

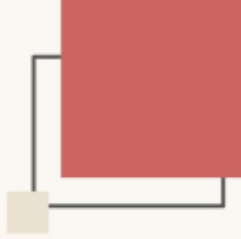
TRIAGE

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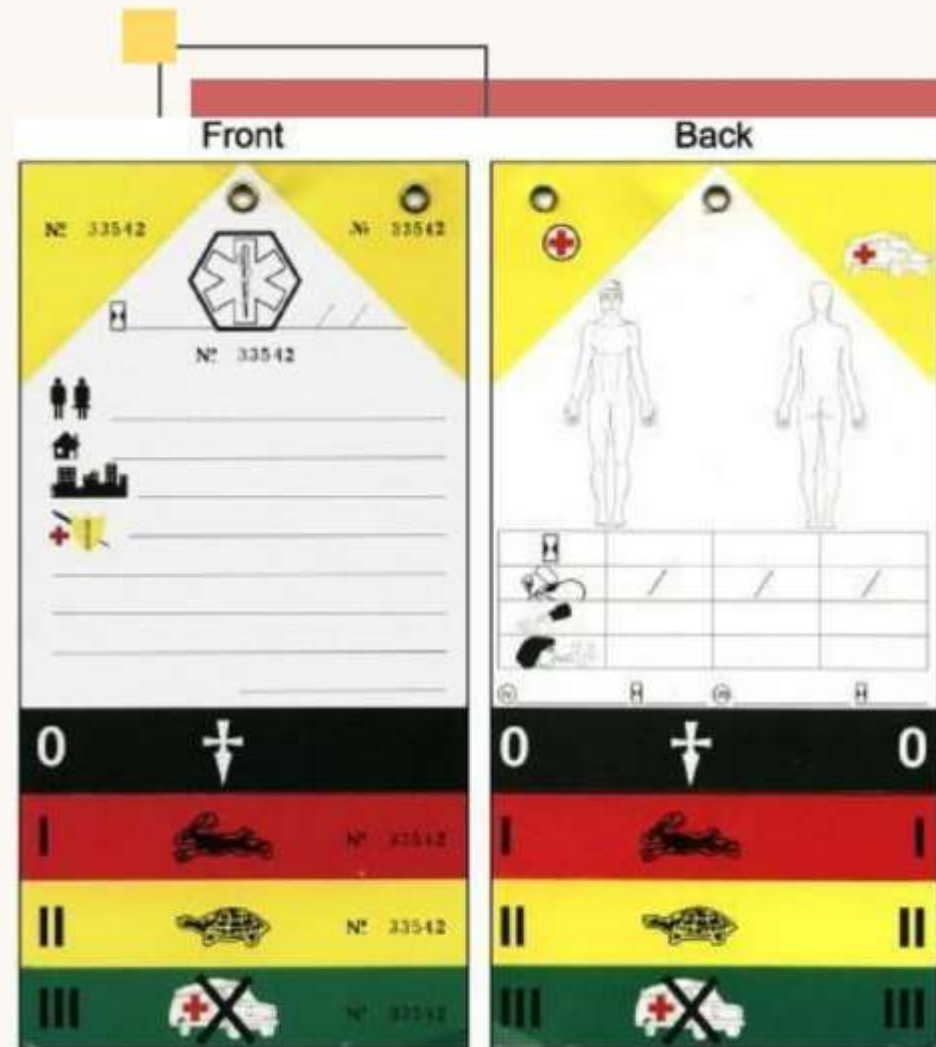
ANESTHESIOLOGY DEPARTMENT

Description

- Is a process of sorting victims by giving priority values for treatment and transportation in order to maximize the number of victims in an incident.
- It is based on ABC priorities (Airway with cervical spine protection, Breathing, Circulation with bleeding control).



TRIAGE CARD



TRIAGE DISTRIBUTION

Priority Group			Description
Number	Name	Color	
P1	Emergency/Immediate	Red	Patients who have life-threatening injuries that are treatable with a minimum amount of time, personnel, and supplies. These patients also have a good chance of recovery.
P2	Urgent	Yellow	Indicates that treatment may be delayed for a limited period of time without significant mortality or in the ICU setting patients for whom life support may or may not change their outcome given the severity of their illness.
P3	Delayed	Green	Patients with minor injuries whose treatment may be delayed until the patients in the other categories have been dealt with or patients who do not require ICU admission for the provision of life support.
P4	Expectant	Blue	Patients who have injuries requiring extensive treatment that exceeds the medical resources available in the situation or for whom life support is considered futile.
--	Dead	Black	Patients who are in cardiac arrest and for which resuscitation efforts are not going to be provided.

