

PATIENT ASSESSMENT

EMERGENCY MEDICAL TECHNICIAN - BASIC



Massachusetts Emergency
Care Training Academy

INTRODUCTION

- What is Patient Assessment?
- Why is Patient Assessment important?

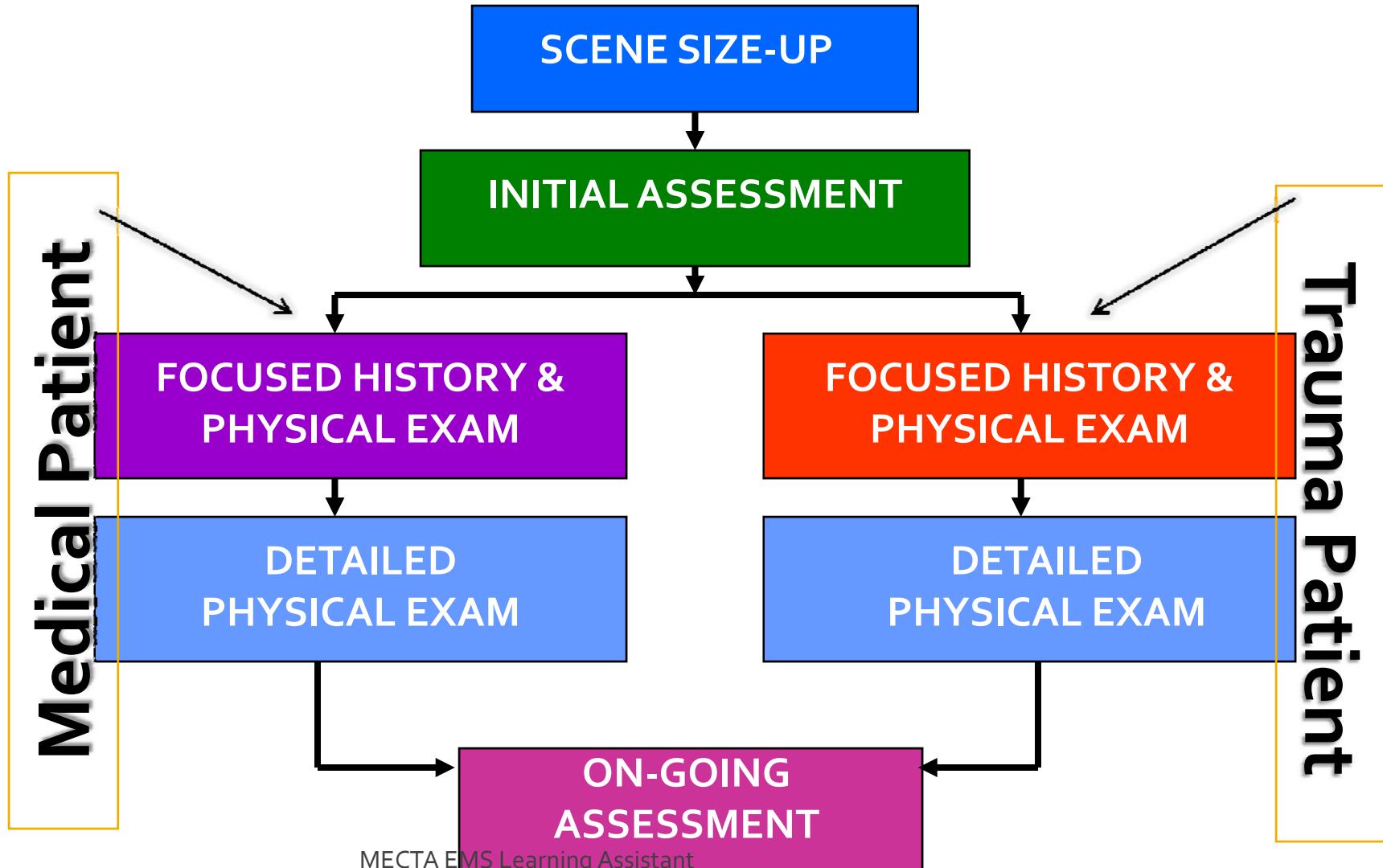
INTRODUCTION

- What are the phases of patient assessment?
 - Review of Dispatch Information
 - Scene Survey
 - Initial Assessment
 - Focused History and Physical Exam
 - Detailed Physical Exam
 - Ongoing Assessment
 - Communication
 - Documentation

INTRODUCTION

- Why is the order of Patient Assessment important?
- Why is it necessary to develop a method of assessment and use that method on all patients?

