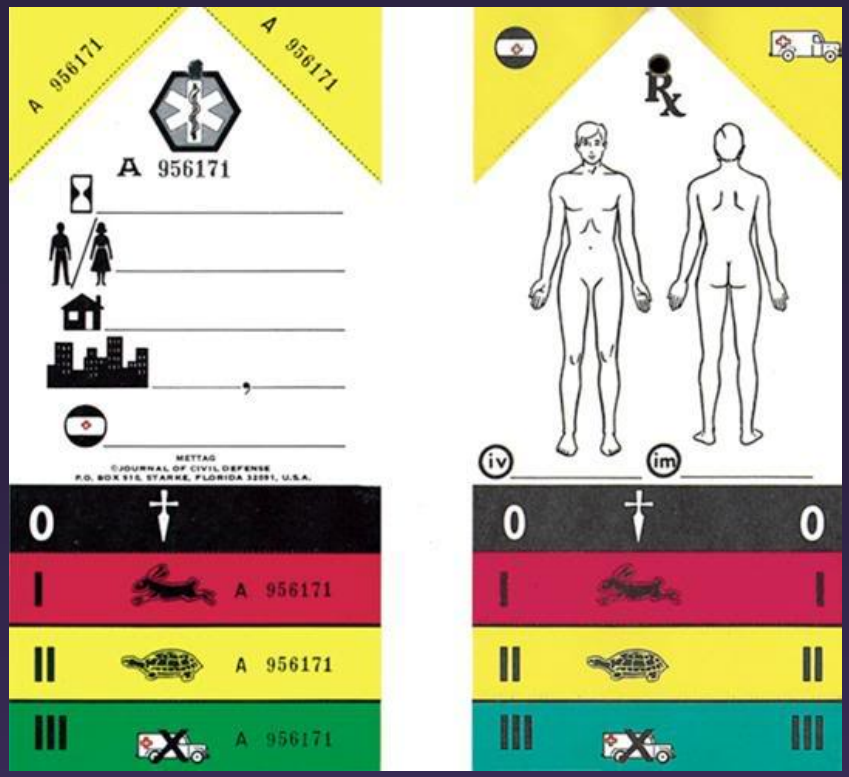
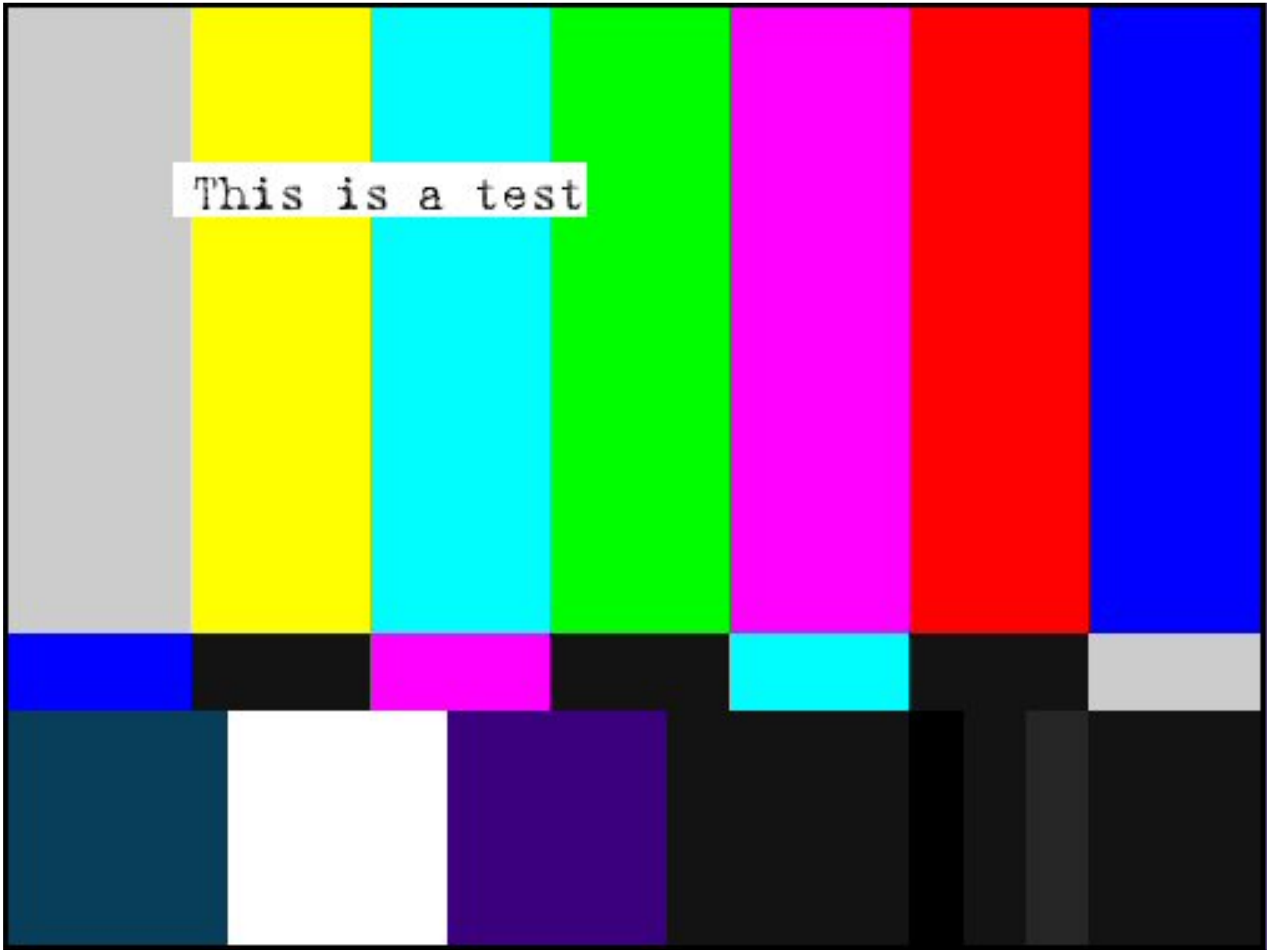
Getting a Fresh S.T.A.R.T.