SYSTEM TAGGING



Victim Priority: if the number of helpers is the same or greater than the number of victims:

- a. First Priority (Red)
- b. Second Priority (Yellow)
- c. Third Priority (Green)
- d. Last Priority (Black)

If the number of helpers is less than the number victim :

- a. First Priority (Green)
- b. Second Priority (Yellow)
- c. Third Priority (Red)
- d. Last Priority (Black)



Steps Beginning of Triage

- The triage team lines up in front of the evacuation team and medical.
- The triage team will enter the disaster area after being declared safe by the Coordinator
- The triage team is divided properly so that victims are triaged by only 1 triage officer.
- The triage team carries out an assessment based on priority.

S.T.A.R.T SYSTEM

Simple Triage And Rapid Treatment

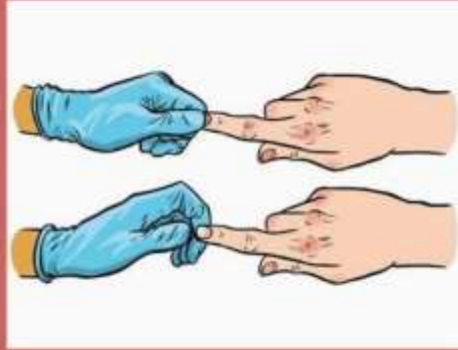


The S.T.A.R.T method can be used for ages > 8 years.

S.T.A.R.T is based on 3 observations:

- Respiratory or breathing
- Perfusion of circulation
- Mental status

2. Perfusion (Circulation)



1. Breathing



Look, listen and
feel for breathing

3. Mental Status

To see whether the person can follow simple commands or not. Commands can be "hold my hand" or "what's your name, what's your complaint?"

- If you can follow simple commands = Yellow tag
- If you can't follow simple command = Red tag

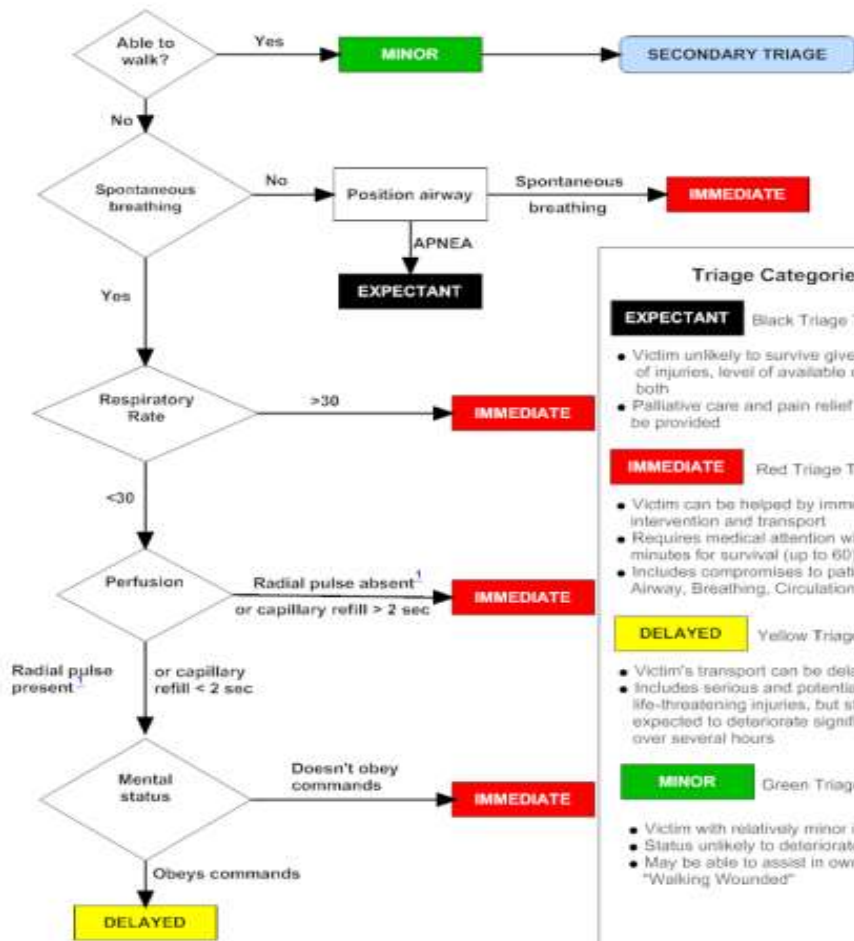


4. Exposure

- For all victims who are suspected of having experienced trauma is not visible, then we can open the victim's clothes to see the possibility of injury.
- After doing this, immediately cover the victim's body to prevent hypothermia.
- After completing triage on one victim, The triage officer will report the number of victims, the color of the triage card, the type of evacuation, what is needed and show the location of the victims to the coordinator.