-PATIENT ASSESSMENT-



Scene Size Up

- Begin with receipt of call
 - Location
 - Incident
 - Injured/Injuries

Scene Size Up

- Continue En Route
 - Further info from dispatcher
 - Observe
 - Smoke?
 - Fire?
 - High line wires?
 - Railroads?
 - Water?
 - Industry?
 - Other Public Safety units?

Scene Size Up

- Upon Arrival
 - Observe
 - Overall scene
 - Location of victim(s)
 - Possible Mechanisms of Injury

Scene Size Up

■ Upon Arrival

- Observe
 - Hazards
 - Crowds
 - HazMat
 - Electricity
 - Gas
 - Fire
 - Glass
 - Jagged metal
 - Stability of environment
 - Traffic
 - Environment

Scene Size Up

- Ensure Safety
 - Yourself
 - Partner
 - Other rescuers/Bystanders
 - Patient

Scene Size Up

- Call for assistance
 - Other EMS Units
 - Law Enforcement
 - Fire Department
 - HazMat
 - Negotiating Team
 - etc.

Scene Safety & Personal Protection

- Body Substance Isolation
 - Hand washing
 - Gloves & eye protection
 - Mask & gown

Scene Safety & Personal Protection

■ Protective Clothing

- Cold weather clothing
 - Dress in layers
- Turnout gear
 - Provides head-to-toe protection
- Gloves
 - Use proper gloves for job being performed

Scene Safety & Personal Protection

- Protective Clothing (Cont.)
 - Helmets
 - Must be worn in any fall zone
 - Boots
 - Should protect your feet, fit well, be flexible

Scene Safety & Personal Protection

- Protective Clothing (Cont.)
 - Eye & ear protection
 - Should be used on rescue operations
 - Skin protection
 - Use sun block when working outdoors

Scene Safety & Personal Protection

- Violent Situation
 - Civil disturbances
 - Domestic disputes
 - Crime scenes
 - Large gatherings

Scene Safety & Personal Protection

- Behavioral Emergencies
 - Determinants of violence
 - Past History
 - Posture
 - Vocal Activity
 - Physical activity

Scene Safety & Personal Protection

■ Immunizations

- Tetanus-Diphtheria
- Measles vaccine
- Rubella Vaccine
- Mumps Vaccine
- Flu vaccine
- Hepatitis vaccine

Scene Safety & Personal Protection

- *Your personal safety is of the utmost importance. You must understand the risks of each environment you enter!*

Initial Assessment

■ Purpose

- To rapidly identify & correct life threats
- To identify those patients who need rapid evacuation
 - Minimum Time on scene - Maximum Care En Route

Initial Assessment

- General Impression

- Using the facts gathered to this point, what is your first impression of the patient's condition?

- Chief Complaint

Initial Assessment

- Mental Status (Level of Consciousness)
 - **A** - Alert
 - **V** - Verbal
 - **P** - Painful
 - **U** - Unresponsive

Initial Assessment

- Identify Life Threats
 - **A**irway
 - Control C-spine (If trauma suspected)
 - Open-Clear-Maintain

Initial Assessment

- **B**reathing
 - Look
 - Listen
 - Feel
 - Bare chest if respiratory distress apparent

Initiate O₂ & Assure Adequate Ventilation

Initial Assessment

■ C

Circulation

- Major Bleeding
 - (Control & assess for major chest trauma)
- Pulse (Rapid/Slow : Weak/Bounding)
 - Radial >80 systolic
 - Femoral >70 systolic
 - Carotid >60 systolic

Initial Assessment

- Circulation (cont.)

- Capillary Refill
- Skin Color
 - Pale
 - Ashen
 - Cyanotic
 - Mottled
 - Red

Initial Assessment

■ Circulation (cont.)