John Freese, M.D.
Chief Medical Director
Fire Department of New York (FDNY)


This is a test

You and your partner are assigned to a subway job beneath Penn Station.

Two trains have collided, and neither train is currently able to be brought back to the station.

You are assigned the task of triage.

The rear car of the first train has significant damage with an estimated 30 patients inside.

Fire and NYPD will be removing the patients to the rescue train – red tag patients first – and taking them back to the station where awaiting EMS units will continue treatment and transport. The ambulatory patients have already been asked to move into the next car.

Patient #1

- Middle age man entangled in the wreckage with an open skull fracture
- Not breathing
- Does not breathe when airway opened

Patient #2

Teenage female entangled in the wreckage, unable to free her arm.

- Nonambulatory
- Breathing
- RR 28
- Radial pulse present
- Follows commands

Patient #3

Teenage male with severe right knee pain

- Nonambulatory
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #4

Young male with a chest injury

- Nonambulatory
- Breathing
- RR 32
- Radial pulse present
- Follows commands

Patient #5

Young female experiencing an "asthma attack" with active shortness of breath

- Nonambulatory
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #6

Elderly male with a left hip injury.

- Nonambulatory
- Breathing
- RR 16
- Radial pulse present
- Follows commands

Patient #7

Elderly female with a head injury.

- Nonambulatory
- Breathing
- RR 10
- Radial pulse present
- Is not able to follow commands

Patient #8

Child with no apparent injury.

- Nonambulatory
- Breathing
- RR 14
- Radial pulse present
- Is not able to follow commands

Patient #9

Middle-age man clutching his chest and complaining of chest pain.

- Nonambulatory
- Breathing
- RR 20
- Radial pulse present
- Follows commands

Patient #10

Young female with an open ankle fracture and no pulse in the foot.

- Nonambulatory
- Breathing
- RR 24
- Radial pulse present
- Follows commands

Patient #11

Middle-age man with a head injury

- Nonambulatory
- Breathing
- RR 28
- Radial pulse present
- Is not able to follow commands

Patient #12

Infant in a stroller with no apparent injury.

- (Patient's mother is) Nonambulatory
- Breathing
- RR 28
- Radial pulse present
- Obviously unable to follow commands

Patient #13

Middle-age man with an impaled object (metal rod) in his abdomen.

- Nonambulatory
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #14

Teenage female with a leg injury.

