

**OSDH-EMS**

# **EMERGENCY MEDICAL Technician**

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## **Guidelines for Teaching EMT Courses in accordance with the National Education Standards 2021**

Approved: Oklahoma OTERAC Education and Training Committee\_\_\_\_\_2022

Approved: Oklahoma Trauma Emergency Response Advisory Council....\_\_\_\_\_2022

INTRODUCTION:

Oklahoma is committed to the implementation of the EMS Education Agenda for the Future:

#### HISTORY:

The *EMS Education for the Future: A Systems Approach* establishes a system of EMS education that more closely parallels that of other health care professions. Oklahoma has opted to follow the *Scope of Practice Model*, as published by the National Highway Traffic Safety Administration's (NHTSA) Office of Emergency Medical Services. Therefore, we have adopted the *National EMS Education Standards 2021* which have been published by NHTSA in conjunction with the above.

#### LINKS

|                                       |  |
|---------------------------------------|--|
| EMS Education Agenda for the Future   | <a href="https://www.ems.gov/">Education Agenda for the Future (ems.gov)</a> |
| National EMS Scope of Practice 2019   | <a href="#">National EMS Scope of Practice Model 2019.pdf</a>                |
| National EMS Education Standards 2021 | <a href="#">EMS Education Standards 2021_FNL.pdf</a>                         |

#### CONTACT

If you have any questions, please feel free to contact the EMS Division at (405) 426- 8480 or by email at [esystems@health.ok.gov](mailto:esystems@health.ok.gov).

**NOTE - The Guidelines in this document are required unless otherwise noted**

### **EMERGENCY MEDICAL TECHNICIAN EDUCATION GUIDELINES**

#### Emergency Medical Technician

The primary focus of the Emergency Medical Technician is to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. Emergency Medical Technicians function as part of a comprehensive EMS response, **under medical oversight**. Emergency Medical Technicians perform basic interventions with minimal equipment.

#### **LEGEND**

The first letter refers to Breadth, which can be:

- Simple (S)
- Foundational (F)
- Comprehensive (C)

The second letter refers to Depth, which can be:

- Simple (S)
- Fundamental (F)
- Complex (C)

## **Preparatory**

**Applies knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.**

### EMS Systems:

- EMS systems (S, F)
- Roles, responsibilities and professionalism of EMS personnel (F, F)
- Quality improvement vs. quality assurance (S, F)
- Role of medical oversight (S, S)
- Culture of safety / patient safety (S, F)
- Continuum of care (S, F)
- History of EMS (S, F)
- Systems of care, e.g., Stroke, STEMI, Trauma, Pediatrics (S, F)
- MIH/CP and other EMS-related specialty roles (S, S)

### *Workforce Safety and Wellness*

- Standard safety precautions (F, F)
- Personal protective equipment (F, F)
- Lifting and moving patients (F, F)
- Crew resource management (F, F)
- Stress management (F, F)
- Prevention of work-related injuries and illnesses (F, F)
- Responder mental health, resilience and suicide prevention (F, F)
- Wellness principles (F, F)
- Disease transmission (F, F)

### *Research*

- Impact of research on EMT care (S, S)
- Data collection (S, S)
- Evidence-based decision making (S, S)

### *Documentation*

- Recording patient findings (S, S)
- Principles of medical documentation and report writing (F, F)
- Supporting medical necessity (S, S)

### *EMS System Communication*

- EMS communication system (S, S)
- Communication with other health care professionals to include cohesive and organized patient handoff (S, S)
- Team communication and dynamics (S, S)
- Telemetric monitoring devices and transmission of clinical data, including video data (S, S)

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### *Therapeutic Communication*

- Health care literacy (S, S)
- Interviewing techniques (F, F)
- Verbal defusing strategies (F, F)
- Managing communication challenges (F, F)
- Family centered care (F, F)
- Adjusting communication strategies for age, stage of development, patients with special needs (S, S)
- Non-discriminatory communication that addresses inherent or unconscious bias, is culturally aware and sensitive, and intended to improve patient outcome (S, S)