- Skin Temperature
 - Hot (warm)
 - Cool
- Skin Condition
 - Moist
 - Dry
 - Skin Turgor

Initial Assessment

- **E**xpose
 - Head/Neck
 - Chest
 - Abdomen
 - FOR LIFE THREATENING Illnesses or Injury (Disability)
- **High Priority Patients Require Immediate Transport**

Initial Assessment

■ Rapid Transport Criteria

- Consider ALS intercept
- If, during the Initial Assessment, you encounter a life-threatening condition that your intervention cannot alleviate, you should rapidly evacuate/transport to someone who can.
 - ALS
 - Air Flight (NE LifeFlight)

Criteria for Rapid Transport -HIGH Priority

- Poor General Impression
- Unresponsive - no gag or cough reflex
- Responsive - unable to follow commands
- Cannot establish / maintain patent airway
- Difficulty breathing / Resp. distress

Criteria for Rapid Transport

- Poor perfusion
- Uncontrolled bleeding
- Severe pain in any part of the body
- Severe chest pain
- Inability to move any part of body

Criteria for Rapid Transport

- Complicated childbirth
- High body temp (above 104° F)
- Signs of generalized hypothermia
- Severe allergic reaction (anaphylaxis)
- Poisoning or overdose of unknown nature

Focused History & Physical Exam - Trauma

- Purpose
 - Obtain Chief Complaint
 - What happened to the patient?
 - Evaluate Chief Complaint
 - What circumstances surround this incident?
 - Is the Mechanism of Injury a high risk for injury?
 - Conduct Physical Exam
 - Obtain Baseline Vital Signs

Focused History & Physical Exam - Trauma

- Re-evaluate Mechanism of Injury (MOI)
 - Significant MOI? Yes/No
 - Is patient unresponsive or disoriented?
 - Can they participate in examination?
 - Is the patient under the influence of drugs or alcohol?
 - Can they participate in examination?

Patients with Significant MOI

■ RAPID TRAUMA ASSESSMENT

- Head-to-Toe Physical Exam
- Palpation
- Auscultation
- Other Senses

Patients with Significant MOI

■ RAPID TRAUMA ASSESSMENT

■ **DCAP-BTLS**

- D - Deformities
- C - Contusions
- A - Abrasions
- P - Punctures/Penetrations
- B - Burns
- T - Tenderness
- L - Lacerations
- S - Swelling

Patients with Significant MOI

- Baseline Vital Signs
 - More than one set
 - Look for “trending”

Patients with Significant MOI

- History **S-A-M-P-L-E**
 - **S** - Signs & Symptoms
 - **A** - Allergies
 - Medications
 - Foods
 - Environment

Patients with Significant MOI

■ M - Medications

- Are you taking any?
- When did you last take your medication?
- What are they?
- What are they for?
- May I see them?
- May we take them with us?

Patients with Significant MOI

- **P** - Previous Medical History
 - Pertinent
 - Related to this complaint
 - Complicating factor

Patients with Significant MOI

- **L** - Last Oral Intake

- Food and/or Drink?
- What?
- When?

Patients with Significant MOI

- **E** - Events leading up to the incident
 - What happened?
 - When?

Patients with NO Significant MOI

- Assess Chief Complaint
- Focused Assessment
- Baseline Vitals
- **SAMPLE** History

Focused History & Physical Exam - Medical

- Patient Responsive? Yes/No
- **AVPU**
 - **A** - Alert
 - **V** - Verbal
 - **P** - Painful
 - **U** -Unresponsive

Responsive Patients - Medical

- Assess Chief Complaint
- Signs & Symptoms
 - **O** - Onset
 - When & How did the symptom begin?
 - **P** - Provokes
 - What makes the symptom worse?

Responsive Patients - Medical

- Signs & Symptoms (cont.)
 - **Q** - Quality
 - How would describe the pain?/What does the pain feel like?
 - **DO NOT** lead the patient
 - **R** - Region/Radiation
 - Where is the pain?
 - Does the pain travel anywhere else?

Responsive Patients - Medical

- Signs & Symptoms (cont.)
 - **S** - Severity
 - How bad is the pain?
 - **T** - Time
 - How long have you had the symptom?

