

EMS Protocols are the written guidelines for EMS activities in the listed agencies areas. EMS PROTOCOLS are mandated by the State of Oregon Health Authority. These EMS PROTOCOLS shall apply to all EMS personnel in the departments named on the cover of these protocols. Emergency Medical Service Personnel (EMSP) include EMR, EMT, AEMT, Intermediate, Paramedic, and Clinicians. OAR [847-035-0030](#) shall define the scope of practice for each level of EMSP. All EMS activities are supervised by the Physician Advisor, a licensed physician whose EMS authority includes recommending certification/rectification of EMS personnel, training, and the development of written protocols that specify the scope and practice of all EMS personnel.

These protocols provide EMS providers of all levels a broad range of options in the management of patients at the scene. Written protocol cannot cover every situation that will be encountered in the field. In most cases, however, the protocols should be followed as written. However, in situations the protocols do not specifically address, or where there is a need for immediate intervention, e.g., patient in extremis, code situations, the EMT should not be encumbered by requirements for immediate approval by Medical Control or destination hospital physician. Clinical judgment should be used to tailor treatment to the patient and the particular circumstances of illness or injury. Patient care procedures for incidents not addressed in these protocols should be performed in accordance with currently accepted standards and within the EMS provider's training and level of certification. Appropriate documentation of any deviation in protocols is expected.


EMS personnel performance will be monitored retrospectively through the QA/QI process and patient evaluation. Accurate and complete documentation is required.

Question and comments about the QA/QI should be addressed to the EMS Director.

In order to ensure conformance with local guidelines for pre-hospital care the designated EMS Director will implement guidelines, review agency conformance to establish protocols, and develop changes in medical policies as needed.

Due to ongoing changes to EMS practices, the EMS Director or designee must review the current protocols biannually, no later than 24 months after the last review.

As Physician Advisor, I hereby declare that I have read, understand, and approve of these patient care guidelines.


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Scope of Practice & Medical Control

EMERGENCY MEDICAL RESPONDER (EMR) SCOPE OF PRACTICE

An Emergency Medical Responder may:

- (a) Conduct primary and secondary patient examinations;
- (b) Take and record vital signs;
- (c) Utilize noninvasive diagnostic devices in accordance with manufacturer's recommendation;
- (d) Open and maintain an airway by positioning the patient's head;
- (e) Provide external cardiopulmonary resuscitation and obstructed airway care for infants, children, and adults;
- (f) Provide care for musculoskeletal injuries;
- (g) Assist with prehospital childbirth;
- (h) Complete a clear and accurate prehospital emergency care report form on all patient contacts and provide a copy of that report to the senior emergency medical services provider with the transporting ambulance;
- (i) Administer medical oxygen;
- (j) Maintain an open airway through the use of:
 - (A) A nasopharyngeal airway device;
 - (B) A noncuffed oropharyngeal airway device;
 - (C) A pharyngeal suctioning device;
- (k) Operate a bag mask ventilation device with reservoir;
- (l) Provide care for suspected medical emergencies, including administering liquid oral glucose for hypoglycemia;
- (m) Prepare and administer aspirin by mouth for suspected myocardial infarction (MI) in patients with no known history of allergy to aspirin or recent gastrointestinal bleed;
- (n) Prepare and administer epinephrine by automatic injection device for anaphylaxis;
- (o) Prepare and administer naloxone via intranasal device or auto-injector for suspected opioid overdose; and

EMERGENCY MEDICAL RESPONDER (EMR) SCOPE OF PRACTICE (Continued)

(p) Perform cardiac defibrillation with an automatic or semi-automatic defibrillator, only when the Emergency Medical Responder:

(A) Has successfully completed an Authority-approved course of instruction in the use of the automatic or semi-automatic defibrillator; and

(B) Complies with the periodic requalification requirements for automatic or semi-automatic defibrillator as established by the Authority.