START Adult Triage



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"

J.U.M.P S.T.A.R.T SYSTEM





The JumpSTART method can be used for children aged 1-8 years.

JumpSTART is based on 3 observations:

START is based on 3 observations:

- **Respiratory or breathing**
- **Pulse**
- **Mental status**

1. Respiration (Breathing)

The victim is not breathing – manually open the airway

- If the victim starts breathing = red tag
- If the victim is not breathing and has no pulse = black tag
- If the victim is not breathing but has a pulse = 5 rescue breaths
- If the victim is still not breathing = black tag
- If the victim is breathing = red tag • If breath <15 or >45 = red tag
- If breath is between 15-45 = go to next step



2. Pulse

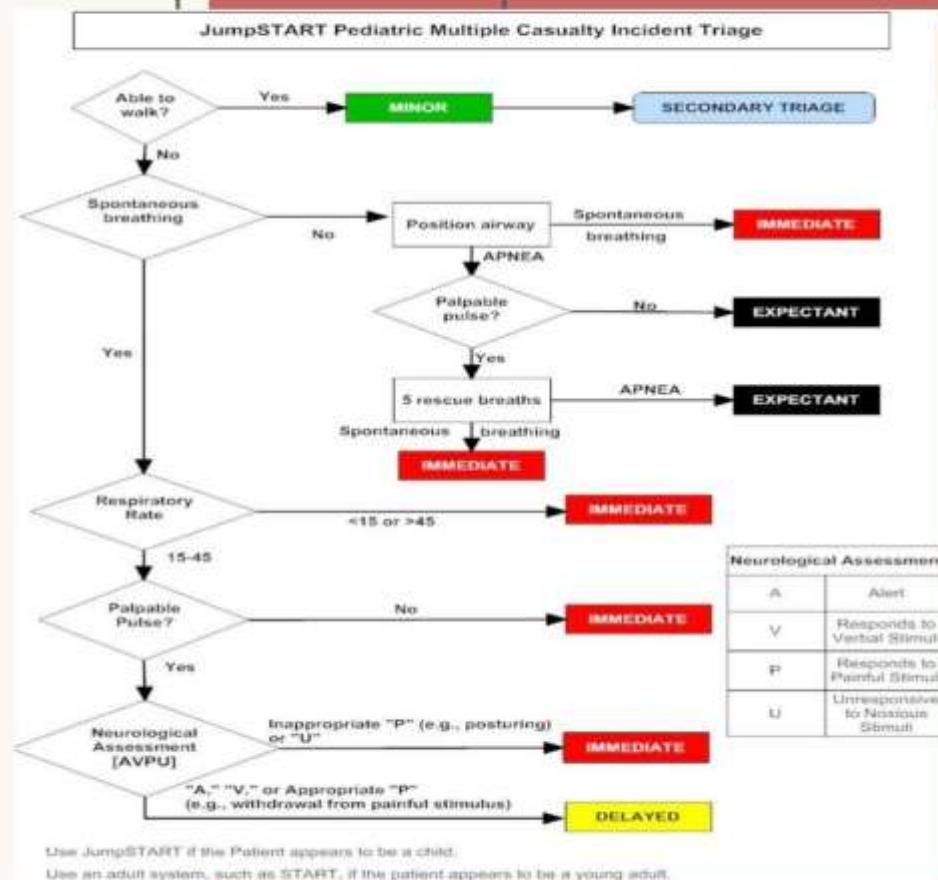
Distal Pulses (a.radialis, a.brachialis, a.tibialis posterior, a.dorsalis pedis)

- No distal pulse = red tag
- Distal pulse is present = go to next step

3. Mental Status

Use AVPU (alert, verbal responds, pain responds, unresponsive)

- Respond verbally or respond to pain = yellow tag
- The response is not appropriate or the response is not the same once = red tag



