

MARCH ➡ xABCDE: Tactical Primary Survey

Stop the bleeding first, then airway, respirations, circulation, head & hypothermia
Assessment · Treatment · DoW TCCC considerations · Aligned to the CoTCCC TCCC Guidelines, 01 May 2026

Care Under Fire · TECC: Direct Threat (Hot)

Return fire, take cover, direct self-aid. **Only** stop life-threatening limb bleeding: TQ **high & tight over the uniform**. Airway is deferred to TFC.

Tactical Field Care · TECC: Indirect Threat (Warm)

Security set, triage done. Full **MARCH-PAWS** below. Disarm casualties with altered mental status. Reassess everything.

Tactical Evacuation · TECC: Evacuation (Cold)

Hand off with MIST. **Reassess all interventions**. Adds: ETI if trained, O₂, monitoring, CPR when a surgical facility is close.

TCCC skill level (lowest tier that performs the skill)

ASM All Service Members · **CLS** Combat Lifesaver
CMC Combat Medic/Corpsman · **CPP** Combat Paramedic/Provider
EMS EMERGILITY protocol & Medical Director · **(2026)** new in 2026

MARCH	XABCDE	ASSESSMENT SKILLS	TREATMENT SKILLS	DOW TCCC CONSIDERATIONS
M Massive Hemorrhage	X eXsanguinating hemorrhage <i>Stop bleeding before airway</i>	Rapid blood sweep: extremities → junctions (neck, axillae, groin) → torso, back and under body armor. - Look for pulsatile or steady flow, pooling, soaked clothing and any traumatic amputation. Shock screen: altered mental status (no TBI) and/or weak or absent radial pulse. - Re-check every TQ placed in CUF for effectiveness and distal pulse.	Limb TQ on skin, 2–3 in above the wound. Add a 2nd side-by-side if bleeding continues. ASM Hemostatic packing: Combat Gauze first (CeloX, ChitoGauze alternatives). Then ≥3 min direct pressure and a pressure dressing. ASM - XStat for deep, narrow junctional wounds. iTClamp for scalp/neck (not within 1 cm of the orbit). CLS Junctional TQ (SAM-JT, JETT) as soon as it's ready. CLS TXA 2 g slow IV/IO push. CMC	Mark every TQ with its time, and record it on the TCCC Card (DD 1380). TXA: give it if a transfusion is likely (shock, major amputation, penetrating torso, severe bleeding) or for significant TBI/altered mental status from blast or blunt trauma. Give it as soon as possible, no later than 3 h after injury. Conversion: aim for ≤2 h if the casualty is not in shock, the wound can be watched and it isn't an amputation. ASM/CLS: no conversion after 2 h unless CMC/CPD directs it. Leave a TQ that has been on >6 h in place without monitoring and labs. (2026) Repositioning: put a new TQ 2–3 in above the wound, confirm control, then loosen the first.
A Airway	A Airway <i>± spinal motion restriction (blunt only)</i>	Talking clearly = patent airway. Look, listen, feel. - Check for obstruction: blood, vomit, teeth, maxillofacial trauma, stridor, gurgling, snoring. Inhalation injury cues: facial burns, soot, singed hair, hoarseness. Closed-space burns are high risk. - Look for an expanding neck hematoma. Note AVPU. Use SpO₂/EtCO₂ when available.	Conscious: let them take any position that protects the airway, including sitting up or leaning forward. ASM Unconscious: recovery position, head tilted back, chin away from chest. Suction if available. ASM - Head-tilt/chin-lift, jaw thrust. NPA + BVM (1000 mL) if SpO₂ <90% (<92% with TBI). CLS SGA/i-gel: EMERGILITY protocol only. EMS Surgical cric (bougie-aided or open): flanged, cuffed cannula, ID 6–7 mm, OD <10 mm, 5–8 cm intratracheal. Use lidocaine if the casualty is conscious. CMC	No airway care under fire. Move to cover first. (2026) The algorithm is positioning first. SGAs were removed from TFC; the surgical cric is the only invasive TFC airway. - Confirm every surgical airway with continuous EtCO₂. Reassess SpO₂, EtCO₂ and patency often. C-spine stabilization isn't needed for penetrating trauma alone. - Inhalation injury with distress or desaturation: consider an early surgical airway. - TACEVAC: ETI may replace cric if the provider is trained.
R Respirations	B Breathing <i>Ventilation & oxygenation</i>	Expose and check the chest front, sides and back (axillae, under armor). Find open or sucking wounds and look for exit wounds. - RR, rhythm, quality and work of breathing. Check symmetry and listen to breath sounds on both sides. SpO₂. Suspect tension PTX with torso trauma or primary blast plus any of: progressive distress or tachypnea, absent or ↓ breath sounds on one side, SpO₂ <90%, shock, or traumatic arrest.	Vented chest seal on every open chest wound (non-vented if that's all you have). ASM - Suspected tension: burp or remove the seal, start pulse ox, position supine or recovery. CLS Needle decompression: 14G or 10G, 3.25 in, at 5th ICS AAL or 2nd ICS MCL (never medial to the nipple line). Go to the hub, hold 5–10 s, leave the catheter. CLS - If it fails, repeat at the alternate site with a new needle. Then finger thoracostomy or chest tube at 5th ICS AAL. CPP - O₂ for low SpO₂. Use NPA + BVM (1000 mL) for hypoxia you can't correct. CMC	ND success: less distress, an audible hiss, SpO₂ rising to ≥90% (this can take minutes and may not happen at altitude), or return of radial pulse or consciousness. - If signs return after success, repeat at the same site with a new needle. - Torso or polytrauma with no pulse or respirations: do bilateral ND before stopping care. - SpO₂ goal is ≥92% with moderate or severe TBI. Pulse ox can mislead in shock or hypothermia.
C Circulation	C Circulation <i>Perfusion & shock</i>	Re-screen for shock: mental status, radial pulse rate and quality, skin (pale, cool, diaphoretic), cap refill, BP if available. Reassess every TQ, pack and dressing, and check distal pulses. - Check for pelvic injury: severe blunt or blast trauma with pelvic pain, or lower-limb amputation. - Sweep for the remaining non-pulsatile bleeding.	- Control remaining bleeding. Apply a pelvic binder when indicated. CLS IV 18G / saline lock, or IO if IV is not quick. CMC Blood, in order of preference: cold-stored LTOWB → fresh LTOWB → 1:1:1 plasma:RBC:platelets → 1:1 plasma:RBC → plasma or RBC alone. CMC Calcium 1 g IV/IO after the first product (30 mL 10% Ca gluconate or 10 mL 10% CaCl₂). CMC - Give TXA now if it wasn't given. Warm all fluids.	Resuscitation endpoints: reassess after each unit and stop at a palpable radial pulse, improved mental status or SBP 100. Not in shock: no IV fluids needed. PO fluids are fine if the casualty is conscious and can swallow. - Crystalloid isn't part of the hemorrhagic-shock fluid hierarchy. Refractory shock: think untreated tension PTX. - Rh+ products are acceptable if Rh- isn't immediately available. Give unscreened fresh whole blood only under medical direction. Ceftriaxone + calcium: never in the same line. Reconstitute ceftriaxone in NS only and flush before and after; it precipitates with calcium and LR.
H Head Injury	D Disability <i>Neuro status</i>	AVPU → GCS (E4 V5 M6). Check pupil size, equality and reactivity, and for posturing or lateralizing signs. Can they follow simple commands (thumbs-up, two fingers, blink)? If not, beyond 10 min post-injury = moderate/severe TBI. - Check motor and sensory function in all four limbs and blood glucose EMS. Use MACE 2 for suspected concussion. - Neuro checks every 5–10 min.	Prevent secondary injury: SpO₂ ≥92%, SBP >100 (or a normal radial pulse). If ventilated, target EtCO₂ 35–45, or 10 breaths/min without capnography. CMC - Elevate the head and torso >30° if the casualty isn't in shock. Loosen the collar and keep the head midline. - Isolated TBI with no hemorrhage: 1–2 units of plasma. CMC Herniation signs: 250 mL 3%/5% HTS or 30 mL 23.4% IV/IO over ≥10 min, then flush. Repeat once at 20 min (max 2 doses). CPP Penetrating TBI: surface dressing, gauze with gentle pressure. Don't pack or close. CLS	- If unsure, treat hemorrhagic shock first. It takes precedence over TBI targets. - Evacuate to neurosurgical care as soon as possible. Outcomes improve with surgery within 5 h. - HTS is not prophylactic and not a resuscitation fluid. Watch the IV site for extravasation. - Ketamine isn't contraindicated in TBI, but it masks neuro decline. Document AVPU before dosing. (2026) Updated SpO₂, SBP and EtCO₂ targets, plasma for isolated TBI, and the do-not-pack rule.
H Hypothermia	E Exposure / Environment <i>Find it all, then rewarm</i>	Expose and inspect fully while protecting dignity and minimizing time exposed. Logroll to check the back. Look for small fragment wounds in the axillae, groin, perineum and scalp. Burns: TBSA to the nearest 10% (Rule of Nines). Note closed-space and facial burns. - Check the environment (wet clothing, wind, cold ground, heat) and core temperature if available.	- Start hypothermia prevention early: insulate from the ground and swap wet clothing for dry. ASM - Put an active heating blanket on the anterior torso and under the axillae (never directly on skin), then an impermeable enclosure and an insulated system (HPMK). CLS - Warm IV/IO fluids to 38 °C (up to 150 mL/min). CMC Burns: dry sterile dressings. For >20% TBSA, fluids at %TBSA × 10 mL/h (40–80 kg), +100 mL/h per 10 kg over 80 kg. CMC	Lethal triad: hypothermia → acidosis → coagulopathy. Prevent it in every trauma casualty, in any climate. - Hemorrhagic shock takes precedence over burn shock. PO fluids are OK for burns ≤30% TBSA if the casualty is awake. - Burns alone don't need antibiotics. Burn casualties are especially prone to hypothermia. - Protect against wind and precipitation through evacuation.



MARCH-PAWS: After the Primary Survey

Pain · Antibiotics · Wounds · Splinting, then the 5 Rs, vital targets and handoff
Aligned to the CoTCCC TCCC Guidelines, 01 May 2026

PAWS: SECONDARY INTERVENTIONS

Pain

CAN STAY IN THE FIGHT: COMBAT WOUND MEDICATION PACK **ASM**

Acetaminophen **1000–1300 mg PO q8h** (2 × 650 mg ER) + meloxicam **15 mg PO daily** + suzetrigine **100 mg PO once**, then **50 mg q12h** **(2026)**

CAN'T STAY IN THE FIGHT: CWMP, THEN **CMC**

Ketamine **100 mg IM** | **50 mg IN** (100 mg/mL) | **25 mg** (or 0.2–0.3 mg/kg) **slow IV/IO over 1 min**, or esketamine **14 or 28 mg IN**. Repeat q30 min PRN until pain is relieved or nystagmus appears. Ondansetron **4 mg ODT/IV/IO/IM q8h PRN**.

Safety: document AVPU before ketamine. Disarm and consider disconnecting comms. Don't combine with benzodiazepines or opioids. If respirations drop, use the sniffing position, then ventilate. **(2026)** Fentanyl/OTFC have been removed.

Procedural sedation **CPP**: ketamine 1–2 mg/kg slow IV/IO or 300 mg IM. Midazolam 0.5–2 mg IV/IO for emergence reactions.

Antibiotics

All open combat wounds and invasive procedures **(2026)**

Can take PO: cefadroxil **1 g PO daily** (or cephalexin 500 mg PO q6h) **CLS**

Can't take PO (shock or unconscious): ceftriaxone **2 g IV/IO/IM daily** **CMC**

Penetrating eye: ceftriaxone 2 g IV/IM or cefadroxil 1 g PO ASAP. Check visual acuity and apply a **rigid eye shield** (no pressure patch). Check allergies first: cefadroxil/cephalexin share side chains with penicillins, ceftriaxone doesn't. Burns alone get no antibiotics. **Why the change:** TCCC Change 25-1 (JSOM 2025) chose narrower-spectrum, longer-acting, better-supplied drugs over moxifloxacin and ertapenem.

Wounds

Inspect and dress **all** known wounds and rinse off gross contamination. **Search for missed wounds** (back, axillae, groin, scalp). **ASM**

Evisceration: cover with a moist, sterile, impermeable dressing. Make one brief (<60 s) reduction attempt only if there's no leakage and bleeding is controlled. Keep the casualty NPO.

Penetrating TBI: don't pack. **Burns:** dry sterile dressings (see H/E).

Splinting

Splint fractures and **check pulse, motor and sensation before and after**. **ASM** Immobilize the joints above and below and pad well. Leave the TQ on an amputation stump. Dress the stump.

Pelvic binder → see C. Long or rough evacuation: pad pressure points and secure all wraps and straps.

PREPARE FOR EVACUATION

Secure the **TCCC Card (DD 1380)** to the casualty. Secure bandage ends, wraps and litter straps, and pad pressure points. Brief ambulatory casualties. Stage per unit SOP.

COMMON PITFALLS

- Missing bleeding under armor, in the axillae or groin, or on the back.
- A TQ that's too loose (a venous TQ **increases** bleeding). The distal pulse should be gone.
- Not rechecking TQs and packing after every move.
- Skipping hypothermia prevention because it's warm out.
- Holding the evacuation request until PAWS is done.

THE 5 RS: ONGOING CARE

REASSESS

Everything the casualty does on their own: **AVPU, HR/radial pulse, RR, SpO₂**. Unstable: every 5 min. Stable: every 15 min.

RECORD

Every assessment and intervention, with times, on the **TCCC Card (DD 1380)**. It travels with the casualty.

RE-EVALUATE

Everything you did: **TQs, packing, wraps, NPA, chest seal, ND, IV/IO, binder, HPMK**.

REINFORCE

All interventions. Re-tighten TQs, secure bandage ends, wraps and litter straps for movement.

REASSURE

Talk to the casualty. Explain care, give clear instructions, keep them calm and engaged.

VITALS: NORMAL VS. TCCC TRIGGERS

Sign	Adult normal	TCCC trigger / target
Mental status	A&O ×4 / GCS 15	AMS without TBI = shock
Radial pulse	Strong, regular	Weak or absent = shock. Palpable = resuscitation endpoint
Heart rate	60–100 /min	Rising HR = early shock; trend it
Resp. rate	12–20 /min	Progressive tachypnea → tension PTX. Ventilated TBI: 10 /min
SpO ₂	≥94%	<90% → tension PTX / hypoxia. TBI ≥92%
SBP	100–140 mmHg	Resuscitate to 100 . TBI: >100
EtCO ₂	35–45 mmHg	TBI (ventilated): 35–45
Temperature	36.5–37.5 °C	Prevent any drop. Hypothermia worsens bleeding

BURN FLUIDS: QUICK MATH

%TBSA × 10 = mL/h (adults 40–80 kg), then **+100 mL/h for every 10 kg over 80 kg**. Only for >20% TBSA.

30% TBSA, 70 kg → **300 mL/h** · 30% TBSA, 100 kg → 300 + 200 = **500 mL/h**

Hemorrhagic shock comes first. LR or NS (Hextend ≤1000 mL total).

AVPU: LEVEL OF RESPONSIVENESS

AAlert

VVerbal

PPainful

UUnresponsive

If alert, check orientation to person, place, time and event. Below "A" without TBI, suspect shock. Document AVPU **before** any ketamine.

THE THIRD "H": HELICOPTER / HEADLIGHTS

Call for evacuation early, ideally as soon as the M-A-R-C picture is clear, not after PAWS.

9-Line MEDEVAC: send Lines 1–5 within 25 s to launch the aircraft. Lines 6–9 can follow en route.

Precedence: Urgent ≤2 h · Urgent-Surgical ≤2 h · Priority ≤4 h · Routine ≤24 h.

Update it if the casualty changes.

Full 9-line, CASEVAC vs. MEDEVAC and LZ references: *EMERGILITY TEMS Tactical Medicine Reference Guide*, p. 3.

HANDOFF: MIST REPORT

M	Mechanism of injury and time of injury
I	Injuries found, head to toe
S	Signs: AVPU, pulse, RR, SpO ₂ , BP and trends
T	Treatment given, with times (TQ, TXA, blood, meds)

SOF MEDIC LENS: 18D · SOCM

- SOCM** (Ranger, SF, SEAL, MARSOC medics) trains at JSOMTC and earns NRP, working at the **CPP tier**. **18Ds** add the SF Medical Sergeant course: prolonged care, minor surgery, lab, dental and veterinary care.
- 2025 Ranger Medic Handbook:** CoTCCC/JTS-compliant; adds calcium chloride and pediatric and K9 TCCC. It **predates TCCC 2026**, so check its antibiotic and analgesia pages against the May 2026 guidelines.
- Whole blood forward:** Ranger ROLO (low-titer O) and walking blood banks bring whole blood to the point of injury.
- Prolonged Casualty Care:** JTS PCC Guidelines and the PCC CPG series (e.g., Nursing Interventions, July 2025).

TWO LENSES, ONE PATIENT

MARCH (TCCC/TECC) and **xABCDE** (PHTLS, ATLS, civilian EMS) follow the same order: **catastrophic bleeding comes before airway**.

M → x · A → A · R → B · C → C · H (head) → D · H (hypothermia) → E

Extreme cold: move **H/E up**. Right after hemorrhage control, get the casualty off the ground and wrapped. Hypothermia impairs clotting (lethal triad), so cold makes bleeding worse.

Use MARCH under threat; use xABCDE at handoff to civilian EMS or the ED.