- Nonambulatory
- Breathing
- RR 14
- Radial pulse present
- Follows commands

Patient #15

Middle-age male with back pain

- Nonambulatory
- Breathing
- RR 20
- Radial pulse present
- Follows commands

Patient #16

Teenage male with knee pain

- Nonambulatory
- Breathing
- RR18
- Radial pulse present
- Follows commands

Patient #17

Elderly female complaining of severe knee pain

- Nonambulatory
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #18

Young male with a head injury

- Is ambulatory and walked to the second car
- Breathing
- RR 18
- Radial pulse present
- Follows commands

Patient #19

Young adult female with a hand injury

- Is ambulatory and walked to the second car
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #20

Elderly male with a wrist and hand injury

- Is ambulatory and walked to the second car
- Breathing
- RR 24
- Radial pulse present
- Follows commands

Patient #21

Middle-age male with back pain

- Is ambulatory and walked to the second car
- Breathing
- RR 14
- Radial pulse present
- Follows commands

Patient #22

Middle-age male complaining of shortness of breath after falling onto his chest

- Is ambulatory and walked to the second car
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #23

Young adult male with shortness of breath (asthma)

- Is ambulatory and walked to the second car
- Breathing
- RR 24
- Radial pulse present
- Follows commands

Patient #24

Middle-age female who is crying and anxious

- Is ambulatory and walked to the second car
- Breathing
- RR 26
- Radial pulse present
- Follows commands

Patient #25

Elderly female with a epistaxis

- Is ambulatory and walked to the second car
- Breathing
- RR 20
- Radial pulse present
- Follows commands

Patient #26

Child with an eye injury

- Is ambulatory and walked to the second car
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #27

Teenage male with neck pain

- Is ambulatory and walked to the second car
- Breathing
- RR 12
- Radial pulse present
- Follows commands

Patient #28

Middle-age male with no apparent injury but wants to go to the hospital to "be checked."

- Is ambulatory and walked to the second car
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #29

Young adult male with chest pain

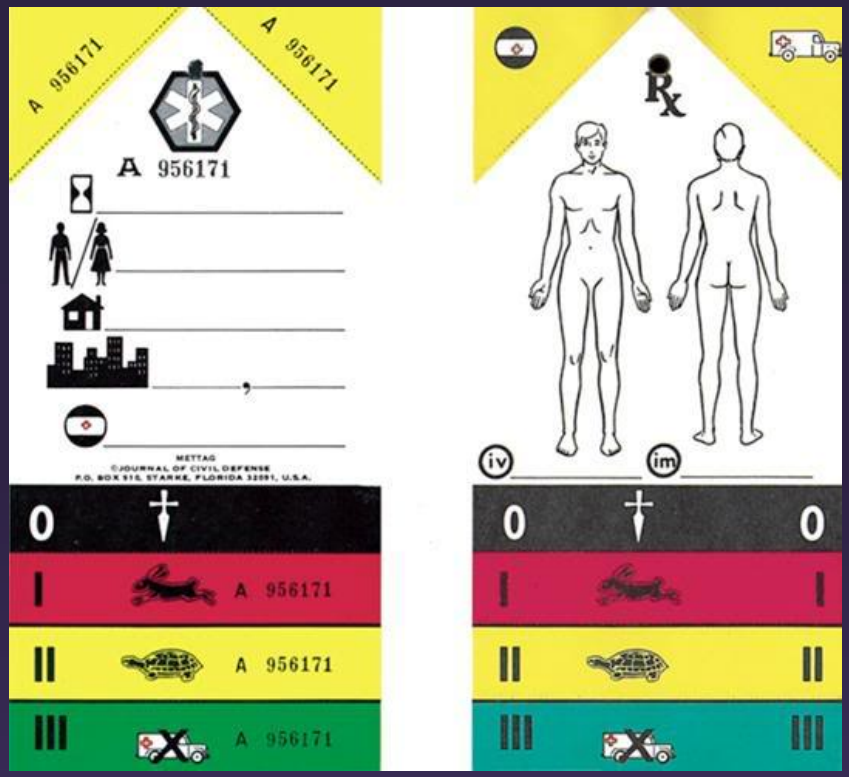
- Is ambulatory and walked to the second car
- Breathing
- RR 22
- Radial pulse present
- Follows commands

Patient #30

Child who is crying but with no apparent injury

- Is ambulatory and walked to the second car
- Breathing
- RR 28
- Radial pulse present
- Follows commands

Getting a Fresh S.T.A.R.T.



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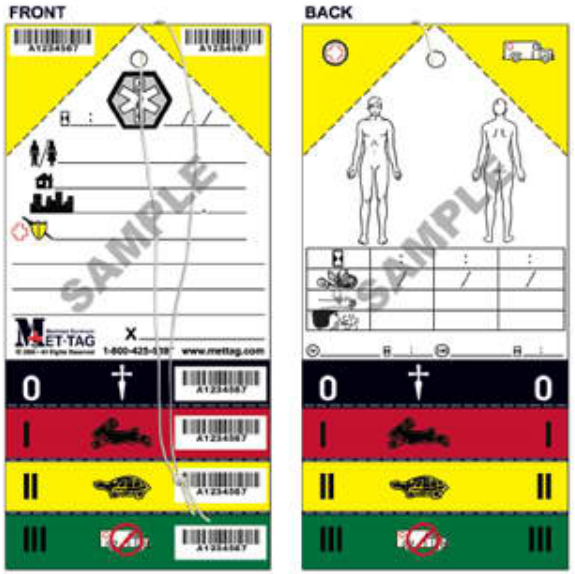
Getting a Fresh S.T.A.R.T.