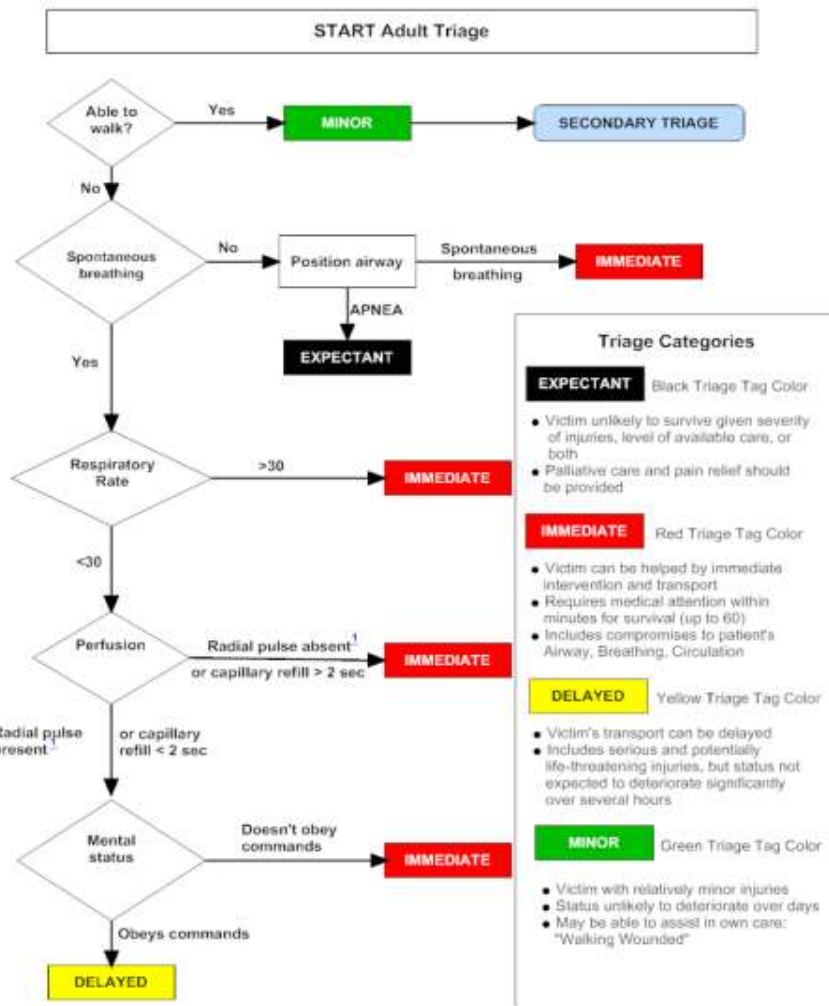
SUMMARY

- Every responder must understand the principles and operations behind your casualty sorting system.
- The START system is an excellent and easily understood triage or casualty sorting method.
- Responders should be involved in periodic community disaster drills so that their skills and capabilities can be tested and improved.

CASE 1

- An adult kneels at the side of the road, shaking his head.

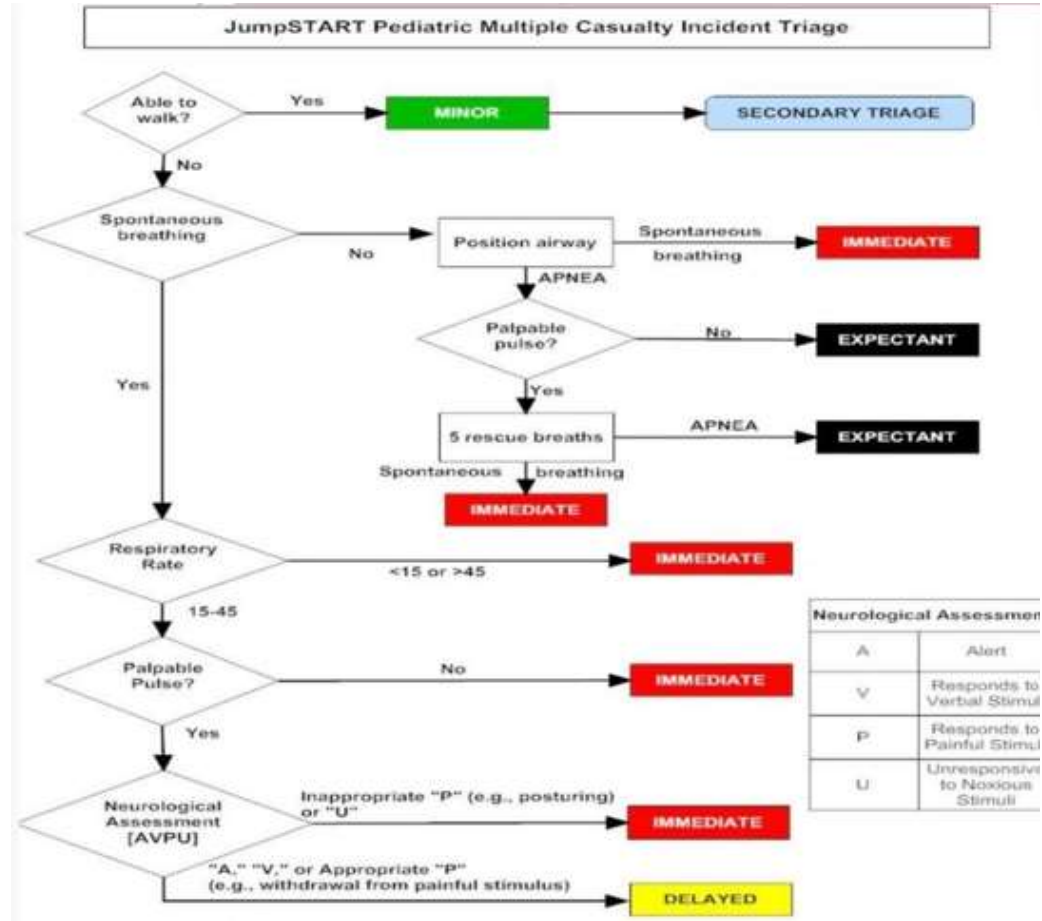
1. He says he's too dizzy to walk.
2. RR 20 /min
3. CR 2 sec
4. Obeys commands



