

Patient Assessment Flow

EMS Field Reference — Scene Size-Up → Primary → Secondary → Reassessment

Knowledge informs Assessment · Assessment informs Treatment · Movement is a Treatment

SCENE SIZE-UP

Before you touch the patient

Scene Safety — FIRST, ALWAYS

- Identify & don appropriate **PPE** (BSI/ Standard Precautions) — gloves, eye protection, mask/gown as indicated
- Assess for threats/hazards while **responding, arriving, and working** the scene
- Traffic, violence, fire, chemicals, unstable structures, animals, electrical, environment
- Maintain situational awareness** throughout the call — reassess for new/changing hazards, keep an escape route

MOI / NOI

- MOI** Mechanism of Injury (trauma)
- NOI** Nature of Illness (medical)

Size Up the Call

- # of patients — triage if multiple
- Additional resources needed? (ALS, fire, PD, extrication, air med)
- MOI suggests spinal injury? → C-spine precautions / immobilization

If Scene Becomes Violent / Unstable

RUN · HIDE · FIGHT

Run (retreat) · **Hide** (cover/concealment) · **Fight** (last resort). Stage & await law enforcement before re-entering.

PRIMARY ASSESSMENT

Find & fix life threats

General Impression

- Sick or not sick? Stable or unstable?

Level of Responsiveness

- AVPU** Alert · Verbal · Painful · Unresponsive
- If **Alert** → check orientation **A&O x4** person, place, time, event

C/C & Life Threats

- Identify chief complaint and/or apparent life threats:
- X** **Exsanguinating** hemorrhage — control first
- A** **Airway** — open? managed?
- B** **Breathing** — rate & adequacy
- C** **Circulation** — rapid head-to-toe blood sweep; perfusion; pulses x4 extremities
- D** **Disability** — trauma (e.g., head injury), illness, or exacerbation (e.g., diabetic)
- E** **Environment** — expose to assess for hidden injuries (preserve privacy/dignity); prevent heat loss afterward — too hot / cold / wet

TREAT LIFE THREATS IMMEDIATELY — before moving on

Patient Priority: Stable vs. Unstable → **Stay & Play** (treat on scene) or **Load & Go** (treat en route)
Unstable/sick → **decide transport now** — trauma / stroke / MI → target **≤10 min** on scene

SECONDARY ASSESSMENT

History & focused / detailed exam

Medical & trauma patients — conscious or unconscious, stable or unstable.

Alert & can articulate C/C

- SAMPLE** history
- Focused exam:
OPQRST-ASPEN
 +
DCAP-BTLS

Altered LOC / unresponsive

- Detailed head-to-toe exam (*pediatric: toe-to-head*)
- Consider **GCS** & **AEIOU-TIPS**

Vitals — obtain ASAP (not necessarily before full history if patient can provide one): AVPU/GCS · Pain (1–10) · BP · HR/Pulse · Resp. · Glucose · Eyes (PERRL) · Skin · Lungs · Temp · SpO2 · CO2 · ECG

Correct injuries as you go — splint fractures and dress wounds as they are found, checking **CMS** (circulation, motor, sensory) before & after splinting. If the patient is **unstable** or needs rapid transport, hold non-life-threatening care (e.g., splinting) until **en route**. If the patient is **stable**, make the transport decision in a timely manner once thoroughly assessed.

REASSESSMENT

Continuous, all patients

Repeat After Any:

- Procedure
- Medication
- Movement

Frequency

- Unstable** patient → every **5 minutes**
- Stable** patient → every **15 minutes**

Re-check

- Repeat primary + vitals
- Re-evaluate treatments/interventions
- Update priority & transport decision
- Trend findings over time

↻ **Feeds back into ongoing patient priority**



SAMPLE (history)

Signs/Symptoms · Allergies · Medications · Pertinent past history · Last oral intake · Events leading up

OPQRST-ASPEN (focused exam)

Onset · Provocation/Palliation · Quality · Region/Radiation · Severity · Time · Associated symptoms · Pertinent negatives