### *Medical/Legal and Ethics*

- Consent/involuntary consent/ refusal of care (F,F) •
- Confidentiality (F, F)
- Advanced directives (F, F)
- Tort and criminal actions (F, F)
- Evidence preservation (F, F)
- Statutory responsibilities (F, F)
- Mandatory reporting (F, F) •
- Ethical principles/moral obligations (F, F)
- End-of-life issues (S, S)
- Patient rights/advocacy (S, S)

## **Anatomy and Physiology**

**Applies knowledge of the anatomy and function of all human systems to the practice of EMS.**

## **Medical Terminology**

**Uses anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.**

## **Pathophysiology**

**Applies knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.**

## **Life Span Development**

**Applies knowledge of life span development to patient assessment and management.**

## **Public Health**

**Applies knowledge of the principles of public health epidemiology including public health emergencies, public health monitoring, health promotion and illness and injury prevention.**

### *Public Health Overview*

- EMS roles in public health (S, S)
- Infection prevention and control (S, S)
- Human trafficking (S,S) •
- EMS EHR reporting and data collection (S, S)
- Governmental/ nongovernmental roles & resources (S, S)
- Public health mission and goals (S, S)
- Social, geographic, economic, demographic determinants of health (S, S)
- Patient and community education (S, S)
- Injury prevention and wellness (S, S)
- Unique pediatric, geriatric and special populations public health concerns (S, S)
- Screenings and vaccinations/ immunizations (S, S)

## **Pharmacology**

**Applies knowledge of the medications the EMT may administer to a patient during an emergency and chronic or maintenance medications the patient may be taking.**

### *Principles of Pharmacology*

- Medication safety (F, F)
- Medication legislation (F, F)
- Naming (F, F)
- Classifications (F, F)
- Storage and security (F, F)
- Medication interactions (S, S)
- Adverse drug reactions (S, S)
- Metabolism and excretion (F, F)
- Mechanism of action (F, F)
- Medication response relationships (F, F)

### *Medication Administration*

- Use a Medication Cross Check procedure (F, F)
- Use an autoinjector (S, S)
- Use a unit-dose, premeasured intranasal device (S, S)
- Administer medications to a patient (F, F)
- Provide pain management, including ethical and safety considerations (F, F)
- Routes of administration (S, S)

### *Acute Medications*

- Names (F, S)
- Effects (S, S)
- Indications (F, S)
- Contraindications (F, S)
- Side effects (F, S)
- Routes of administration (F, S)

- Dosages (F, S)
- Actions (F, S)
- Complications (F, S)
- Interactions (F, S)

#### *Chronic or Maintenance Medications*

Specific medication classes to be determined locally (Epinephrine 1:1,000)

- Class names (S, S)
- Class indications (S, S)
- Class complications (S, S)
- Class side effects (S, S)
- Polypharmacy (S, S)

#### *Oklahoma Scope of Practice*

- IV maintenance without medications

## **Airway Management, Respiration and Artificial Ventilation**

**Applies knowledge of anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation and respiration for patients of all ages.**

**Include age related variations in pediatric and geriatric patients**

#### *Airway Management*

- Airway anatomy (F, F)
- Airway assessment (F, F)
- Techniques of assuring a patent airway (F, F)

#### *Respiration*

- Anatomy of the respiratory system (F, F)
- Physiology and pathophysiology of respiration (F, C)
  - Pulmonary ventilation
  - Oxygenation
  - Respiration
    - External
    - Internal
    - Cellular
- Assessment and management of adequate and inadequate respiration (F, C)
- Supplemental oxygen therapy (F, C)

#### *Ventilation*

- Assessment and management of adequate and inadequate ventilation (F, F)
- Effect of ventilation on cardiac output (F, F)

#### *Oklahoma scope of practice*

- Supraglottic airway
- End tidal CO<sub>2</sub> monitoring

## Assessment

**Applies scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history and reassessment) to guide emergency management.**