CASE 2

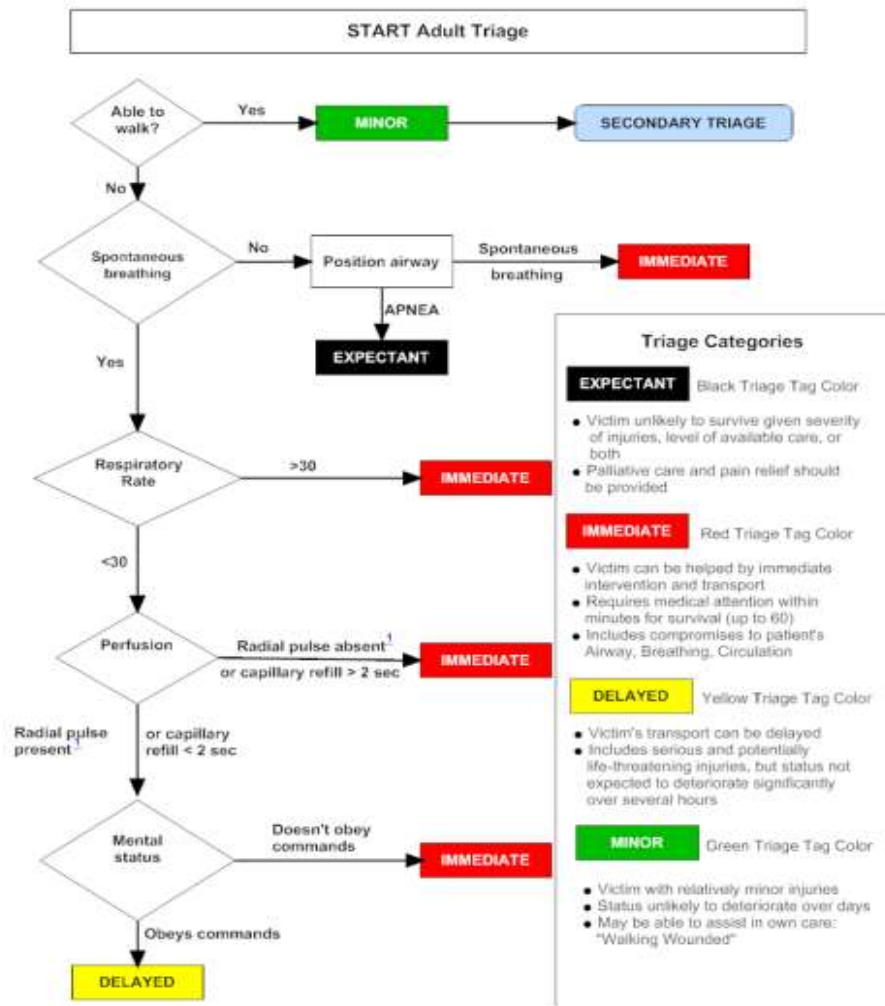
- A toddler lies among the wreckage.