Responsive Patients - Medical

- **SAMPLE** History
- Focused Medical Assessment
- Baseline Vital Signs
- Transport Decision
- Detailed Physical Exam
- Ongoing Assessment

Unresponsive Patients - Medical

- Rapid Medical Assessment
- Baseline Vital Signs
- **SAMPLE** History
 - Family, co-workers, bystanders
- Transport
- Ongoing assessment

Detailed Physical Exam

- More detailed Head-to-Toe examination
- Time sensitive
 - Usually performed en-route

Detailed Physical Exam

- Required for any unresponsive patient
 - If the patient cannot communicate what is wrong, you must seek out the problem(s)
- Required for any multi-trauma patient
 - Victims of multiple trauma must be assessed for less obvious or “masked” injuries

Detailed Physical Exam

- Required for any Patient with significant mechanism of injury
 - If the mechanism of injury **could** have caused serious injuries, the EMT must actively assess for additional injuries

On-Going Assessment

- Purpose -
 - Determine if there are any changes in the patient's condition
 - Identify any missed injuries or conditions
 - Assess the effectiveness of treatment given and adjust if necessary

On-Going Assessment

- Performed on both the trauma or medical patient
- Procedure
 - Repeat Initial Assessment
 - Reassess Vital Signs
 - Repeat Focused Assessment
 - Check Interventions

EMT – Interns:

Please keep in mind that this is only a guide, please refer to the Chief or Faculty with questions.

Hope this helps!

SCENE SIZE-UP



Scene Size Up

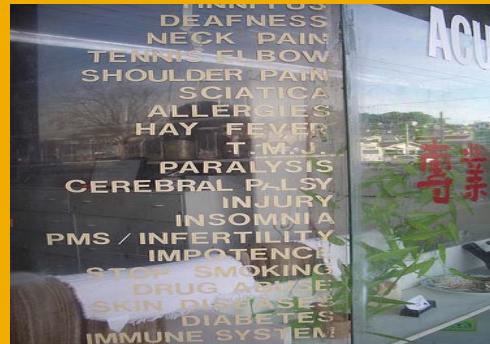


**Body Substance
Isolation**

INITIAL ASSESSMENT



**General
Impression**



Chief Complaint

Table II: Example of AVPU Assessment Tool

A=Alert	Patient is alert and conscious
V=Verbal	Patient responds to verbal stimulus
P=Pain	Patient responds to painful stimulus
U=Unresponsive	Patient is unresponsive to any form of stimulus