DCAP-BTLS (physical exam)

Deformities · Contusions · Abrasions · Punctures/Penetrations · Burns · Tenderness · Lacerations · Swelling

GCS (Glasgow Coma Scale)

Eye (4): 4 Spontaneous · 3 To voice · 2 To pain · 1 None
Verbal (5): 5 Oriented · 4 Confused · 3 Inappropriate words · 2 Incomprehensible · 1 None
Motor (6): 6 Obeys · 5 Localizes pain · 4 Withdraws · 3 Flexion (decorticate) · 2 Extension (decerebrate) · 1 None
Total = E+V+M (3–15)

AEIOU-TIPS (altered LOC causes)

Alcohol · **Epilepsy/Endocrine** · **Insulin** · **Overdose** · **Uremia** · **Trauma/Temperature** · **Infection** · **Psychiatric** · **Stroke/Seizure/Shock**

APGAR (newborn/infant)

Appearance: 0 Blue/pale · 1 Body pink, extremities blue · 2 Pink all over
Pulse: 0 Absent · 1 <100 bpm · 2 ≥100 bpm
Grimace: 0 None · 1 Grimace · 2 Cough/sneeze/cry
Activity: 0 Limp · 1 Some flexion · 2 Active motion
Respiration: 0 Absent · 1 Slow/irregular · 2 Good, crying
Total 0–10, at 1 & 5 min

PAT (Pediatric Assessment Triangle)

Appearance (TICLS): Tone, Interactiveness, Consolability, Look, Speech/cry
Work of Breathing: position (sniffing/tripod), retractions, flaring, grunting/stridor
Circulation to Skin: pallor, mottling, cyanosis
Assess from across the room, before touching patient

Secondary Assessment Pathways

Trauma (MOI) vs. Medical (NOI) — Stable vs. Unstable

TRAUMA (MOI)

Significant mechanism of injury

STABLE

Specific injury, responsive

Sequence: History → Focused Exam

- Responsive → obtain **detailed history** first: **SAMPLE** + **OPQRST-ASPN** for the injury
- Then **focused physical exam** of the injured area/system — **DCAP-BTLS** at the site
- Baseline vitals

Correct as found — splint, dress, etc. (non-life-threatening)
Check **CMS** (circulation, motor, sensory) before & after splinting
Reassess every **15 minutes** (stable)

UNSTABLE

Significant MOI / unconscious

Sequence: Exam First → History After

- **Detailed head-to-toe** (rapid trauma) exam **FIRST** — before history
- Full-body **DCAP-BTLS** ; **CMS** (circulation, motor, sensory) x4 extremities; C-spine precautions if indicated
- History from bystanders/family/ MedicAlert as available — **SAMPLE**
- Vitals

LOAD & GO — target **≤10 min on scene**

Hold non-life-threatening care until **en route**
Reassess every **5 minutes** (unstable)

MEDICAL (NOI)

Underlying illness / nature of illness

STABLE

Specific complaint, responsive

Sequence: History → Focused Exam

- Responsive → obtain **detailed history** first: **SAMPLE** + **OPQRST-ASPN** for the chief complaint
- Then **focused physical exam** relevant to the complaint/system
- Consider likely system(s) involved — see **Expanded Systems Review** below
- Vitals

Treat per complaint/protocol
Reassess response to treatment given
Reassess every **15 minutes** (stable)

UNSTABLE

Altered LOC / unresponsive

Sequence: Exam First → History After

- **Detailed head-to-toe** exam **FIRST** — history often unavailable/unreliable
- Look for clues: medical alert tags, medication patches, needle marks, injury signs
- Consider **AEIOU-TIPS** causes
- Vitals
- History from bystanders/family/ medications on scene, after

LOAD & GO if indicated

Treat identifiable causes (e.g., glucose)
Reassess every **5 minutes** (unstable)