EMT SCOPE OF PRACTICE

An Emergency Medical Technician (EMT) may:

- (a) Perform all procedures that an Emergency Medical Responder may perform;
- (b) Ventilate with a non-invasive positive pressure delivery device;
- (c) Insert a cuffed pharyngeal airway device in the practice of airway maintenance. A cuffed pharyngeal airway device is:
 - (A) A single lumen airway device designed for blind insertion into the esophagus providing airway protection where the cuffed tube prevents gastric contents from entering the pharyngeal space; or
 - (B) A multi-lumen airway device designed to function either as the single lumen device when placed in the esophagus, or by insertion into the trachea where the distal cuff creates an endotracheal seal around the ventilatory tube preventing aspiration of gastric contents.
- (d) Perform tracheobronchial tube suctioning on the endotracheal intubated patient;
- (e) Provide care for suspected shock;
- (f) Provide care for suspected medical emergencies, including:
 - (A) Obtain a capillary blood specimen for blood glucose monitoring;
 - (B) Prepare and administer epinephrine by subcutaneous injection, intramuscular injection, or automatic injection device for anaphylaxis;
 - (C) Administer activated charcoal for poisonings; and
 - (D) Prepare and administer nebulized Albuterol sulfate treatments for known asthmatic and chronic obstructive pulmonary disease (COPD) patients suffering from suspected bronchospasm.
- (g) Perform cardiac defibrillation with an automatic or semi-automatic defibrillator;
- (h) Transport stable patients with saline locks, heparin locks, foley catheters, or in-dwelling vascular devices;
- (i) Assist the on-scene Advanced EMT, EMT-Intermediate, or Paramedic by:

EMT SCOPE OF PRACTICE (Continued)

- (A) Assembling and priming IV fluid administration sets; and
- (B) Opening, assembling and uncapping preloaded medication syringes and vials;
- (j) Perform other emergency tasks as requested if under the direct visual supervision of a physician and then only under the order of that physician;
- (k) Complete a clear and accurate prehospital emergency care report form on all patient contacts;
- (l) Assist a patient with administration of sublingual nitroglycerine tablets or spray and with metered dose inhalers that have been previously prescribed by that patient's personal physician and that are in the possession of the patient at the time the EMT is summoned to assist that patient;
- (m) In the event of a release of organophosphate agents, the EMT who has completed Authority-approved training may prepare and administer atropine sulfate and pralidoxime chloride by autoinjector, using protocols approved by the Authority and adopted by the supervising physician; and
- (n) In the event of a declared Mass Casualty Incident (MCI) as defined in the local Mass Casualty Incident plan, monitor patients who have isotonic intravenous fluids flowing.

ADVANCED EMT (AEMT) SCOPE OF PRACTICE

An Advanced Emergency Medical Technician (AEMT) may:

- (a) Perform all procedures that an EMT may perform;
- (b) Initiate and maintain peripheral intravenous (I.V.) lines;
- (c) Initiate saline or similar locks;
- (d) Obtain peripheral venous blood specimens;
- (e) Initiate and maintain an intraosseous infusion in the pediatric patient;
- (f) Perform tracheobronchial suctioning of an already intubated patient; and
- (g) Prepare and administer the following medications under specific written protocols authorized by the supervising physician or direct orders from a licensed physician:
 - (A) Physiologic isotonic crystalloid solution;
 - (B) Anaphylaxis: epinephrine;
 - (C) Antihypoglycemics:
 - (i) Hypertonic glucose;
 - (ii) Glucagon;
 - (D) Vasodilators: nitroglycerine;
 - (E) Nebulized bronchodilators:
 - (i) Albuterol;
 - (ii) Ipratropium bromide;
 - (F) Analgesics for acute pain: nitrous oxide.

