### Airway/Breathing
- Stabilize c-spine during assessment
- Open airway using modified jaw thrust, if indicated
* Maintain SpO2 >94%

### Circulation
- Prioritize hemorrhage control if active bleeding; Control external bleeding by direct pressure or tourniquet
- Vital signs: Report any SBP <90 even if transient (determines KU activation level)
- Maintain warmth: external and internal
- Apply c-spine immobilization. Full spine management per local protocol – may defer LSB.

### IV fluid support: Hypotensive
- Large-bore IV sites (x2) or (x1) IO in humerus preferred, if possible
- Initiate LR/NS at:
  - 500 ml/hr adults
  - 20 ml/kg pediatrics

Don’t delay transport for endotracheal intubation.

### At the Trauma Bay
Immediately on arrival
- For traumatic cardiac arrest, report total time down and minutes of CPR to the trauma team leader.

### Verbal EMS report
- Communicate any emergent information to the trauma team leader (TTL) on arrival. You may be asked to hold full report until airway and external hemorrhage is controlled. Afterward, you will receive our full attention. The entire trauma team needs to hear your report. MIST (Mechanism, Injuries, Symptoms, Treatment) format is preferred for report. If TXA has been given, notify the time of TXA administration.

### Trauma
ACS-verified Level I Trauma Center

### ST Elevation MI
Accredited STEMI Receiving Center

### Stroke
Advanced Comprehensive Stroke Center

### EMS Guidelines Time-Critical Diagnosis

#### EMS with 12-lead ECG
- Symptoms consistent with ACS include chest pain, abdominal pain, back pain, upper extremity pain, dyspnea, diaphoresis, N/V, weakness and fatigue.
- Patients with these symptoms should have a 12-lead ECG performed and interpreted within 10 minutes of patient contact.
- If EKG reveals STEMI, elevation ≥ 1 mm in 2 contiguous leads, immediately notify STEMI receiving center that requires the shortest transport time or a STEMI referral center per your predetermined protocols.
- Transmit report en route using clear communication that a STEMI patient has been identified.
- Transmit ECG if capable or hand hard copy of 12-lead to ED staff.

#### EMS without 12-lead ECG
- Emergently transport to the closest appropriate hospital.

#### Intervention en route
- Continuous cardiac monitor
- Place defib pads
- O2 – maintain SpO2 >94%
- ASA – 4 baby – chew if alert
- Nitro SL q. 5 minutes x3 PRN
  - Use cautiously with elevations in II, III and AVF.
  - Do not give if patient is on phosphodiesterase inhibitors (Viagra, Cialis, etc.).
- 2 large bore IVs, NS-TKO
- Morphine for pain PRN

#### Cincinnati Prehospital Stroke Scale
**Facial droop**
- Normal: Both sides of face move equally
- Abnormal: One side of face does not move

**Arm drift**
- Normal: Both arms move equally
- Abnormal: One arm drifts compared to the other

**Speech**
- Normal: Correct words with no slurring
- Abnormal: Slurred or inappropriate words or mute

### Field Intervention
- Heart monitor
- IV of NS during transport
- Blood glucose evaluation, treat if signs and symptoms of hypoglycemia per local protocol
* O2 – maintain SpO2 >94%

### SAMPLE History
**S** – Signs and symptoms
**A** – Allergies
**M** – Medications
**P** – Past medical history
**L** – Last oral intake
**E** – Events leading up to incident, including last known time patient was well

#### Eye-opening response
**Score**
- **<1 year**
  - 6 Displays spontaneous response
  - 5 Localizes pain
  - 4 Withdraws from pain
  - 3 Displays abnormal flexion to pain (decorticate rigidity)
  - 2 Displays abnormal extension to pain (decerebrate rigidity)
  - 1 None

- **>1 year**
  - Obeys commands
  - Localizes pain
  - Withdraws from pain
  - Displays abnormal flexion to pain (decorticate rigidity)
  - Displays abnormal extension to pain (decerebrate rigidity)
  - None

#### Motor response
**Score**
- **<1 year**
  - 5 Babbles, coos appropriately
  - 4 Cries, but is consolable
  - 3 Cries or screams persistently to pain
  - 2 Grunts or moans to pain
  - 1 None

- **>1 year**
  - 5 Uses appropriate words and phrases
  - 4 Uses inappropriate words
  - 3 Cries or screams persistently to pain
  - 2 Grunts or moans to pain
  - 1 None

#### Verbal response
**Score**
- **0-23 months**
  - 5 Is oriented and converses
  - 4 Conversation is confused
  - 3 Words are inappropriate
  - 2 Sounds are incomprehensible
  - 1 None

- **2-5 years**
  - 5 Uses appropriate words and phrases
  - 4 Uses inappropriate words
  - 3 Cries or screams persistently to pain
  - 2 Grunts or moans to pain
  - 1 None

- **>5 years**
  - 5 Is oriented and converses
  - 4 Conversation is confused
  - 3 Words are inappropriate
  - 2 Sounds are incomprehensible
  - 1 None

### Glasgow Coma Scale

<table>
<thead>
<tr>
<th>Eye-opening response</th>
<th>Motor response</th>
<th>Verbal response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Score</strong></td>
<td><strong>&lt;1 year</strong></td>
<td><strong>&gt;1 year</strong></td>
</tr>
<tr>
<td>6</td>
<td>Displays spontaneous response</td>
<td>Obeys commands</td>
</tr>
<tr>
<td>5</td>
<td>Localizes pain</td>
<td>Localizes pain</td>
</tr>
<tr>
<td>4</td>
<td>Withdraws from pain</td>
<td>Withdraws from pain</td>
</tr>
<tr>
<td>3</td>
<td>Displays abnormal flexion to pain (decorticate rigidity)</td>
<td>Displays abnormal flexion to pain (decorticate rigidity)</td>
</tr>
<tr>
<td>2</td>
<td>Displays abnormal extension to pain (decerebrate rigidity)</td>
<td>Displays abnormal extension to pain (decerebrate rigidity)</td>
</tr>
<tr>
<td>1</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
**Burns**
ABA-Verified Adult and Pediatric Burn Center

**Pre-hospital fluid management**
- Age < 5 years: 125 mL LR/hr
- Age 6-13 years: 250 mL LR/hr
- Age > 14 years: 500 mL LR/hr

**Caution:** Start IV fluid at 250 mL/hr for patients with pre-existing cardiac disease, pulmonary disease or age > 70.

Avoid fluid challenge unless patient is hypotensive due to trauma.

**How to estimate scattered burns:**
The size of the patient’s hand (palm with fingers closed) represents 1% of his or her total burn surface area.

**Analgesia support: IV meds only**

**Adult**
- Fentanyl: 50 mcg over 1-2 minutes
  - Slowly: Diluted IV titrated to desired effect
  - Slowly: Titrate IV increments to desired effect

**Pediatrics**
- Fentanyl: 1 mcg/kg, q. 3-5 minutes
  - Slowly: Diluted IV titrated to desired effect
  - Slowly: Titrate IV increments to desired effect

**Burn Size Assessment**
(Include partial- and full-thickness burns only.)

**Keep patient warm – cover with clean dry sheets.**
**Avoid use of ice or ointments.**