TRAUMA — Head-to-Toe Body-Region Exam

- **Head** — eyes (PERRL), ears, nose, mouth, scalp
- **Neck** — trachea position, JVD, cervical spine
- **Chest** — inspect, palpate, auscultate
- **Abdomen/Pelvis** — inspect, palpate
- **Upper extremities** — inspect, palpate, CMS
- **Lower extremities** — inspect, palpate, CMS
- **Posterior thorax, lumbar, buttocks** — inspect, palpate (log roll)



MEDICAL — Expanded Systems & History Review

Cardiovascular Pulmonary Neurological Musculoskeletal
Integumentary GI/GU Reproductive Psychological Social

For each reported sign/symptom, ask **clinically qualifying questions** tied to **OPQRST-ASPN**.

Reassess & document the patient's **feedback/response** to any medications or treatments given.

Rule of thumb: Patient can reliably provide history → **History first**, then focused exam. • Patient can't (unconscious/unstable) → **Head-to-toe exam first**, history from bystanders/family after.

Additional Mnemonics to Consider

Shock vs. Cushing's Triad

Shock: ↑HR · ↓BP · ↑RR · cool/clammy —
Cushing's (↑ICP): ↑HR · ↑BP · irreg. resp.

FAST / BE-FAST (stroke)

Face · **Arm** · **Speech** · **Time** — add **Balance** & **Eyes**

START / JumpSTART (MCI triage)

Respirations · **Perfusion** · **Mental status** — adult / pediatric

SLUDGEM (toxidrome)

Salivation · **Lacrimation** · **Urination** ·
Defecation · **GI distress** · **Emesis** · **Miosis**

6 P's (vascular/compartment)

Pain · **Pallor** · **Paresthesia** · **Paralysis** ·
Pulselessness · **Poikilothermia**

Resp. Distress vs Failure vs Arrest

Distress: ↑WOB, compensating — consider CPAP · **Failure:** inadequate O2/vent — assist ventilations · **Arrest:** apneic — ventilate now

MIST / SBAR (handoff report)

MIST: Mechanism · Injuries · Signs · Treatment — **SBAR:** Situation · Background · Assessment · Recommendation

SOAP (narrative report)

Subjective · **Objective** · **Assessment** · **Plan**

CHART (narrative report)

Chief complaint · **History** · **Assessment** · **Rx/ treatment** · **Transport**

5 Rights (medication admin)

Right Patient · **Right Medication** · **Right Dose** · **Right Route** · **Right Time**

UNSTABLE PATIENT — Red-Flag Criteria

HR >120 or <50 · RR >24 or <10 · SBP <90 · SpO2 <92% · GCS <13

Also: **AMS/unconscious** · **uncontrolled bleeding** · **severe pain** · resp. failure · shock · anaphylaxis

RULE OF NINES — Burn TBSA (adult)

Head 9% · **Each arm** 9% · **Chest/back** 18% each · **Each leg** 18% · **Groin** 1%

Patient Encounter Documentation

Field Report — Complete during / immediately after patient contact

DATE	TIME	LOCATION	PATIENT NAME	DOB / AGE	SEX
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SAFETY & SECURITY — identify/assess hazards & threats; manage risks

Incident / Event Description	Trauma (MOI) / Medical (NOI)	General Impression (Sick / Not sick)
Chief Complaint (CC) / Complains Of (c/o)	Initial Differential Diagnosis	

PRIMARY ASSESSMENT — locate & treat immediate life threats (CPR / xABCDE / MARCH)

AMS / LOC (AVPU / GCS)	Life Threats Found & Treated	Airway / Breathing / Circulation / C-Spine (open & maintain / assess adequacy & ventilate / assess & treat shock / precautions if indicated)
If Alert → A&O x ☐ Person ☐ Place ☐ Time ☐ Event		

SECONDARY ASSESSMENT — detailed physical exam, history & vitals

Trauma (DCAP-BTLS / DOTS / CMS x4 extremities)	Medical (CNS, CV, EENT, RESP, GI/GU, HEMA, Skin, Meta, Other)
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HISTORY TAKING — for AMS, consider AEIOU-TIPS