Mental Status

INITIAL ASSESSMENT

Use Jaw Thrust/ Trauma



Airway

Life Threats



Open / Assess /
Insert / Inflate
INJURY
Management



Breathing

O₂

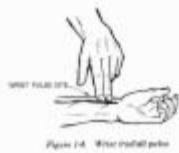


Adequate
Ventilation

INITIAL ASSESSMENT



5-10
Seconds



Check Pulse

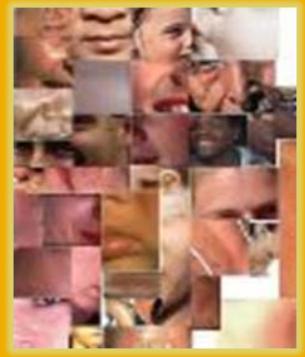


Control Major
Bleeding



Cap Refill

Circulation



Skin Color



Temperature



Condition

INITIAL ASSESSMENT

Transport Decision

Prioritize
Patients



Make
Transport
Decision



Focused History & Physical Exam - Medical

Determine Responsiveness – Level of Consciousness

A

Alert

V

Verbal
Stimuli

P

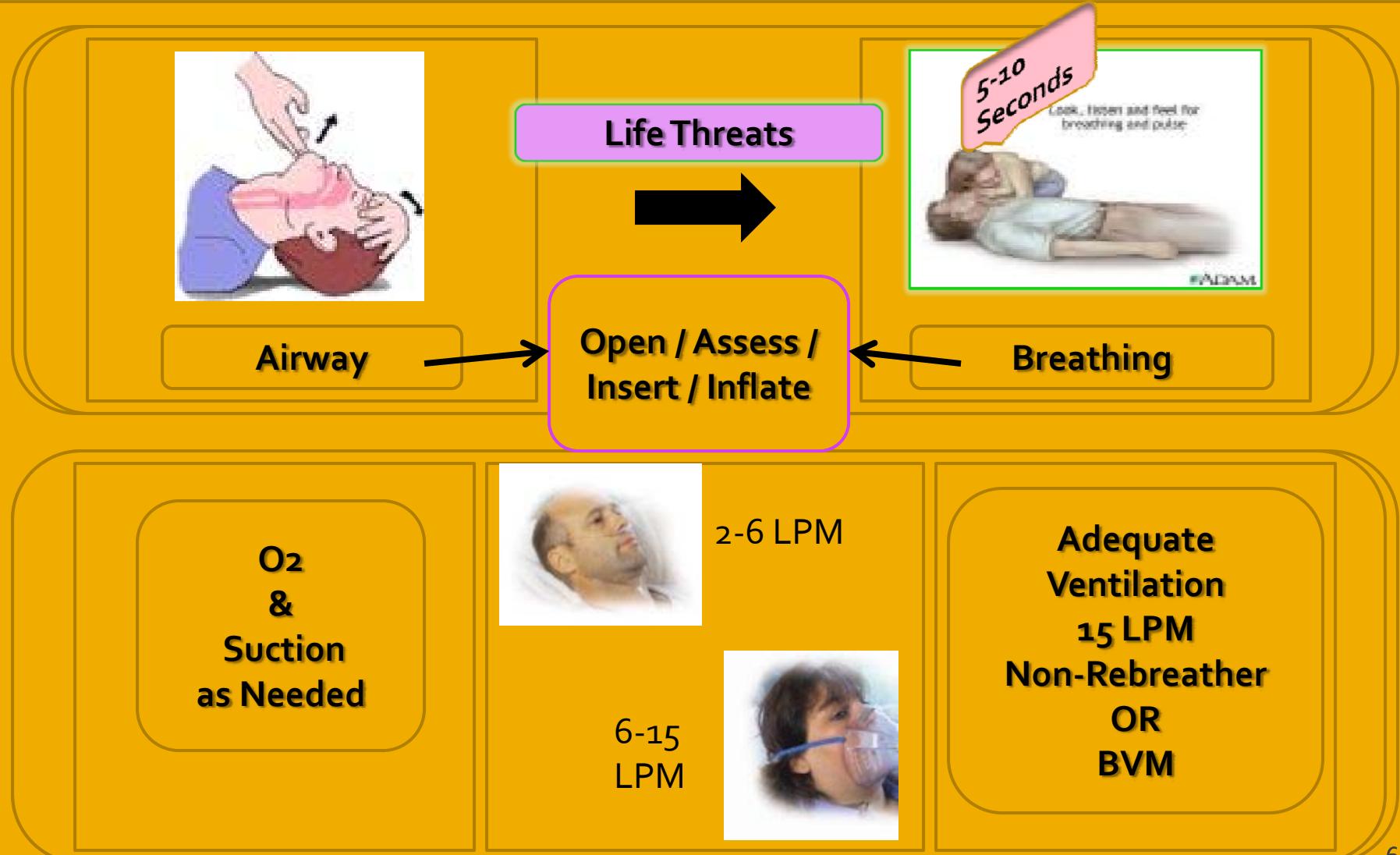
Painful
Stimuli

Level of Consciousness

U

Unresponsive

Focused History & Physical Exam - Medical



Focused History & Physical Exam - Medical

U
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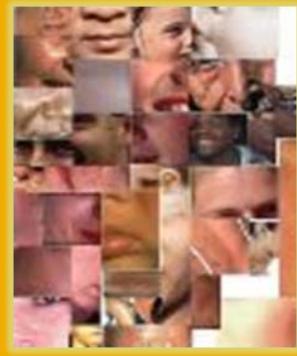
Check Pulse