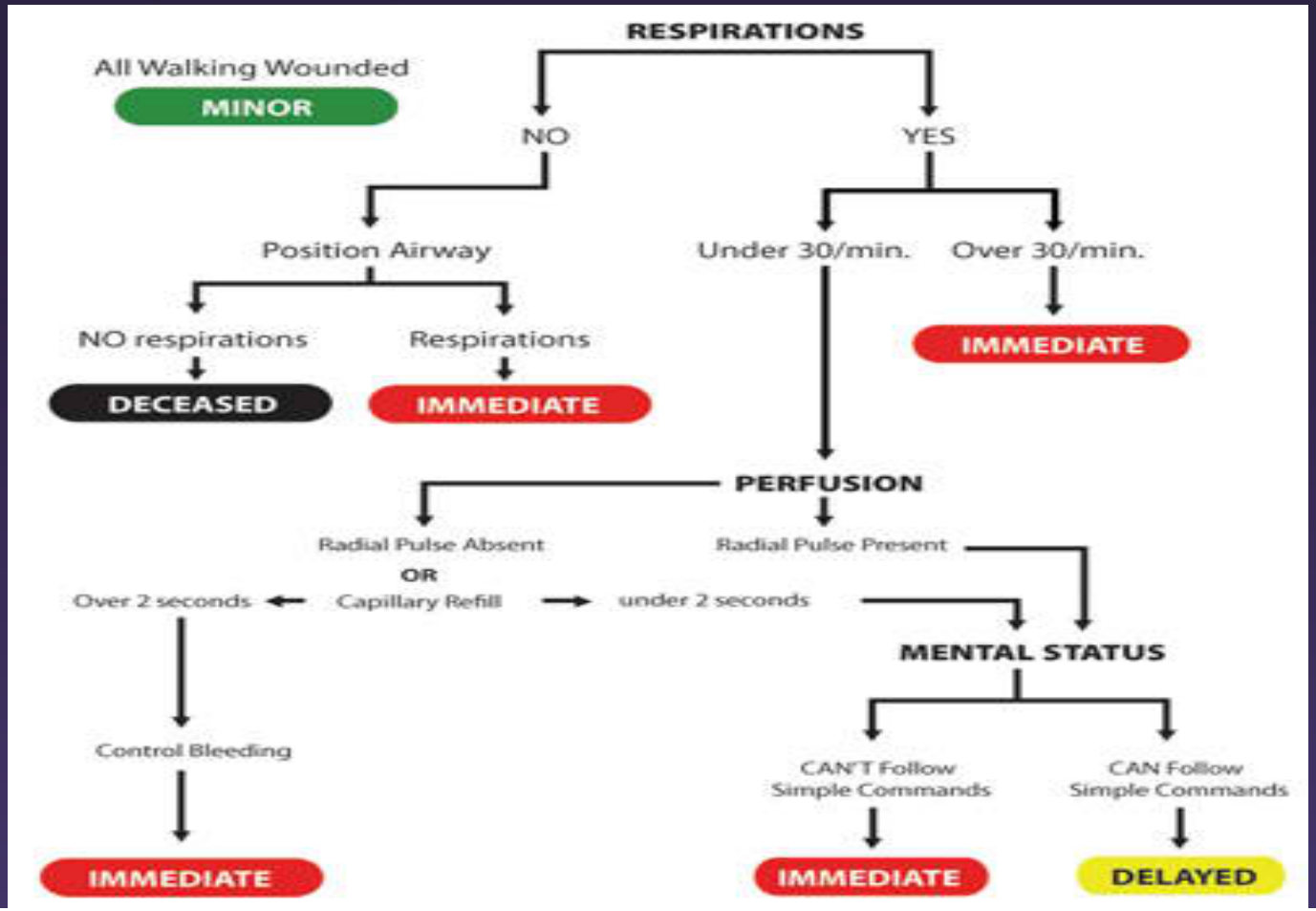
START is supposed to be just what it says it is… Simple Triage (and Rapid Transport)… six simple questions:



- Can they walk away?
- No? Are they breathing?
- No? What if you open the airway?
- How fast are they breathing?
- Do they have a radial pulse?
- Can they follow commands?