EMT-INTERMEDIATE SCOPE OF PRACTICE

An EMT-Intermediate may:

- (a) Perform all procedures that an Advanced EMT may perform;
- (b) Initiate and maintain an intraosseous infusion;
- (c) Prepare and administer the following medications under specific written protocols authorized by the supervising physician, or direct orders from a licensed physician:
 - (A) Vasoconstrictors:
 - (i) Epinephrine;
 - (ii) Vasopressin;
 - (B) Antiarrhythmics:
 - (i) Atropine sulfate;
 - (ii) Lidocaine;
 - (iii) Amiodarone;
 - (C) Analgesics for acute pain:
 - (i) Morphine;
 - (ii) Nalbuphine Hydrochloride;
 - (iii) Ketorolac tromethamine;
 - (iv) Fentanyl;
 - (D) Antihistamine: Diphenhydramine;
 - (E) Diuretic: Furosemide;
 - (F) Intraosseous infusion anesthetic: Lidocaine;
 - (G) Anti-Emetic: Ondansetron;
- (d) Prepare and administer immunizations in the event of an outbreak or epidemic as declared by the Governor of the state of Oregon, the State Public Health Officer or a

EMT-INTERMEDIATE SCOPE OF PRACTICE (Continued)

county health officer, as part of an emergency immunization program, under the agency's supervising physician's standing order;

(e) Prepare and administer immunizations for seasonal and pandemic influenza vaccinations according to the CDC Advisory Committee on Immunization Practices (ACIP), and/or the Oregon State Public Health Officer's recommended immunization guidelines as directed by the agency's supervising physician's standing order;

(f) Distribute medications at the direction of the Oregon State Public Health Officer as a component of a mass distribution effort;

(g) Prepare and administer routine or emergency immunizations and tuberculosis skin testing, as part of an EMS Agency's occupational health program, to the EMT-Intermediate's EMS agency personnel, under the supervising physician's standing order;

(h) Insert an orogastric tube;

(i) Maintain during transport any intravenous medication infusions or other procedures which were initiated in a medical facility, if clear and understandable written and verbal instructions for such maintenance have been provided by the physician, nurse practitioner or physician assistant at the sending medical facility;

(j) Perform electrocardiographic rhythm interpretation; and

(k) Perform cardiac defibrillation with a manual defibrillator.

PARAMEDIC SCOPE OF PRACTICE

A Paramedic may:

- (a) Perform all procedures that an EMT-Intermediate may perform;
- (b) Initiate the following airway management techniques:
 - (A) Endotracheal intubation;
 - (B) Cricothyrotomy; and
 - (C) Transtracheal jet insufflation which may be used when no other mechanism is available for establishing an airway;
- (c) Initiate a nasogastric tube;
- (d) Provide advanced life support in the resuscitation of patients in cardiac arrest;
- (e) Perform emergency cardioversion in the compromised patient;
- (f) Attempt external transcutaneous pacing of bradycardia that is causing hemodynamic compromise;
- (g) Perform electrocardiographic interpretation;
- (h) Initiate needle thoracostomy for tension pneumothorax in a prehospital setting;
- (i) Obtain peripheral arterial blood specimens under specific written protocols authorized by the supervising physician;
- (j) Access indwelling catheters and implanted central IV ports for fluid and medication administration;
- (k) Initiate placement of a urinary catheter for trauma patients in a prehospital setting who have received diuretics and where the transport time is greater than thirty minutes; and
- (l) Prepare and initiate or administer any medications or blood products under specific written protocols authorized by the supervising physician, or direct orders from a licensed physician.

Advance Directives, DNR and POLST – 00.020

PURPOSE:

This EMS system believes in respect for patient autonomy. The patient with decision-making capacity has the right to accept or refuse medical intervention. This includes the right to specify, in advance, patient preferences when the person is no longer able to communicate wishes.