**Include age related variations in pediatric and geriatric patients**

### *Scene Assessment*

- Scene safety/situational awareness (C, C)
- Scene management (F, F)
- Impact of the environment on patient care (F, F)
- Addressing hazards (F, F)
- Violence (F, F)
- Need for additional or specialized resources (F, F)
- Standard precautions (F, F)
- Multiple patient situations (F, F)

### *Primary Assessment*

- Primary assessment (F, S)
- Integration of treatment/ procedures needed to preserve life (F, S)

### *History Taking*

- Investigation of the chief complaint (F, F)
- Mechanism of injury/nature of illness (F, F)
- Associated signs and symptoms (F, F)
- Past medical history (F, F)
- Pertinent negatives (F, F)

### *Secondary Assessment*

- Assessment of vital signs (F, F)
- Assessment of pain (F, F)
- Techniques of physical examination (F, F)
  - Respiratory system including breath sound quality
  - Cardiovascular system
  - Neurological system
  - Musculoskeletal system
  - Major anatomical regions

### *Monitoring Devices*

- Pulse oximetry (S, S)
- Non-invasive blood pressure (S, S)
- Cardiac monitoring

- 12 lead ECG acquisition and transmission (S, S)
- Blood glucose determination (S, S)
- Oklahoma scope of practice*
- **Capnography (S, F)**
- **Mechanical CPR device (S, F)**
- **12 Lead EKG application and telemetric monitoring devices (S, S)**
- **Glucose Testing (S, F)**

#### *Reassessment*

- How and when to reassess patients (F, F)

## **Medicine**

**Applies knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.**

**Include age related variations in pediatric and geriatric patients**

#### *Medical Overview*

**Include psychosocial aspects of age-related assessment and treatment modifications for the major or common diseases and/ or emergencies associated with pediatric and geriatric medical patients**

- Pathophysiology, assessment, and management of a medical complaints to include (S, F)
  - Transport mode
  - Destination decisions

#### *Abdominal and Gastrointestinal Disorders*

- Acute and chronic gastrointestinal hemorrhage (F, F)
- Other gastrointestinal disorders to be determined locally (S, S)

#### *Cardiovascular*

- Acute coronary syndrome (F, F)
- Hypertensive emergencies (S, S)
- Aortic aneurysm/dissection (F, F)
- Thromboembolism (F, F)
- Heart failure (F, F)
- Other cardiovascular disorders to be determined locally (S, S)

#### *Disorders of the Eyes, Ears, Nose, and Throat*

- Epistaxis (S, S)
- Other eye, ear, nose and throat disorders to be determined locally (S, S)

#### *Endocrine Disorders*

- Diabetic emergencies (F, F)
- Other endocrine disorders to be determined locally (S, S)



### *Genitourinary/Renal*

- Complications related to renal dialysis (S, S)
- Complications related to urinary catheter management (not insertion) (S, S)
- Kidney stones (S, S)
- Sexual assault (Female and Male) (F, F)
- Other GI/Renal to be determined locally (S, S)

### *Hematology*

- Sickle cell crisis (S, S)
- Clotting disorders (S, S)
- Other hematologic disorders to be determined locally (S, S)

### *Immunology*

- Allergic and anaphylactic reactions (F, F)
- Other immunological disorders to be determined locally (S, S)

### *Infectious Diseases*

- Assessment and management of a patient who may have an infectious disease (S, S)
- How to decontaminate the ambulance and equipment after treating a patient (S, S)
- Sepsis and septic shock (S, S)
- Other infectious diseases to be determined locally (S, S)

### *Neurology*

- Decreased level of responsiveness (S, S)
- Seizure (F, F)
- Stroke (F, F)
- Dementia vs. delirium (S, S)
- Alzheimer's disease (S, S)
- Headache (F, F)
- Brief Resolved Unexplained Event (BRUE) (F, F)
- Other neurological disorders to be determined locally (S, S)

### *Non-Traumatic Musculoskeletal Disorders*

- Non-traumatic fractures (F, F)
- Other non-traumatic musculoskeletal disorders to be determined locally (S, S)