Getting a Fresh S.T.A.R.T.

And the answers to those questions led you to a triage category / color:

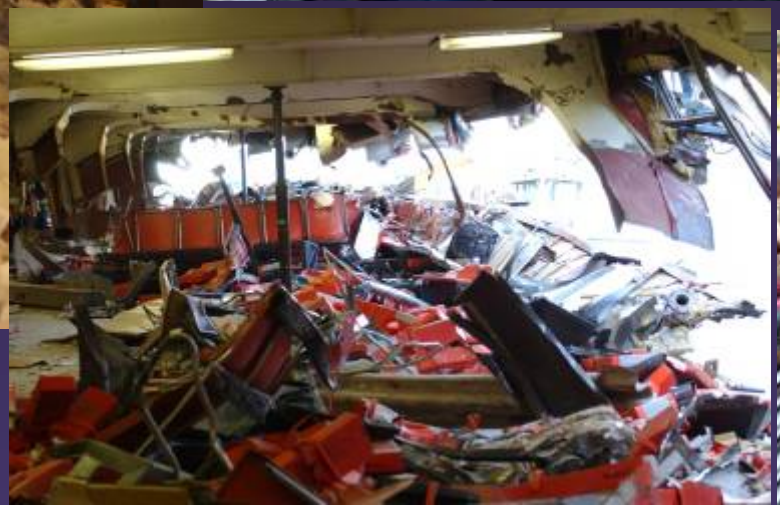


Getting a Fresh S.T.A.R.T.

What START does:

- allows for rapid assessment by any level of provider
- removes the ambulatory patient from the process
- identifies the deceased or moribound
- separates the most critically ill / injured (based on physiologic signs – tachypnea, hypotension / lack of a pulse, altered mental status) from the less ill/injured

Getting a Fresh S.T.A.R.T.



Getting a Fresh S.T.A.R.T.

Getting a Fresh S.T.A.R.T.

Getting a Fresh S.T.A.R.T.

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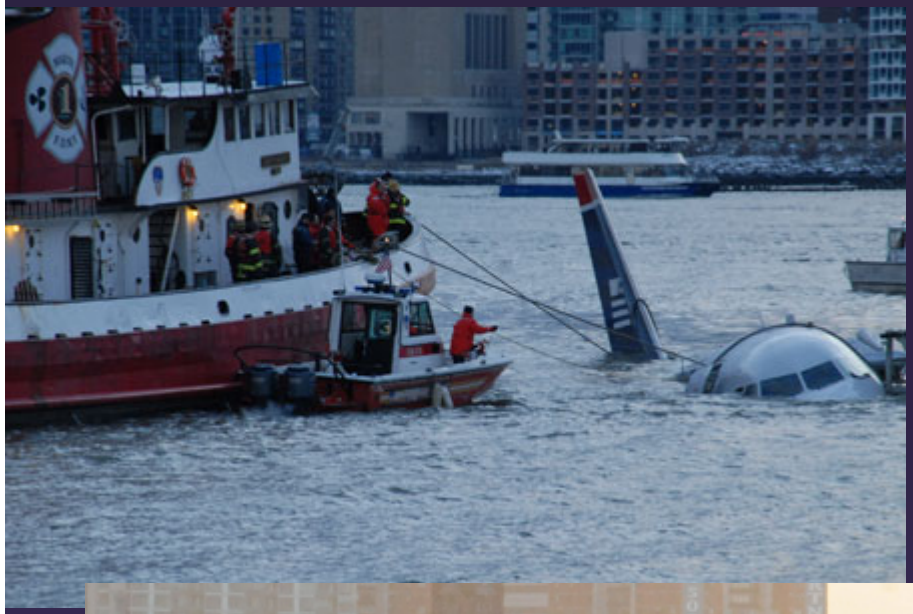
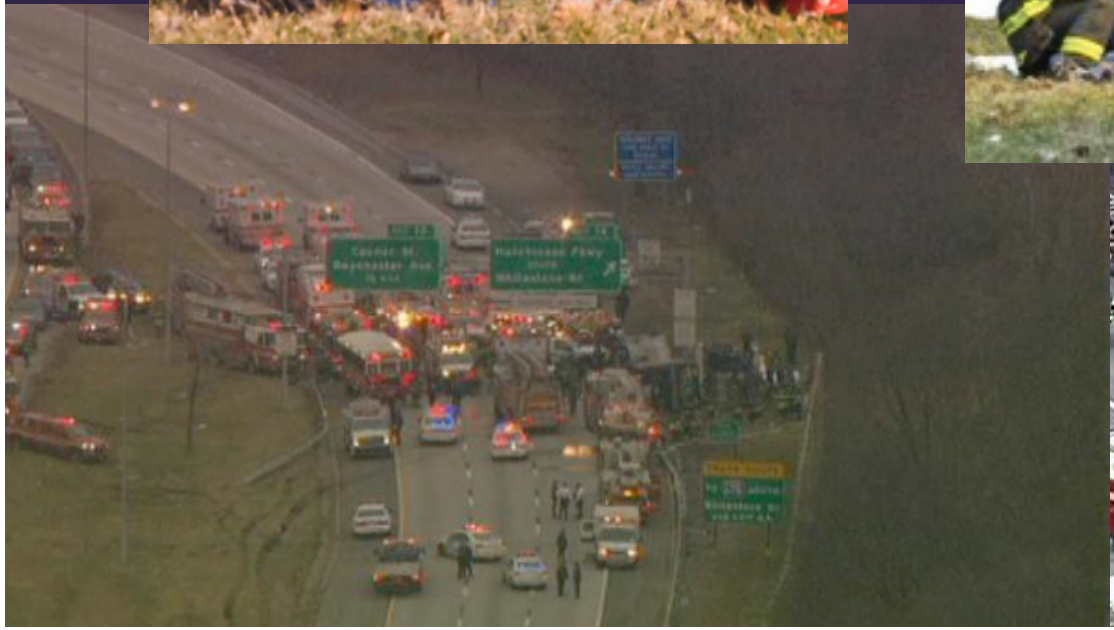