1. RR 50 /min
2. Palpable distal pulse
3. Withdraws from painful stimulus



CASE 3

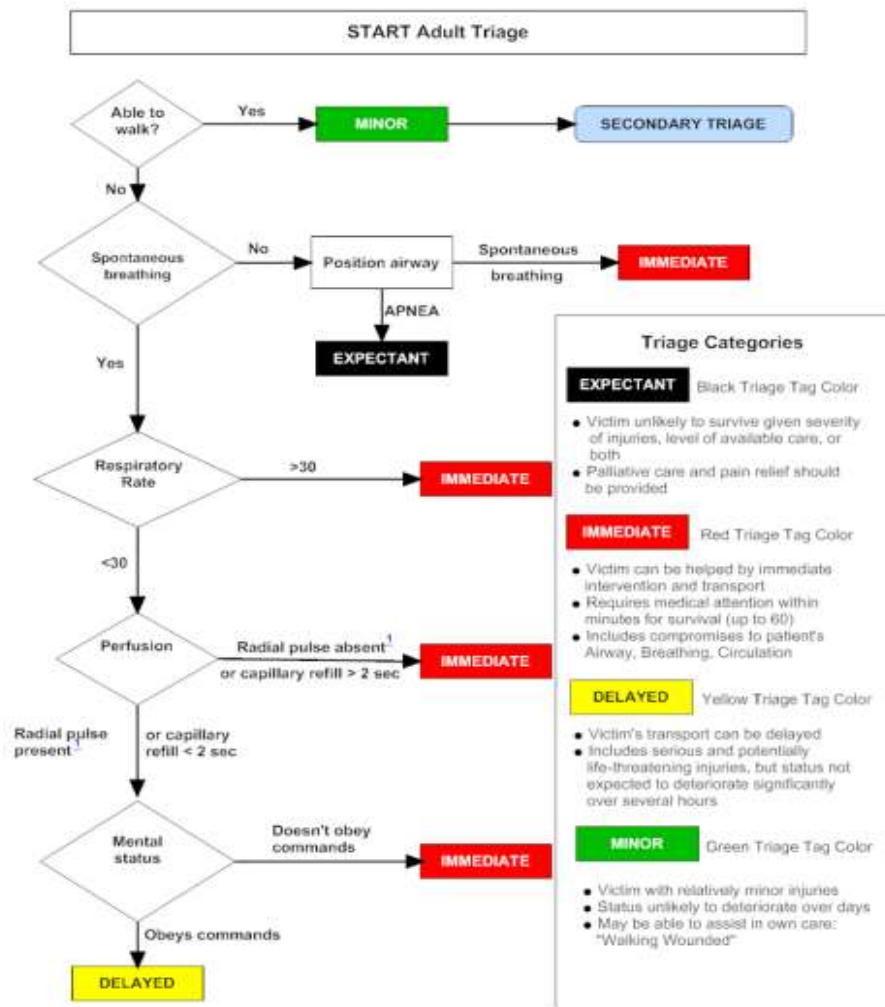
- An adult male lies on the ground
 - RR 20 /min
 - Good distal pulse
 - Obeys commands but cries that he can't move his legs



CASE 4

- Adult female driver still in the bus, trapped by her lower legs under caved-in dash.

- RR 24 /min
- Capillary refill 4 sec
- Moans with verbal stimulus



EVACUATION

ANESTHESIOLOGY DEPARTMENT



EVACUATION

Efforts to move victims from the location of a dangerous incident to an adequate place to provide assistance or to follow up on their condition in order to survive.

- When carrying out an evacuation, there are several things that must be considered, namely the situation and conditions in evacuation, the condition of the victim and the condition of the rescuer.
- The main thing that needs to be considered before carrying out an evacuation is controlling the condition of the victim medically.

GENERAL RULES

- Pay attention to the victim's condition (any injuries).
- If possible, explain to the victim what will be done so that they can cooperate. If

several people evacuate, 1 person gives command.

- Don't ignore the safety of your own helper.



RULES FOR LIFTING AND LOWERING THE VICTIM:

- **Position your feet as comfortably as possible, one foot forward to maintain balance.**
- **Straighten your body and bend your knees.**
- **Hold the victim/bandage with all your fingers.**
- **Make sure the weight of the victim being lifted is as close as possible with helper.**
- **If you lose your balance, put the victim down, reposition him, then start lifting**

EVACUATION WITHOUT TOOLS



Carrying the victim without tools

1. Human stick

Indication: for conscious victims who can still walk if assisted by a rescuer, for example due to dislocation/sprain of one ankle.

Method:

- You stand next to the victim on the injured or weak side. Put the victim's arm around your shoulder and hold their hand or wrist.
- Your other arm wraps around the victim's waist and holds their shirt or waist.
- Step the other foot in and walk adjusted to the victim's speed. Sticks or wooden branches can provide additional support. The victim must be calmed.