5-10
Seconds



Cap Refill

Circulation



Skin Color



Temperature



Condition

Focused History & Physical Exam - Medical

Transport Decision

Prioritize Patients



Make Transport Decision



Focused History & Physical Exam

- Medical

S

Onset

Signs & Symptoms

A

Provocation

Allergies

M

Quality

Medications

P

Radiation

Past History

L

Severity

Last Meal

E

Time

Events

Focused History & Physical Exam

- Medical

Inspect

Auscultate

Palpate

Affected Body Part

OR

System

Focused History & Physical Exam

- Medical

Baseline VITALS

Focused History & Physical Exam

- Medical

ASA

NITRO

Inhaler

Interventions

EPI - Pen

Per State-Wide Protocols

And Medical Direction

Focused History & Physical Exam - Medical

DETAILED

**Re-Evaluate
Transport
Decision**

**Repeat
Assessment**

**Repeat
Vitals**

**Repeats
Focused
Assessment/
PT.
Complaint**

20 minutes to complete
assessment

**Check
Interventions**

Focused History & Patient Exam

TRAUMA Assessment

Focused

OR

Rapid

Focused History & Patient Exam

TRAUMA Assessment

A

Alert

V

Verbal
Stimuli

P

Painful
Stimuli

Level of Consciousness

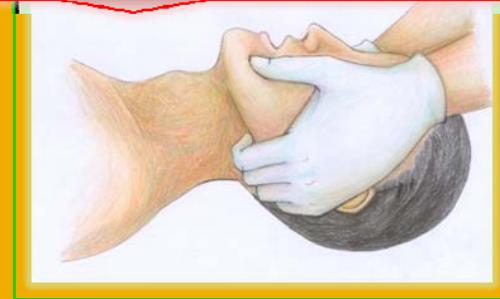
U

Unresponsive

Focused History & Patient Exam

TRAUMA Assessment

Use Jaw Thrust/Trauma



Airway

Life Threats

5-10
Seconds



Open / Assess /
Insert / Inflate
INJURY
Management

Breathing

O₂
&
Suction
as Needed



Adequate
Ventilation
15 LPM
Non-
Rebreather
OR
BVM

Focused History & Patient Exam

TRAUMA Assessment



Chest Trauma

Manage-
Major
OR
Open
Chest Wounds



Occlusive Dressing

O₂
&
Suction
as Needed



Adequate
Ventilation
15 LPM
Non-
Rebreather
OR
BVM

Focused History & Patient Exam

TRAUMA Assessment

Unconscious



Check Pulse

5-10
Seconds

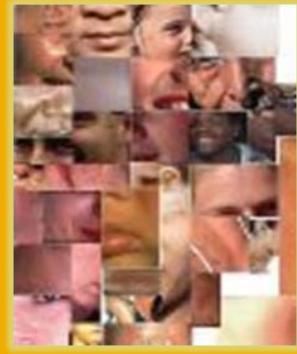


Control Major
Bleeding



Cap Refill

Circulation



Skin Color



Temperature



Condition

Focused History & Patient Exam

Transport Decision

Prioritize
Patients



Make
Transport
Decision



Focused History & Patient Exam

TRAUMA Assessment

Focused

OR

Rapid

Focused History & Patient Exam

RAPID - TRAUMA Assessment

DETAILED

Inspect & Palpate

Posterior
Thorax

Posterior
Lumbar

? Breath
Sounds

Baseline VITALS

Pulse

Resp.

BP

Focused History & Patient Exam

TRAUMA Assessment

S

Signs &
Symptoms

A

Allergies

M

Medications

Assess History / Present Illness

P

Past History

L

Last Meal

E

Events

Focused History & Patient Exam

TRAUMA Assessment

D
C
A
P

Head

Scalp/Ears

Head

Eyes

Head

Face/Mouth/
Nose

HEAD to Toe Exam – INSPECT & PALPATE

B
T
L
S

Neck

Inspect / Palpate

Neck

Assess for JVD

Neck

Tracheal
Deviations

Focused History & Patient Exam

TRAUMA Assessment

D
C
A
P

Chest

Inspect

Chest

Palpate

Chest

Auscultate

HEAD to Toe Exam – INSPECT & PALPATE

B
T
L
S

ABD/
Pelvis

ABDOMEN
Inspect / Palpate

ABD/
Pelvis

PELVIS
Inspect / Palpate

ABD/
Pelvis

Genitalia

Focused History & Patient Exam

TRAUMA Assessment

D
C
A
P

Right Leg

Inspect
CSM's

Left Leg

Inspect
CSM's

Inspect &
Palpate
Circulation
Sensory
Motion

HEAD to Toe Exam – INSPECT & PALPATE

B
T
L
S

Right Arm

Left Arm

Inspect &
Palpate
Circulation
Sensory
Motion

ABDOMEN
Inspect / Palpate

PELVIS
Inspect / Palpate

Focused History & Patient Exam

TRAUMA Assessment

Manage Secondary Injuries / Wounds

**Re-Assess
Pulse
Respiration
Blood Pressure**