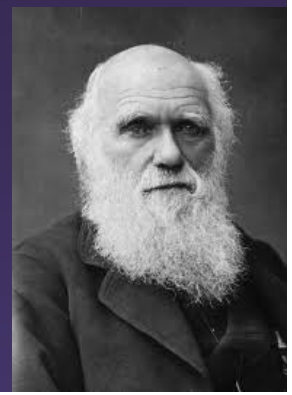
Getting a Fresh S.T.A.R.T.



Getting a Fresh S.T.A.R.T.

What START does not do:

- adjust for medical emergencies among the injured
- separate the serious but not critical patients for those who can't walk
- account for pediatric patients
- anticipate that seriously ill or injured patients may fall into lesser groups

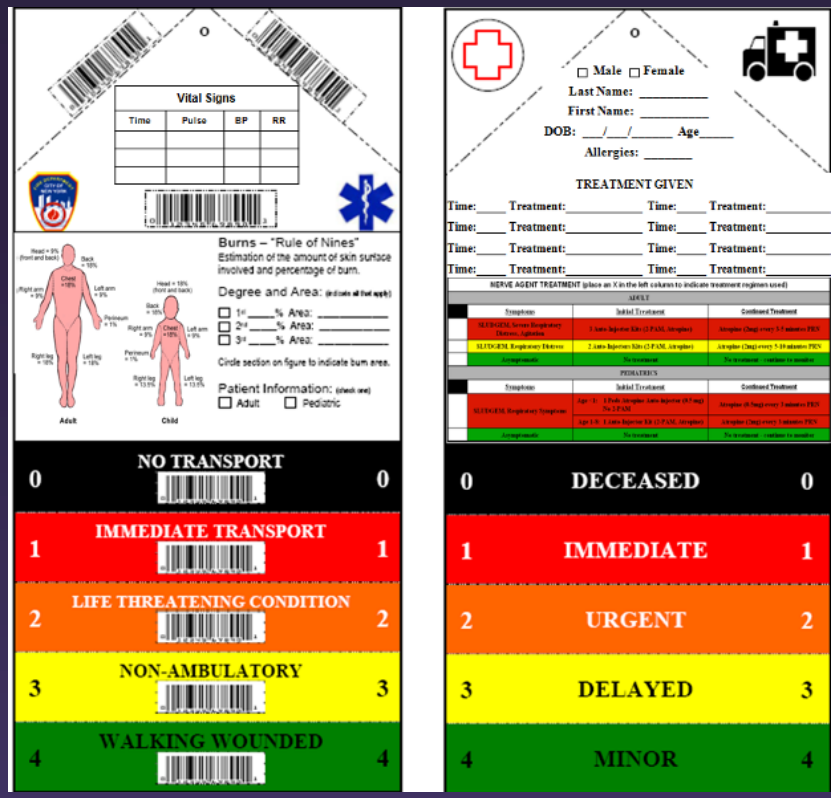


Getting a Fresh S.T.A.R.T.