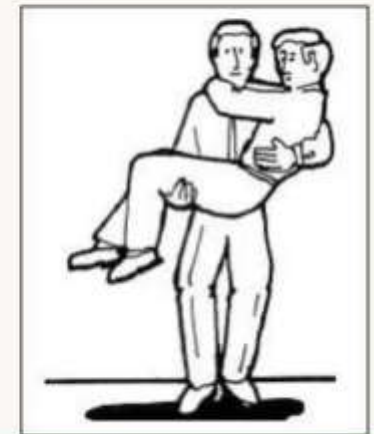
Carrying the victim without tools

2. Carry Princess

Indication: for conscious victims who cannot walk. Even though he is conscious, the victim is only able to hang his hands passively around the helper's neck.

Method:

- You squat next to the victim, slipping your arms around their body, above their wrists.
- Slide the other arm under the victim's thigh. His body is hugged towards you and lifted.



Carrying the victim without tools

3. Pull

Indications: no fractures in the victim's legs and dislocations/fractures from the shoulders to the hands, the evacuation route is flat, there is no danger to evacuation.

Method:

- You squat behind the victim, place the victim's hands crossed on his chest, hold the victim's hands through the armpits from behind.
- If the victim can sit, cross his arms over his chest. Grasp your wrists through your armpits and lift them up.
- If the victim is wearing a jacket, unbutton it, and pull the jacket under his head. Hold the jacket over his shoulders and lift it up.





Carrying the victim without tools

4. Carrying through a narrow passage

Indications: no fractures in the legs, no dislocations from shoulder to wrist, evacuation route is flat, no danger of evacuation, victim is in a narrow passage.

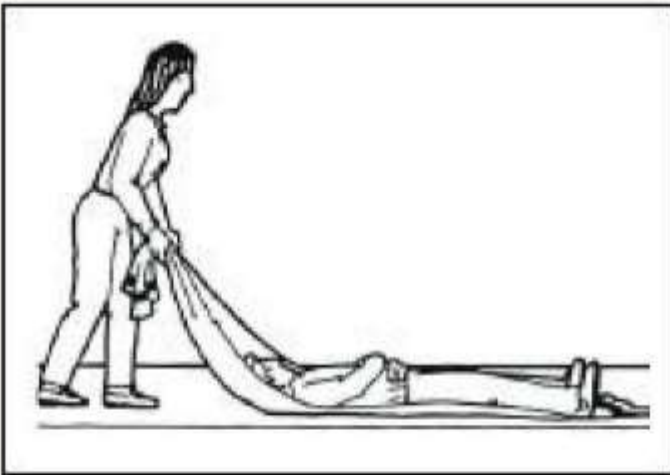
Method:

- The rescuer stands above the victim's head in a direction opposite of the victim.
- The victim's hands are tied and hung from the helper's neck.
- The walker crawls out.

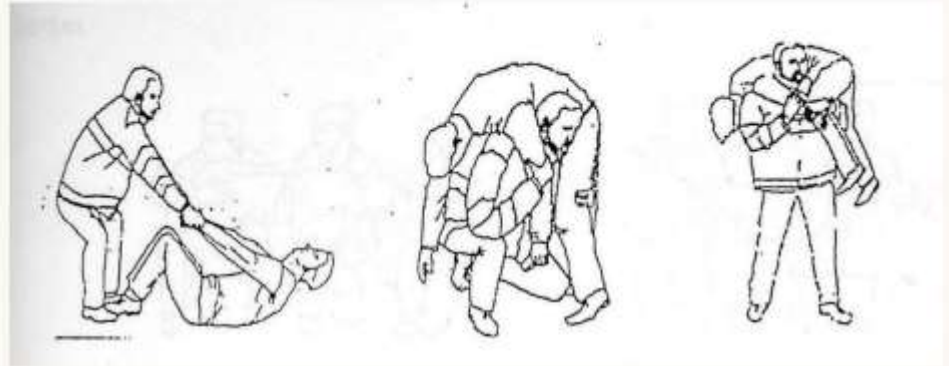




5. Carrying a blanket over the unconscious victim



6. Carrying (Popong)



Carrying the victim with two helpers

1. Two-handed chair (Becak)

Indications: the victim is conscious and cannot walk, there is no fracture in the leg, the victim does not have an arm/shoulder injury.

Example: a victim with dislocation of both ankles. Or the victim is heavier than the rescuer so he cannot be princessed.

