

EMS Guidelines Time-Critical Diagnosis

Radio report

Trauma

ACS-verified Level I Trauma Center

Airway/Breathing

- Stabilize C-spine during assessment
- Open airway using modified jaw thrust, if indicated
- Manage airway/administer O2/ventilate
- Maintain SpO2 >94%

Circulation

- Vital signs: Report any SBP <90 even if transient (determines KU activation level)
- Control external bleeding by direct pressure
- Maintain warmth: external and internal
- Apply c-spine immobilization. Full spine management per EMS guidelines - may defer LSB.

IV fluid support: Hypotensive

- Large-bore IV sites (x2) **or** (x1) IO
- Initiate crystalloids at:
 - o 500 ml/hr adults
 - o 20 ml/kg pediatrics

Don't delay transport for endotracheal intubation.

At the Trauma Bay

Immediately on arrival

For trauma code, report total time down and minutes of CPR to the trauma team leader.

Verbal EMS report

Communicate all urgent information to the trauma team leader (TTL) on arrival. Hold full report until the primary survey is addressed. The TTL will call for this to ensure that any life-threatening injuries are assessed and addressed immediately, after which you receive our full attention. The entire team needs to hear the EMS MIVT report (Mechanism Injuries Vital signs and Treatment).

ST Elevation MI

Accredited STEMI Receiving Center

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 \geq 1mm 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 saturation >94%
- ASA – 4 baby – chew if alert
- Nitro SL q. 5 minutes x3 PRN
 - o Use cautiously with elevations in II, III and AVE.
 - o Do not give if patient is on phosphodiesterase inhibitors (Viagra, Cialis, etc.).
- 2 large bore IVs, NS-TKO
- Morphine for pain PRN

Stroke

Advanced Comprehensive Stroke Center

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 saturation >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**

Glasgow Coma Scale

Eye-opening response

Score	>1 year	<1 year
4	Spontaneous	Spontaneous
3	To verbal command	To shout
2	To pain	To pain
1	None	None

Motor response

Score	>1 year	<1 year
6	Obeys commands	Displays spontaneous response
5	Localizes pain	Localizes pain
4	Withdraws from pain	Withdraws from pain
3	Displays abnormal flexion to pain (decorticate rigidity)	Displays abnormal flexion to pain (decorticate rigidity)
2	Displays abnormal extension to pain (decerebrate rigidity)	Displays abnormal extension to pain (decerebrate rigidity)
1	None	None

Verbal response

Score	>5 years	2-5 years	0-23 months
5	Is oriented and converses	Uses appropriate words and phrases	Babbles, coos appropriately
4	Conversation is confused	Uses inappropriate words	Cries, but is consolable
3	Words are inappropriate	Cries or screams persistently to pain	Cries or screams persistently to pain
2	Sounds are incomprehensible	Grunts or moans to pain	Grunts or moans to pain
1	None	None	None

EMS Guidelines Time-Critical Diagnosis

Radio report

Burns

ABA-Verified Adult and Pediatric Burn Center

Airway

Evidence of injury
Hoarse/raspy voice
Singled nasal hair
Soot in pharynx

Yes: Intubate ASAP
No: Oxygen 100%

Elevate HOB 30°
(unless contraindicated)

IV fluid support

Establish rule of 9s
Initiate IVFs if >15% adults,
10% pediatrics

Pre-hospital fluid management

Age < 5 years : 125ml 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

Analgesia support: IV meds only

Adult

Fentanyl

50 mcg over 1-2 minutes
Slowly: Diluted IV titrated
to desired effect

or

Morphine

2 mg, q. 3 minutes

Slowly: Titrate IV increments
to desired effect

Pediatrics

Fentanyl

1 mcg/kg, q. 3-5 minutes
Slowly: Diluted IV titrated
to desired effect

or

Morphine

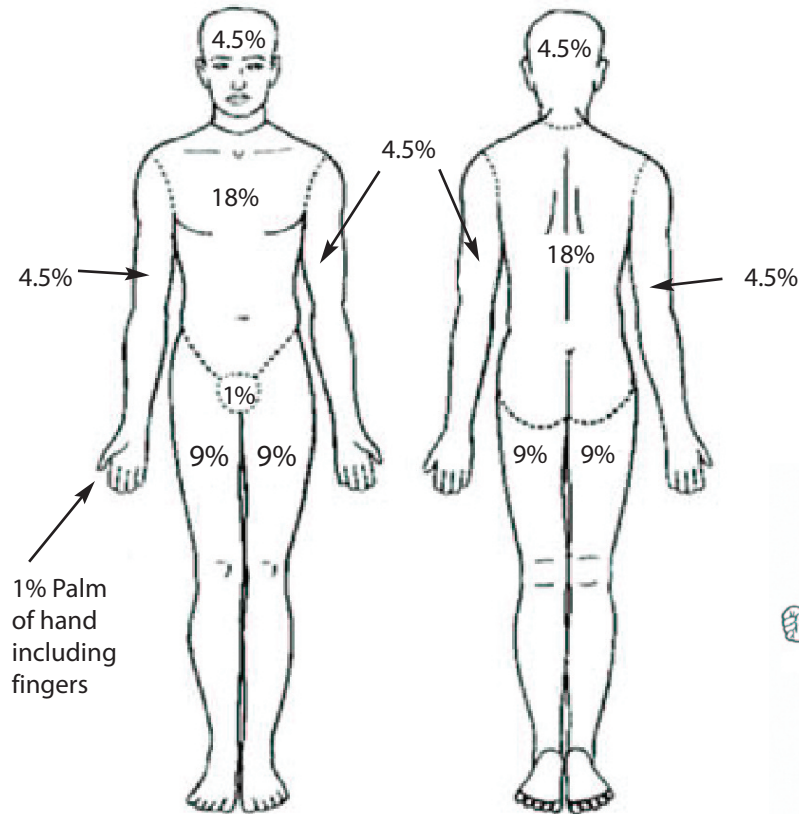
0.1 mg/kg q. 5 minutes

Slowly: Titrate IV increments
to desired effect

Burn Size Assessment

(Include partial- and full-thickness burns only.)

Adult



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.

Pediatric