### *Psychiatric or Behavioral Emergencies*

- Basic principles of the mental health system (S, S)
- Patterns of violence, abuse and neglect (S, S)
- Acute psychosis (F, F)
- Suicide ideation (F, F)
- Excited delirium (F, F)

- Anxiety (F, F)
- Depression (F, F)
- Medical fear (F, F)
- Substance use disorder (F, F)
- PTSD (F, F)
- Other psychiatric/behavioral disorders to be determined locally (S, S)

#### *Respiratory*

- Respiratory distress/failure/ arrest (F, F)
- Upper airway obstruction (F, F)
- Lower airway disease: Asthma, bronchiolitis, pneumonia, chronic obstructive pulmonary disease (COPD) (F, F)
- Spontaneous pneumothorax (F, F)
- Pulmonary edema (F, F)
- Other respiratory disorders to be determined locally (S, S)

#### *Toxicology*

- Carbon monoxide poisoning (S, S)
- Nerve agent poisoning (S, S)
- Opioid toxicity (S, S)
- How and when to contact a poison control center (S, S)
- Poisons (inhaled, ingested, injected, absorbed) (F, F)
- Alcohol intoxication and withdrawal (F, F)
- Other toxicological disorders to be determined locally (S, S)

## **Shock and Resuscitation**

**Applies knowledge of the causes, pathophysiology and management of shock, respiratory failure or arrest, cardiac failure or arrest, termination of resuscitative efforts and post resuscitation management.**

#### *Shock*

- Essential components in normal perfusion (F, S)
- Physiologic response (S, S)
- Types of shock (S, S)
- Treatment of shock (S, S)

#### *Resuscitation from Cardiac Arrest*

- Ethical issues in resuscitation (C, C)
- CPR physiology (F, F)
- Resuscitation system components (F, F)
- Special arrest and peri-arrest situations (F, F)
- Post resuscitation support (F, F)

- Termination of resuscitation (F, F)

## Trauma

Applies knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.

**Include psychosocial aspects of age-related assessment and treatment modifications for the major or common diseases and/or emergencies associated with pediatric and geriatric trauma patients.**

### *Trauma Overview*

- Trauma scoring (F, F)
- Transport and destination issues (F, F)
- Transport mode (F, F)

### *Abdominal and Genitourinary Trauma*

- Blunt versus penetrating mechanisms (F, S)
- Evisceration (S, S)
- Impaled object (S, S)
- Solid and hollow organ injuries (F, S)
- Injuries to the internal or external genitalia (F, S)

### *Bleeding*

- Bleeding (F, F)

### *Chest Trauma*

- Blunt versus penetrating mechanisms (F, S)
- Open chest wound (S, S)
- Impaled object (S, S)
- Hemothorax (F, S)
- Pneumothorax (F, S)
- Cardiac tamponade (F, S)
- Rib fractures (F, S)
- Flail chest (F, S)
- Commotio cordis (F, S)

### *Environmental Emergencies*

- Drowning (F, F)
- Temperature-related illness (F, F)
- Bites and envenomation's (F, F)
- Lightning injury (F, F)
- Other environmental emergencies to be determined locally (S, S)

### *Head, Facial, Neck, and Spine Trauma*

- Life threats (S, S)
- Spine trauma (F, F)
- Penetrating neck trauma (F, F)
- Laryngotracheal injuries (F, F)
- Shaken Baby Syndrome (F, F)
- Facial fractures (S, S)
- Skull fractures (S, S)
- Foreign bodies in the eyes (S, S)
- Globe rupture (S, S)
- Dental trauma (S, S)
- Severe epistaxis (S, S)

### *Multi-System Trauma*

- Multi-system trauma (F, F)
- Blast injuries (F, F)

### *Nervous System*

- Traumatic brain injury (F, F)
- Spinal cord injury (F, F)