PROCEDURE:

The EMS system shall honor POLST forms, Advance Directives and other Do Not Resuscitate orders (DNAR) under the following circumstances:

- A. **Do Not Attempt Resuscitation:** In the pulseless and apneic patient who does not meet the criteria of the DEATH IN THE FIELD protocol, but is suspected to be a candidate for withholding resuscitation, BLS protocols will be followed until one of the following occurs:
 1. The EMS Provider sees a written DNAR order, which should be honored and resuscitation stopped.
 2. The patient's physician is contacted and directs EMS Provider to discontinue resuscitation.
 3. The EMS Provider sees a valid Advance Directive or Directive to Physician which directs them not to continue resuscitation.
 4. The patient's attorney-in-fact (PAHC or DPAHC) directs the EMS Provider not to resuscitate the patient.
 5. OLMC directs the EMS Provider not to continue resuscitation.
 6. If a person who is terminally ill appears to have ingested medication under the provisions of the Oregon Death with Dignity Act. (See Section F below)
- B. **Advance Directives:** DNAR (DNR) orders only apply if the patient is in cardiopulmonary arrest. If the patient's PAHC, DPAHC, or other Advance Directive is available to convey the patient's wishes, and the EMS Provider has seen a copy of the document, the EMS Provider must honor the treatment preferences as expressed.
- C. **Physician Orders for Life-Sustaining Treatment (POLST):** If a POLST form is available and it clearly expresses the patient's wishes and is signed by a physician, nurse practitioner or physician's assistant, EMS Providers shall honor the patient's treatment care preferences as documented in the EMS section of the POLST. [Cite: OAR 847-035-030 (7)] If an electronic registry is available and the POLST form is not immediately available, EMS Providers may also follow orders documented in the electronic POSLT registry.
- D. If there are questions regarding the validity or enforceability of the health care instruction, begin BLS treatment and contact OLMC.
- E. It is always appropriate to provide comfort measures as indicated.

- F. **Death with Dignity Act:** If a person who is terminally ill and appears to have ingested medication under the provisions of the Oregon Death with Dignity Act, the EMS Provider should:
1. Provide comfort care as indicated.
 2. Determine who called 9-1-1 and why (i.e. to control symptoms or because the person no longer wishes to end their life with medications).
 3. Establish the presence of DNAR orders and/or documentation that this was an action under the provisions of the Death with Dignity Act.
 4. Contact OLMC.
 5. Withhold resuscitation if:
 - a. DNAR orders are present, and
 - b. There is evidence that this is within the provisions of the Death with Dignity Act, and
 - c. OLMC agrees.

DEFINITIONS:

- A. **Do Not Attempt Resuscitation Order (DNAR):** An order written by a physician stating that in the event of cardiopulmonary arrest, cardiopulmonary resuscitation will not be administered. DNAR orders apply only if the patient is pulseless and apneic.
- B. **Health Care Instruction:** A document executed by a person to indicate the person's instructions regarding health care decisions.
- C. **Advance Directive:** A document that contains a health care instruction or a power of attorney for health care.
- D. **Living Will:** A document that may confirm an Advance Directive or Directive to Physician informing her/him that if the patient has a terminal illness and death is imminent, the patient would not wish to be placed on artificial life support that will only prolong the process of dying. In general, the traditional Living Will document alone is not helpful in the out-of-hospital setting because of its multiple restrictions and lack of clarity on when it should take effect.
- E. **Attorney in Fact:** An adult appointed to make health care decisions for a person.
- F. **Power of Attorney for Health Care (PAHC):** Power of attorney document that authorizes an attorney-in-fact to make health care decisions for a person when the person is incapable.
- G. **Physician Orders for Life-Sustaining Treatment (POLST):** The POLST is a voluntary form that was developed to document and communicate patient treatment preferences across treatment settings. It includes a section for documentation of DNAR orders and a section communicating patient preferences for EMS care. While these forms are most often used to limit care, they may also indicate that the patient wants everything medically appropriate done. **Read the form carefully!** When signed by a physician (MD or DO), nurse practitioner, or physician's assistant, the POLST is a medical order and the EMS Providers are directed to honor it in their Scope of Practice. If the POLST is not immediately available, a POLST form as documented in the **Electronic POLST registry (503-494-7333)** may also be honored.

PURPOSE:

The purpose of the Death in the Field Protocol is to define under what conditions medical care can be withheld or stopped once it has been started.