And so the FDNY Modified START Triage program was developed.

It keeps the basics of START in place, but accounts for those deficiencies as well.

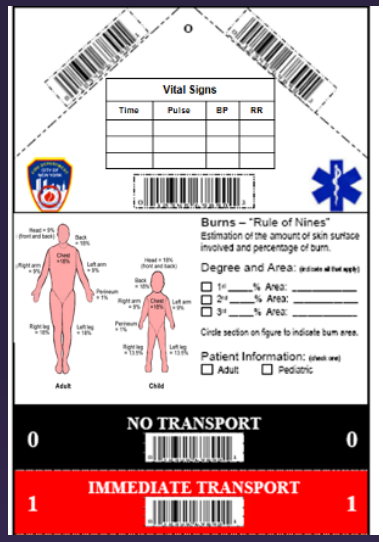
Includes just three changes…



Getting a Fresh S.T.A.R.T.

Infants…

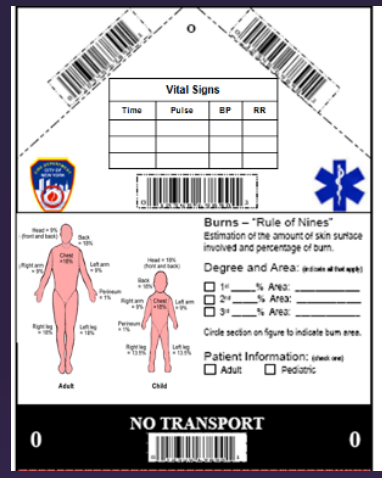
- in assessing any patient, if you believe that they are an infant (no need to check a DOB – if they look like an infant, they are an infant), there is no need to go through the steps, just tag them as red.



Getting a Fresh S.T.A.R.T.

Second change (also peds):

- Same as START (almost)
- Are they breathing?
- If not, attempt to open their airway.
- Are they breathing now?
- If not, these are your black tags
  (as well as those with obvious mortal injuries)
- But wait… If they are a child…



Getting a Fresh S.T.A.R.T.

If they are a child…

- deciding to terminate resuscitation efforts or not start them for a child is a VERY tough decision
- but in an MCI, deciding not to spend time on a dead child can mean that you have the chance to save another viable patient (adult or child)

Getting a Fresh S.T.A.R.T.

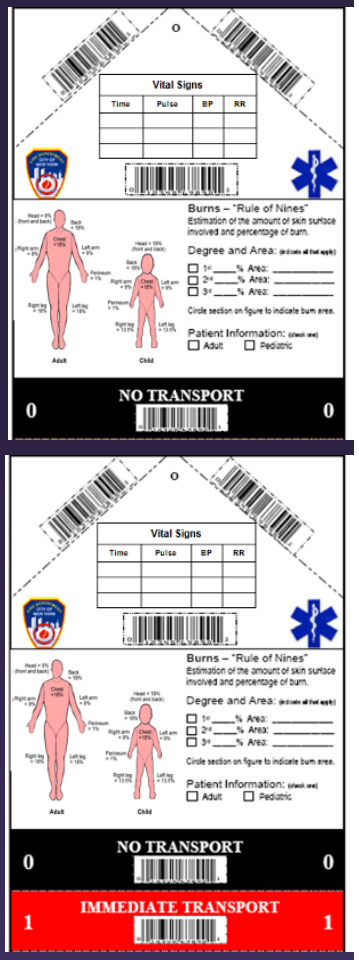
If they are a child…

- we know that even in large MCIs,
  most children will not be "black"
- but what if you were faced with dozens
  of children
- who can you save?
- those with respiratory arrest that can be reversed with ventilation may be viable
- those who do not respond to ventilation are not, and that's when we should move on to try to save another

Getting a Fresh S.T.A.R.T.

So if they are a child…

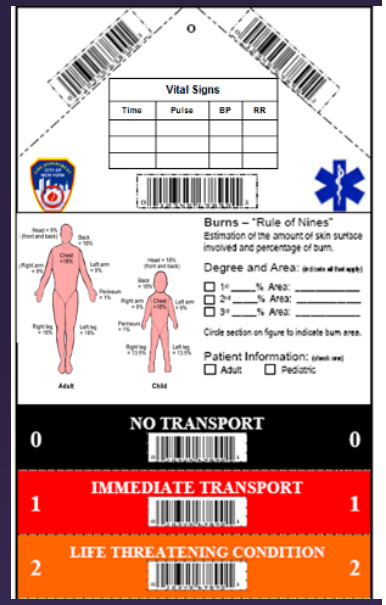
- and they are not breathing
- and opening their airway didn't help
- give them five rescue breaths
- if they still have not respiratory effort, they are a black tag
- if they begin to breathe, they are a red tag



Getting a Fresh S.T.A.R.T.