### *Orthopedic Trauma*

- Open fractures (F, F)
- Closed fractures (F, F)
- Dislocations (F, F)
- Amputations/replantation (F, F)
- Upper and lower extremity orthopedic trauma (F, F)
- Sprains/strains (F, F)
- Pelvic fractures (F, F)

### *Soft Tissue Trauma*

- Wounds (avulsion, bite, laceration, puncture, incision) (F, F)
- Burns (electrical, chemical, thermal, radiation) including inhalation injury (F, F)
- Chemicals in the eye and on the skin (S, S)
- Crush/compartment syndrome (S, S)
- High-pressure injection injury (S, S)

### *Special Considerations in Trauma*

- Pregnant patient (F, F)
- Pediatric patient (F, F)
- Geriatric patient (F, F)
- Cognitively impaired patient (F, F)

## **Special Patient Populations**

**Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response.**

**Include psychosocial aspects of age-related assessment and treatment modifications for the major or common diseases and/or emergencies associated with pediatric and geriatric patients.**

### *Gynecology*

- Vaginal bleeding (F, F)
- Infections (S, S)
- Other gynecological disorders to be determined locally (S, S)

### *Obstetrics*

- Normal delivery (F, F)
- Vaginal bleeding in the pregnant patient (S, S)
- Normal pregnancy (anatomy and physiology) (F, F)
- Pathophysiology of complications of pregnancy (F, F)
- Assessment of the pregnant patient (F, F)
- Abnormal delivery (nuchal cord, prolapsed cord, breech, shoulder dystocia, prematurity, multiparity) (F, F)
- Third trimester and antepartum bleeding (placenta previa, placental abruption) (F, F)
- Spontaneous abortion/ miscarriage (F, F)
- Ectopic pregnancy (F, F)
- Preeclampsia/eclampsia (F, F)
- Postpartum complications (S, S)

### *Neonatal care*

- Newborn stabilization (F, F)
- Neonatal resuscitation (F, F)

## **Pediatrics**

**The Education Standards now integrate assessment, diagnostic, treatment and disposition modifications for pediatric-specific diseases and emergencies into each section of the document.**

## **Geriatric**

**The Education Standards now integrate assessment, diagnostic, treatment and disposition modifications for geriatric-specific diseases and emergencies into each section of the document**

### *Patients with Special Challenges*

- Recognizing and reporting abuse and neglect (S, S)
- Abuse/Intimate partner violence (S, S)

- Neglect (S, S)
- Child/dependent adult maltreatment (S, S)
- Homelessness (S, S)
- Poverty (S, S)
- Bariatrics (S, S)
- Technology dependent (locally determined) (S, S)
- Hospice/ terminally ill (S, S)
- Tracheostomy care/dysfunction (S, S)
- Homecare (S, S)
- Sensory deficit/loss (S, S)
- Developmental disability (S, S)
- Autism Spectrum Disorder (S, S)
- Orthotics/prosthetics (S, S)

## EMS Operations

**Knowledge of operational roles and responsibilities to ensure patient, public and personnel safety**

### *Emergency Response Vehicles*

- Risks and responsibilities of emergency response and radio communications (S,S)
- Risks and responsibilities of operating emergency vehicles (S,S)
- Pediatric transport considerations (F,F)
- Risks and responsibilities of transport (F,F)
- **Introduction to operation Emergency Vehicles Recommended** -
- **TIMS link to NHTSA Recommended**

*Incident Management* The extent of information presented in this area will vary at the regional and local level.)

- Establish and work within the incident management system (F, F)
- Understand the principles of Crew Resource Management (F, F)
- *The extent of information presented in this area will vary at the regional and local level.*

### *Multiple Casualty Incidents*

- Operational goals (F, F)
- Field triage (F, F)
- Destination determination (F, F)
- Treatment principles (F, F)
- *The extent of information presented in this area will vary at the regional and local level.*

### *Air Medical*

- Safe air medical operations (S, S)

- Criteria for utilizing air medical response (S, S)
- Medical risks/needs/advantages (F, F)

*The extent of information presented in this area will vary at the regional and local level.*

#### *Rescue Operations*

- Safety principles of rescue operations (S, S)

*The extent of information presented in this area will vary at the regional and local level.*

#### *Hazardous Materials Awareness*

- Risks and responsibilities of operating on the scene of a hazardous materials incident (S, S)
- Hazmat links to [FEMA 5.a General Link](#) **Recommended**

*The extent of information presented in this area will vary at the regional and local level.*

#### *Mass Casualty Incidents due to Terrorism and Disaster*

- Risks and responsibilities of operating on the scene of a natural or man-made disaster (F, F)
- NIMS 100, 200, 700, General Link **Recommended**

*The extent of information presented in this area will vary at the regional and local level.*

## **Clinical Assessment**

Perform a simple assessment to identify life threats, identify injuries requiring spinal motion restriction and conditions requiring treatment within the scope of practice of the EMR

## **Therapeutic Communication and Cultural Humility**

Effectively communicates in a non-discriminatory manner that addresses inherent or unconscious bias, is culturally aware and sensitive, and intended to improve patient outcome.

## **Psychomotor Skills**

See Oklahoma EMT competencies.

## **Professionalism**

Demonstrate professional affective domain behaviors including but not limited to:

- Integrity
- Empathy/compassion
- Self-motivation
- Appearance/personal hygiene
- Self-confidence
- Communications
- Time management
- Teamwork/diplomacy
- Respect
- Patient advocacy

- Careful delivery of service
- Lifelong learning

## **Decision Making**

- Initiates interventions based on assessment findings intended to provide symptom relief (within the provider's scope of practice) while providing access to definitive care
- Evaluates the effectiveness of interventions and modifies treatment plan accordingly.

## **Record Keeping**

Report and document assessment findings, interventions performed, and clinical decision making.

## **Team Dynamics**

The entry-level clinician serves as a team member, while gaining the experience necessary to function as the team leader.

## **Safety**

Ensure the safety of the rescuer, other public safety personnel, civilians and the patient.

## **Educational Facilities**

- OSDH-EMS Approved Facilities sponsored or approved by sponsoring agency
- Sponsoring agency commitment to diversity, equity and inclusion
- ADA compliant facility
- Sufficient space for class size
- Controlled environment

## **Student Space**

- Provide space sufficient for students to attend classroom sessions, take notes, and participate in classroom activities
- Provide space for students to participate in kinematic learning and practice activities

## **Instructional Resources**

- Provide basic instructional support material
  - Provide audio, visual, and kinematic aids to support and supplement didactic instruction
- Provide syllabi and lesson plans  
See Recommended equipment list page

## **Instructor Preparation Resources**

- Provide space for instructor preparation
- Provide support equipment for instructor preparation



## **Storage Space**

- Provide adequate and secure storage space for instructional materials

## **Sponsorship**

Sponsoring organizations shall be one of the following:

- Accredited educational institution
- Public safety organization
- Accredited hospital, clinic or medical center, or
- Other states approved institutions, first response agency or organization

## **Programmatic Approval**

- Sponsoring organizations shall have programmatic approval by authority having jurisdiction for program approval (state)
- Approved OSDH agency or training programs add link
- Enter Oklahoma regulations links or references

## **Faculty**

Course primary instructors should:

- Be educated at a level higher than they are teaching; however, as a minimum, they must be educated at the level they are teaching
- OSDH Approved EMS Instructors

## **Medical Director Oversight**

- Provide medical oversight for all medical aspects of instruction
- 

## **Hospital/Clinical Experience**

- The student must demonstrate the ability to perform an adequate assessment and implement an adequate treatment plan.
  - These can be performed in an emergency department, ambulance, clinic, nursing home, doctor's office, on a standardized patient or in an alternative clinical environment when clinical access is not available.
  -

## **Field Experience**

- The student should participate in and document patient contacts in a field experience in an ambulance, mobile health care experience, or simulated environment when ambulance experience is not available as approved by the medical director and program director. This may occur in an ambulance, ambulance experience, or simulated environment when ambulance experiences are not available.

## **Course Length**

- Instructors may use a variety of formats to deliver content including but not limited to: -
  - Independent student preparation

- Synchronous or asynchronous instruction
- Face-to-face instruction
- Pre- or co-requisites

### **Course length should be based on competency, not hours**

- Consensus opinion is that students should need a minimum of 150 clock hours including the four integrated phases of education (didactic, laboratory, clinical and field) to cover the material

Consensus opinion is that students should need a minimum of 120 didactic and laboratory clock hours to cover the material.

### **Course Design**

- Provide the following components of instruction:
  - Didactic instruction
  - Skills laboratories
  - Hospital/clinical experience
  - Field experience

### **Student Assessment**

- Perform knowledge, skill and professional behavior evaluation based on educational standards and program objectives
- Provide several methods of assessing achievement
- Provide assessment that measures, as a minimum, entry-level competency in all domains
- Provide a comprehensive summative cognitive exam, (minimum of 100 questions)
- Provide a comprehensive summative psychomotor exam

### **Program Evaluation**

- Provide evaluation of program instructional effectiveness
- Provide evaluation of organizational and administrative effectiveness of program (QA - QI)

### **Course Approval**

- Regulation language here
- <https://oklahoma.gov/content/dam/ok/en/health/health2/documents/canrequest.pdf>

### **Course Roster**

- Regulation language here
- <https://oklahoma.gov/content/dam/ok/en/health/health2/documents/initial.pdf>

### **State EMS Regulations**

- **If any potential conflicts refer to regulation. Nothing in this document shall superced regulation. [Link to website](#)**
- <https://oklahoma.gov/health/services/licensing-inspections/emergency-systems/ems-division.html>



| EMERGENCY MEDICAL TECHNICIAN<br>MINIMUM HOUR REQUIREMENTS |              |   |
|---|--------------|---|
| <i>Topic</i>  | <i>Hours</i> | <i>Comments</i>                         |
| <b>Preparatory</b>  |              |   |
| EMS Systems   | 1            |   |
| Workforce Safety and Wellness                             | 1            | Hand washing                            |
| Research  | 4            |   |
| Documentation   | 2            |   |
| EMS Systems   | 1            |   |
| Therapeutic Communications                                | 1            |   |
| Medical/Legal and Ethics                                  | 2            |   |
| Anatomy and Physiology                                    | 10           |   |
| Medical Terminology                                       | 2            |   |
| Pathophysiology   | 6            |   |
| Life Span Development                                     | 2            |   |
| Pediatric and Geriatric                                   | 1            |   |
| <b>TOTAL</b>  | <b>33</b>    |   |
| <b>Public Health</b>                                      |              |   |
| Public Health Overview                                    | 0.5          |   |
| <b>TOTAL</b>  | <b>0.5</b>   |   |
| <b>Pharmacology</b>                                       |              |   |
| Principles of Pharmacology                                | 1            |   |
| Medication Administration                                 | 1.5          | See Oklahoma protocols                  |
| Acute Medications   | 1            |   |
| Chronic or Maintenance Medications                        | 0.5          |   |
| Pediatric and Geriatric                                   | 1            |   |
| <b>TOTAL</b>  | <b>5</b>     |   |
| <b>Airway Management, Respiration and Ventilation</b>     |              |   |
| Airway Management   | 2            |   |
| Respiration   | 12           |   |
| Ventilation   | 2            |   |
| Pediatric and Geriatric                                   | 4            | Includes pediatric and geriatric skills |
| <b>TOTAL</b>  | <b>20</b>    |   |
| <b>Patient Assessment</b>                                 |              |   |
| Scene Assessment  | 2            |   |
| Primary Assessment  | 6            |   |
| History Taking  | 2            |   |
| Secondary Assessment                                      | 4            |   |
| Monitoring Devices  | 4            |   |
| Reassessment  | 2            |   |
| Pediatric and Geriatric                                   | 2            | Includes pediatric and geriatric skills |
| <b>TOTAL</b>  | <b>22</b>    |   |
| <b>Medicine</b>   |              |   |
| Medical Overview  | 1            |   |
| Abdominal and Gastrointestinal Disorders                  | 2            |   |