PROCEDURE:

Resuscitation efforts may be withheld if:

- A. The patient has a valid, signed "DNR" order. POLST registry # 888-476-5787
- B. The patient is pulseless and apneic in a mass casualty incident or multiple patient scene where the resources of the system are required for the stabilization of living patients.
- C. The patient is decapitated.
- D. The patient has rigor mortis in a warm environment.
- E. The patient is in the stages of decomposition.
- F. The patient has skin discoloration in dependent body parts (dependent lividity).

TRAUMATIC ARREST:

1. A victim of trauma (blunt or penetrating) who has no vital signs in the field may be declared dead on scene. If opening the airway does not restore vital signs/signs of life, the patient should NOT be transported unless there are extenuating circumstances.
2. A cardiac monitor may be beneficial in determining death in the field when you suspect a medical cause or hypovolemia: A narrow complex rhythm (QRS < .12) may suggest profound hypovolemia, and may respond to fluid resuscitation.
3. At a trauma scene, the paramedic should consider the circumstances surrounding the incident, including the possibility that a medical event (cardiac arrhythmia, seizure, and hypoglycemia) preceded the accident. When a medical event is suspected, treat as a medical cardiac event. VF should raise your index of suspicion for a medical event.
4. In instances prior to transport where the patient deteriorates to the point that no vital signs (i.e. pulse/respiration) are present, a cardiac monitor should be applied to determine if the patient has a viable cardiac rhythm. A viable rhythm especially in patients with penetrating trauma may reflect hypovolemia or obstructive shock (tamponade, tension pneumothorax) and aggressive care should be continued.

MEDICAL CARDIAC ARREST:

In addition to the conditions listed above under Death in the Field, a medical patient should generally be declared dead if:

- I. ECG shows asystole or agonal rhythm upon initial monitoring, and after at least two lead changes, the patient, in the paramedic's best judgment, would not benefit from resuscitation:
 - a. The PIC should determine DIF and notify Law Enforcement;
 - OR -
 - b. Begin BLS procedures, and contact OLMC with available patient history, current condition, and with a request to discontinue resuscitation.

2. If after the airway is established and the asystole protocol has been exhausted the patient persists in asystole, (confirm in 3 leads) consider termination of efforts. The PIC may declare the patient to be dead in the field.
3. The patient who has PEA/Asystole and has not responded to the initial cycle of ACLS may be determined to be dead at the scene after appropriate consultation with OLMC.
4. All patients in VF/VT should be treated for at least 40 minutes prior to transport or termination of efforts. Termination of efforts for VF/VT requires OLMC unless a valid, signed DNR is present.

NOTES & PRECAUTIONS:

1. ORS allows a layperson, EMT or Paramedic to determine “Death in the Field”
2. The EMT is encouraged to consult OLMC if any doubt exists about the resuscitation potential of the patient.
3. A person who was pulseless or apneic and has received CPR and has been resuscitated, is not precluded from later being a candidate for solid organ donation.
4. ETCO₂ may be a useful adjunct in the decision to terminate resuscitation with Asystole/PEA. An ETCO₂ of 10 or less in patients in Asystole/PEA after 20 minutes of ACLS resuscitation does not correlate with survival.
5. Survival from trauma arrest is low, but not completely zero.
6. If person has been identified as an organ donor, contact OLMC as soon as possible.

Procedure

Assess the patient in each category (eye opening, best verbal response, best motor response) and add the scores from each category. Example: if the patient's BEST verbal response is a string of muffled, incomprehensible words give them a 2 for that category. The patient's Glasgow Coma Scale will be the total of all three categories. A Glasgow Coma Scale of 7 indicates Coma.

Reassess the patient's score frequently, record each observation and the time it was made.