Third change:

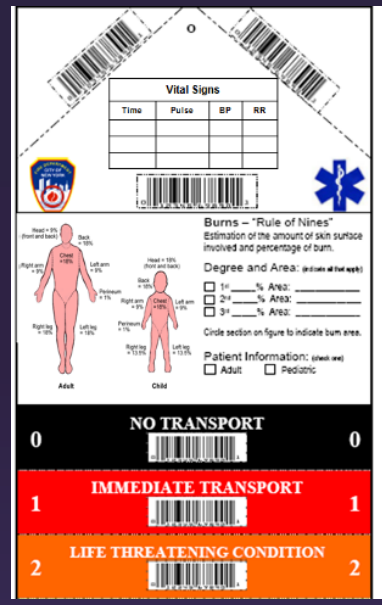
- the orange tag
- patients initially meet green or yellow criteria, but are felt to be “more sick / injured”
- somewhat subjective based upon the scene, number of patients, mechanism (i.e. blast)



Getting a Fresh S.T.A.R.T.

New additional step:

- the orange tag
- but there are two “mandatory” orange tag patients:
  - on-going chest pain
  - on-going dyspnea



Getting a Fresh S.T.A.R.T.

Summary of Modified Start

Step 1 – Can the patient walk?

- **Yes = Green**
- **No = Next step**

Step 2 – Is the patient breathing?

- **Yes = Next step**
- **No = Open the airway**
- **Now breathing = Red**
- **Still no (not a child) = Black**
- **Still no (child) = 5 rescue breaths**
- **Breathing (child) after 5 breaths = Red**
- **Still no (child) after 5 breaths = Black**

Step 2a – All Infants are Red

Step 3 – How fast are the breathing?

- **> 30 = Red**
- **≤ 30 = Next Step**

Step 4 – Do they have a radial pulse?

- Yes = Next Step
- No = Red

Step 5 – Can they follow commands?

- Yes = Yellow
- No = Red

Step 6 – Consider orange

- active chest pain
- active dyspnea
- other possibilities
  - i.e. blast injury
- scenario-specific

Vital Signs			
Time	Pulse	BP	RR

Burns – "Rule of Nines"

Estimation of the amount of skin surface involved and percentage of burn.

Degree and Area: (indicate all that apply)

- ☐ 1st ____% Area: _____
- ☐ 2nd ____% Area: _____
- ☐ 3rd ____% Area: _____

Circle section on figure to indicate burn area.

Patient Information: (check one)

☐ Adult ☐ Pediatric

0 NO TRANSPORT 0

1 IMMEDIATE TRANSPORT 1

2 LIFE THREATENING CONDITION 2

3 NON-AMBULATORY 3

4 WALKING WOUNDED 4

☐ Male ☐ Female

Last Name: _____

First Name: _____

DOB: ___/___/_____ Age_____

Allergies: _____

TREATMENT GIVEN

Time:____ Treatment:_____ Time:____ Treatment:_____

Time:____ Treatment:_____ Time:____ Treatment:_____

Time:____ Treatment:_____ Time:____ Treatment:_____

Time:____ Treatment:_____ Time:____ Treatment:_____

NERVE AGENT TREATMENT (place an X in the left column to indicate treatment regimen used)

	ADULT		
	Symptoms	Initial Treatment	Continued Treatment
	SLUDGEM, Severe Respiratory Distress, Agitation	3 Auto-Injector Kits (2-PAM, Atropine)	Atropine (2mg) every 3-5 minutes PRN
	SLUDGEM, Respiratory Distress	2 Auto-Injectors Kits (2-PAM, Atropine)	Atropine (2mg) every 5-10 minutes PRN
	Asymptomatic	No treatment	No treatment – continue to monitor

	PEDIATRICS		
	Symptoms	Initial Treatment	Continued Treatment
	SLUDGEM, Respiratory Symptoms	Age <1: 1 Peds Atropine Auto-Injector (0.5 mg) No 2-PAM	Atropine (0.5mg) every 3 minutes PRN
		Age 1-5: 1 Auto-Injector Kit (2-PAM, Atropine)	Atropine (2mg) every 3 minutes PRN
	Asymptomatic	No treatment	No treatment – continue to monitor

0 DECEASED 0

1 IMMEDIATE 1

2 URGENT 2

3 DELAYED 3

4 MINOR 4


THANK
YOU!