Method:

- Both rescuers squat on either side of the victim, cross their arms over the victim's back and hold the belt.
- The other two arms are tucked under the victim's knees, and the helper holds each other's wrists. The arms holding each other are brought to the victim's mid-thigh

1



2



3





Carrying the victim with two helpers

2. Lifting Front and Back

Indications: the same as tricycles.

- The victim is seated and his arms are crossed over his chest.
- Squat behind the victim, slide your arms through the victim's armpits and grasp their wrists firmly.
- The helper squats on the side and the arms are tucked in victim's thigh.
- Work simultaneously, get up slowly and walk.



Carrying the victim without tools

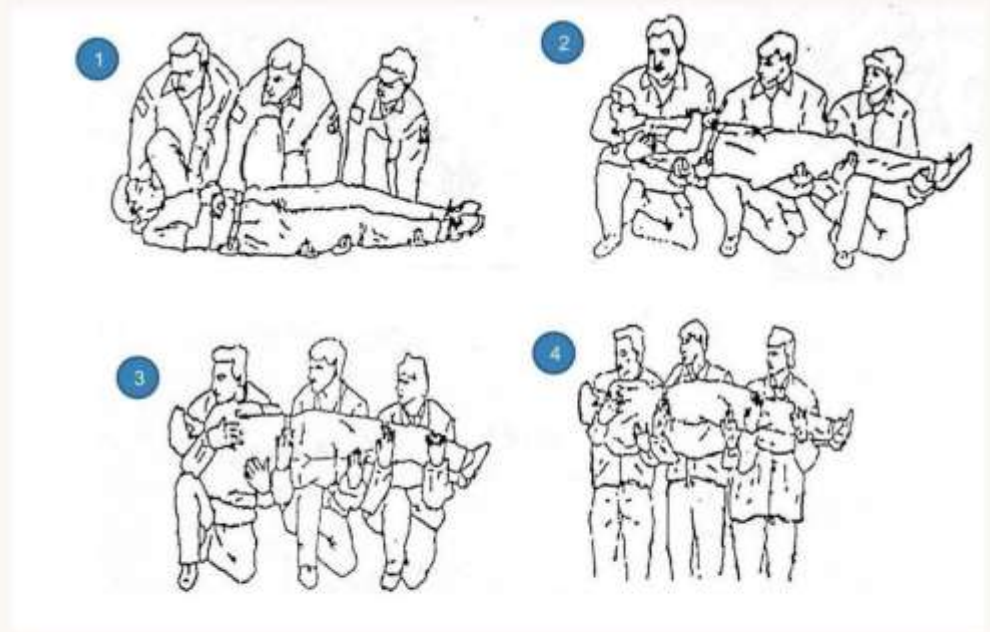
Two helpers

3. Carrier Chair

Carrying the victim with
use a chair as a stretcher



Three helpers



EVACUATE WITH TOOL HELP



Carrying the victim with the help of a stretcher

Indication: the victim cannot be evacuated by an evacuator without tools.

- Each evacuator stood on four stretchers. If there are 3 people, 2 standing near the head and 1 at the feet, all the lifters squat and hold following the signal, rise at the same time and stand up to hold the stretcher evenly.
- The next signal is for all lifters to step inside with short steps.
- To lower the victim, the lifters stopped when given the signal, at the next signal everyone squatted down and placed the stretcher carefully.





Carrying the victim with the help of a **homemade stretcher**

- Even though in an emergency we can make a stretcher, it is best to wait until help and special equipment arrives.
- If you must move the victim to a sheltered location, a stretcher can be made from a hard surface, such as a door, stick, or billboard. You can also insert the pole through the sleeve of a jacket or anorak.
- The strength of the stretcher should always be tested before use.





Lift the victim with the help of a scoop stretcher

Indications: Used for cases of bone injuries other than spinal injuries

- The scoop stretcher consists of 4 evacuators. However, the scoop stretcher cannot be used to evacuate victims over long distances (requires assistance from a stretcher).
- First of all, open the locks at the bottom and top of the scoop stretcher, then open the length adjusters on the lateral sides of each side, estimate the victim's height to adjust the length of the tool. Once appropriate, scoop the victim using the scoop stretcher tool and lock it again. And the victim is ready to be lifted onto the scoop stretcher.



Carrying the victim with the help of Long Spine Board

Indication: if you suspect a vertebral fracture and basecranii fracture.

Technique:

LSB requires 6 evacuators:

- 1 person for head and neck fixation.
- 2 people to install the neck collar.
- 3 people to move the victim to the top of the LSB.





SOURCE

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THANKS
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