Present / Pertinent Illness or Injury (SAMPLE / OPQRST-ASPN / APGAR)	Past Illness / Injury
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INITIAL & ONGOING VITAL SIGNS — every 5 min unstable · every 15 min stable

Time	AVPU/GCS	Pain	BP	Pulse/HR	Resp	Glucose	Eyes	Skin	Lungs	Temp	SpO2	CO2	ECG

Life-Threatening	Critical / Emergent	Non-Emergent	Refined Differential Diagnosis
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TREATMENT (Tx) / MEDICATIONS (Rx)

Time	Airway	Breathing	Circulation	Ortho	Other	Drug	Dose

Notes:

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Field Notes

Space for observations, debrief notes, or instructor feedback

Assessment Skills vs. Treatment Skills

Category	Assessment Skills — how to evaluate	Treatment Skills — actions to correct findings
General Impression	Visual survey before touching · sick/not sick · position · work of breathing · skin color	Prioritize care based on impression · call for backup/ALS early if sick
X — Hemorrhage	Rapid visual/tactile sweep for severe external bleeding	Direct pressure · hemostatic dressing · tourniquet
A — Airway	Look, listen, feel · check patency · noises (snoring/gurgling/stridor)	Positioning (head-tilt/jaw-thrust) · suction · OPA/NPA · advanced airway
B — Breathing	Rate, rhythm, effort · auscultate · SpO2 · chest rise/symmetry	High-flow O2 · BVM/assisted ventilation · seal open chest wounds · consider CPAP
C — Circulation	Pulse rate/quality · skin CTC · cap refill · rapid blood sweep	Hemorrhage control · IV/IO access · fluids · CPR/AED
D — Disability	AVPU/GCS · pupils (PERRL) · gross motor/sensory	Position to protect airway · treat correctable causes (glucose) · spinal precautions
E — Environment	Expose to find hidden injuries · assess surroundings/temperature	Prevent heat/cold loss · remove from hazard · wound care, dressing, splinting
Vital Signs	BP · pulse rate/quality · RR · SpO2 · temp · glucose · pain (1–10)	Trend & document · treat per finding (O2, glucose, etc.) · repeat q5–15min
Secondary Exam	DCAP-BTLS / DOTS head-to-toe or focused exam · inspect, palpate, auscultate	Address findings as identified · dress/stabilize/splint per injury
Musculoskeletal / Splinting	Deformity, swelling · CMS distal to injury before splinting	Splint (rigid, traction, sling & swathe) · recheck CMS after splinting
Wound / Bleeding Care	Type/severity of external bleeding · signs of internal bleeding	Direct pressure · dressing/bandaging · hemostatic agent · tourniquet if severe
Burns	TBSA (Rule of Nines) · depth · circumferential/airway burns	Stop the burn · cool briefly, cover dry/sterile · remove jewelry/clothing
Cardiac Arrest	Pulse check ≤10 sec · rhythm via AED	High-quality CPR · AED/defibrillation · airway management
Allergic Reaction / Anaphylaxis	Hives, swelling, itching · airway/resp. involvement · hypotension	Epinephrine (per protocol) · position of comfort · high-flow O2
Diabetic Emergency	Blood glucose · LOC · skin (diaphoretic/dry)	Oral glucose if alert & can swallow · IV dextrose (ALS) · reassess LOC
Seizure	Type, duration, triggers · post-ictal status	Protect from injury · recovery position · airway/O2 · benzodiazepine (ALS) if prolonged
Behavioral / Psychiatric	Scene safety · mental status · suicidal/homicidal ideation	Verbal de-escalation · maintain safe distance · restraint only per protocol/PD
Childbirth / OB	Contractions (frequency/duration) · crowning · presentation	Support delivery · dry/warm/stimulate newborn · APGAR at 1 & 5 min
Spinal Motion Restriction	MOI · neuro deficit · point tenderness	Manual stabilization · collar · minimize movement per current protocol

Notes: