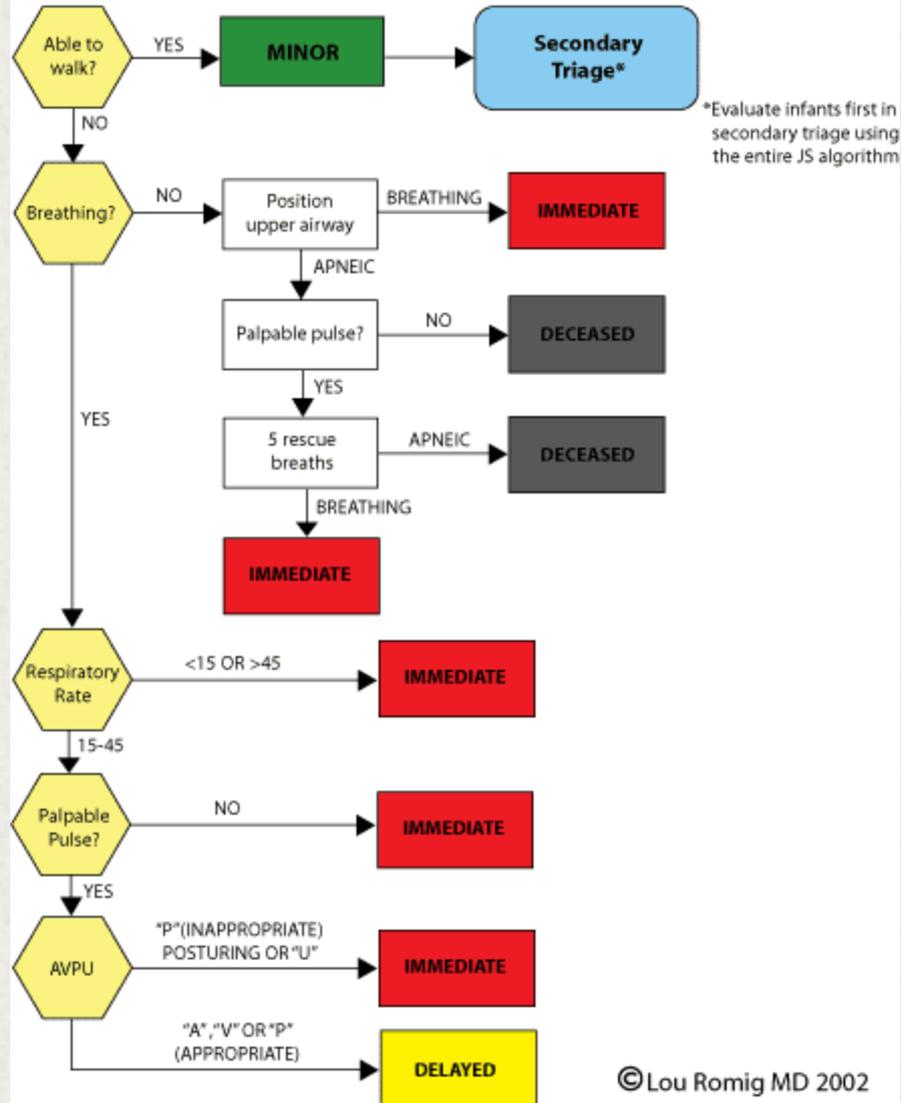- **Allows for family reunification**

START Adult Triage

Able to walk? — Yes → **MINOR** → SECONDARY TRIAGE

No ↓

Spontaneous breathing — No → Position airway — Spontaneous breathing → **IMMEDIATE**

Position airway ↓ APNEA → **EXPECTANT**

Yes ↓

Respiratory Rate — >30 → **IMMEDIATE**

<30 ↓

Perfusion — Radial pulse absent[1] or capillary refill > 2 sec → **IMMEDIATE**

Radial pulse present[1] or capillary refill < 2 sec ↓

Mental status — Doesn't obey commands → **IMMEDIATE**

Obeys commands ↓

**DELAYED**

**Triage Categories**

**EXPECTANT** Black Triage Tag Color

- Victim unlikely to survive given severity of injuries, level of available care, or both
- Palliative care and pain relief should be provided

**IMMEDIATE** Red Triage Tag Color

- Victim can be helped by immediate intervention and transport
- Requires medical attention within minutes for survival (up to 60)
- Includes compromises to patient's Airway, Breathing, Circulation

**DELAYED** Yellow Triage Tag Color

- Victim's transport can be delayed
- Includes serious and potentially life-threatening injuries, but status not expected to deteriorate significantly over several hours

**MINOR** Green Triage Tag Color

- Victim with relatively minor injuries
- Status unlikely to deteriorate over days
- May be able to assist in own care: "Walking Wounded"

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JumpSTART Pediatric MCI Triage©

*Evaluate infants first in secondary triage using the entire JS algorithm

©Lou Romig MD 2002

# Maryland Triage System

MIEMSS gratefully acknowledges the following individuals for their efforts in the development of this program:

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# Maryland Triage System



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