ADULT and CHILD		Score
Eye Opening	Spontaneously	4
	To Speech	3
	To Pain	2
	None	1
Best Verbal Response	Oriented	5
	Confused	4
	Inappropriate	3
	Incomprehensible	2
	None	1
Motor Responses	Obeys Commands	6
	Localizes Pain	5
	Withdraws From Pain	4
	Flexion to Pain	3
	Extension to Pain	2
	None	1
Maximum Score		15
INFANT and TODDLER		Score
Eye Opening	Spontaneously	4
	To Speech	3
	To Pain	2
	None	1
Verbal Response	Smiles, Interacts	5
	Consolable	4
	Cries to Pain	3
	Moans to Pain	2
	None	1
Motor Response	Normal Movement	6
	Localizes Pain	5
	Withdraws from Pain	4
	Flexion	3
	Extension	2
	None	1
Maximum Score		15

Medical Control for Drugs & Procedures – 00.050

The following drugs and procedures are considered **CATEGORY A**, and will be used at the EMS Provider's discretion in accordance with these EMS Treatment Protocols.

Drugs – Category A:

- Acetaminophen
- Adenosine
- Albuterol
- Albuterol & Atrovent (DuoNeb)
- Amiodarone
- Ammonia Inhalant
- Aspirin
- Atropine Sulfate
- Calcium Chloride/Gluconate (cardiac arrest & hyperkalemia)
- Dextrose 50%, 25%, D10%
- Dexamethasone
- Diazepam
- Diphenhydramine
- Diltiazem
- Epinephrine
- Etomidate
- Fentanyl
- Glucagon
- Glucose, Oral
- Haloperidol
- Hydromorphone
- IV solutions
- Ketamine Hydrochloride
- Ketorolac
- Levophed
- Lidocaine
- Lorazepam
- Magnesium Sulfate (cardiac arrest)
- Metoprolol
- Midazolam
- Morphine
- Naloxone
- Nitroglycerin
- Ondansetron
- Oxygen
- Phenergan
- Rocuronium
- Sodium Bicarbonate
- Succinylcholine
- Thiamine

Medical Control for Drugs & Procedures – 00.050

- Tranexamic Acid
- Vasopressin
- Vecuronium
- Verapamil

Procedures – Category A

- Chemical Patient Restraint
- Continuous Positive Airway Pressure (CPAP)
- Defibrillation manual and AED
- Emergency cricothyrotomy
 - Needle cricothyrotomy
 - Per-Trach
 - Quick-Trach (type device)
 - Surgical cricothyrotomy
- End-Tidal CO2 Monitoring
- Endotracheal Intubation
- Endotracheal intubation with paralytics
- Intraosseous access & infusion
- Intravenous access & infusion
- Extraglottic Airway Device
- Left Ventricular Assist Device
- Oral gastric tube insertion
- Physical Patient Restraint
- PICC line access
- Pelvic immobilization with sling/wrap
- Sports equipment removal
- Suctioning
- Synchronous cardioversion
- Taser Barb Removal
- Tension Pneumothorax Decompression
- Transcutaneous Pacing

The following drugs and procedures are considered **CATEGORY B** and require On-line Medical Control authorization. Confirmation of dosage or procedure will be obtained directly from a Physician on duty at OLMC.

Drugs – Category B:

- Albuterol (Hyperkalemia)
- Calcium Chloride/Gluconate (calcium channel blocker overdose)
- Glucagon (beta blocker OD)
- Magnesium Sulfate (Seizure and asthma)
- Nitroglycerin (HTN crisis)
- Sodium Bicarb (Hyperkalemia)

Procedures – Category B:

- Automatic Implantable Cardio-Defibrillator (AICD) deactivation

TREATMENT:

- A. Assess scene safety and use appropriate personal protective equipment.
- B. Begin initial patient assessment, determine chief complaint and obtain GCS.
- C. Secure airway and start oxygen as needed per General Airway Management protocol.
- D. Monitor vital signs and SpO₂.
- E. Monitor ECG, 12 lead, ETCO₂ and CBG readings as appropriate.
- F. Establish vascular access (IV or IO) as appropriate for patient's condition.
- G. Obtain pain severity scale if applicable.
- H. Follow appropriate Patient Care Treatment Protocol if patient's chief complaint or assessment findings change.

KEY CONSIDERATIONS:

If patient is unable to provide medical history, check for medical bracelets and necklaces which can provide critical medical information and treatment.