|   |             |   |
|---|-------------|---|
| Cardiovascular                                    | 8           |   |
| Disorders of the Eyes, Ears, Nose and Throat      | 0.5         |   |
| Endocrine Disorders                               | 4           |   |
| Genitourinary/Renal                               | 0.5         |   |
| Hematology  | 1           |   |
| Immunology  | 2           |   |
| Infections Disease                                | 1           |   |
| Neurology   | 6           |   |
| Non-Traumatic Musculoskeletal Disorders           | 0.5         |   |
| Psychiatric or Behavioral Emergencies             | 3           |   |
| Respiratory                                       | 8           |   |
| Toxicology  | 3           |   |
| Pediatric and Geriatric                           | 6           | Includes pediatric and geriatric skills |
| <b>TOTAL</b>                                      | <b>46.5</b> |   |
| <b>Shock and Resuscitation</b>                    |             |   |
| Shock   | 4           |   |
| Resuscitation from Cardiac Arrest                 | 6           |   |
| <b>TOTAL</b>                                      | <b>10</b>   |   |
| <b>Trauma</b>                                     |             |   |
| Trauma Overview                                   | 1           |   |
| Abdominal and Genitourinary Trauma                | 2           |   |
| Bleeding  | 3           |   |
| Chest Trauma                                      | 2           |   |
| Environmental Emergencies                         | 4           |   |
| Head, Facial, Neck and Spine Trauma               | 6           |   |
| Multi-system Trauma                               | 2           |   |
| Nervous System Trauma                             | 2           |   |
| Orthopedic Trauma                                 | 8           |   |
| Soft Tissue Trauma                                | 5           |   |
| Special Considerations in Trauma                  | 1           |   |
| Oklahoma Trauma Triage                            | 2           |   |
| Pediatric and Geriatric                           | 6           |   |
| <b>TOTAL</b>                                      | <b>44</b>   |   |
| <b>Special Patient Populations</b>                |             |   |
| Gynecology  | 1           |   |
| Obstetrics  | 8           |   |
| Neonatal Care                                     | 2           |   |
| Patients with Special Challenges                  | 8           |   |
| Pediatric and Geriatrics (taught in all sections) | 4           | Taught in all topics                    |
| <b>TOTAL</b>                                      | <b>23</b>   |   |
| <b>EMS Operations</b>                             |             |   |
| Emergency Response Vehicles                       | 3           |   |
| Incident Management                               | 0           | On-line Material                        |
| Multiple Casualty Incidents                       | 2           |   |
| Air Medical                                       | 1           |   |
| Rescue Operations                                 | 2           |   |

|   |            |                    |
|---|------------|--------------------|
| Hazardous Materials                                   | 0          | Co or Prerequisite |
| Mass Casualty Incidents Due to Terrorism and Disaster | 2          |                    |
| <b>TOTAL</b>  | <b>10</b>  |                    |
| <b>Clinical Hours</b>                                 |            |                    |
| Hospital  | 18         |                    |
| EMS/Field   | 18         |                    |
| <b>TOTAL</b>  | <b>36</b>  |                    |
| <b>TOTAL COURSE RECOMMENDED HOURS</b>                 | <b>250</b> |                    |

Notes:

- These hours are didactic, and lab hours combined.
- Pediatric and geriatric materials should be included in each subject.

STUDENT COMPETENCIES ON THE NEXT SEVERAL PAGES. ALL STUDENTS SHOULD  
ACCOMPLISH THESE SKILLS WITH 100% ACCURACY TO COMPLETE THIS COURSE!

## OKLAHOMA EMT COMPETENCIES

| <b>I. Skill – Airway/Ventilation/Oxygenation</b>                                | <b>Date</b> | <b>Approved</b> |
|---|-------------|-----------------|
| Airway – Nasal  |             |                 |
| