EMS Operations

Scene hazards, hazmat, infection control, ambulance and air operations, ICS, legal duties and privacy, at EMT scope

SCENE SIZE-UP

PPE and safety, mechanism, patient count, resources (EMS Patient Assessment). Move the patient out of a hazard before care.

HAZARD	DO
Roadway	Hi-vis vest; engine blocks upstream; ambulance parks downstream
Downed line, live wire in water	Treat as live; stay out; occupant stays in the car; wait for power off
Gas odor	Leave with the patient; no switches or phones
Vehicle on its side	Stay off; talk until fire stabilizes it
Silent EV	Assume on: chock, park, power down; avoid orange cables
Two down in a pit, silo or tank	Stay out; confined-space team
Water	Reach, throw, row; go only if trained
Violence, crowd, dog	Stage for police; pets shut away; load and go if a crowd turns

SAFETY About 43% of confined-space deaths in a 1989 NIOSH review were would-be rescuers.

HAZMAT: AWARENESS LEVEL

- Upwind, uphill; read placards from afar; isolate, deny entry, call for help; no entry untrained
- ERG: yellow by ID number, blue by name, orange guides, green distances
- Green-highlighted entry is an inhalation hazard: not burning, green table; burning, orange guide distances
- No placard is not no hazard: most classes need none under 1,001 lb
- DANGEROUS placard or unidentified cargo: start with Guide 111; shipping papers in the cab
- NFPA 704: blue health, red fire, yellow instability; 4 is worst

Zones, PPE levels, decon: Mass Casualty Triage.

INFECTION CONTROL

PATIENT	CREW PROTECTION
Every patient	Standard; mask, eyes, gown for splash or suction
TB, measles, chickenpox, spread zoster	Airborne: fit-tested N95, patient masked; pox and zoster add gown, gloves
Influenza	Mask; N95, eyes, gown, gloves for suction, CPR or intubation
Meningococcal	Mask until 24 h of antibiotics
C. diff	Gown, gloves; soap and water; sporicidal cleaner
MRSA wound not held by a dressing, RSV in infants	Gown and gloves (contact)
Drug powder	Nitrile, respirator; skin: soap and water, no sanitizer

- Measles, chickenpox: immune crew member cares; measles: N95 even if immune
- Measles exposure, no evidence of immunity: off work from day 5 after first exposure to day 21 after last
- N95: fit test before use and yearly; seal check every time
- Doffing: gloves, goggles, gown, mask, hand hygiene

BLOODBORNE EXPOSURE AND CLEANING

1. Wash with soap and water; flush eyes or mouth with water
2. Report at once
3. Medical evaluation now: source and crew testing, PEP if indicated

- Do not recap; sharps container at point of use
- OSHA: free PPE; hepatitis B vaccine within 10 working days
- Cleaning: remove soil, then EPA-registered disinfectant

LIFTING AND MOVING

SITUATION	CHOICE
Immediate danger	Emergency drag, long axis
Stairs, alert patient, no spine concern	Stair chair
Rough ground	Basket stretcher
Very heavy patient	Request lift assist en route

Power lift: back straight, legs lift, load close, no twisting.

DRIVING THE AMBULANCE

- Lights and siren only if time saved could change outcome; they save little time and raise crash risk
- Due regard: exemptions never excuse unsafe driving
- Red light: stop or nearly stop; clear lane by lane
- No escorts; spotter to back; partner reads the screen
- All belted; child in a restraint on the cot, never a lap
- Floodwater: 12 inches carries away most cars

AIR MEDICAL

- Consider for a time-critical patient when ground exceeds 30 min, or major trauma with time saved
- Typical LZ: 100 x 100 ft, flat, no wires or debris; bystanders 200 ft back; follow your air service
- Never shine lights at the aircraft
- Approach on signal, from the front, never the tail; hats secured, long items low

INCIDENT COMMAND

- First unit: command, size-up report, resources
- Transfer: face-to-face briefing, then notify everyone
- Unified command: agencies sharing jurisdiction command jointly
- Plain language; one supervisor each. Triage, roles: Mass Casualty Triage

CRIME SCENES AND OBVIOUS DEATH

- Police secure it; then care comes first
- Disturb little; no weapons; cut around holes; tell police what moved
- Obvious death by protocol (e.g. decapitation, decomposition, medical arrest with lividity or rigor): no CPR; minimal contact

SAFETY Unsure? Start CPR; call medical direction.

CONSENT, REFUSAL AND LEGAL DUTIES

TERM	MEANING
Expressed	Capable adult agrees, risks explained
Implied	Unresponsive, or minor in an emergency with no guardian: treat
Refusal	Needs capacity; not if suicidal
Valid DNR or POLST (state rules vary)	No CPR or airway; comfort care continues
DNR with a pulse	Treat; a DNI bars only intubation
Abandonment	Leaving without handoff to equal or higher care
Negligence	Duty, breach, damages, proximate cause
Good Samaritan	Unpaid good-faith care; not gross negligence
Scope vs standard	What law allows vs what a prudent peer does

Refusal PCR: capacity, risks explained, patient's own words, who stays, may call back.

RECORDS, PRIVACY, RADIO AND MEDICAL DIRECTION

- HIPAA: full handoff to the treating team; media to the PIO
- Abuse reports, police: only what law and policy allow
- Online orders: repeat back; question doubtful ones. Offline: protocols
- Radio: plain language, no names; repeaters extend range

Sources (27) are listed with links at medicbasics.com/sheets/ems-operations.html. For education and exam preparation only. Not medical advice; follow current guidelines and your institution's protocols. Medic Basics is an independent study aid not affiliated with any certifying body.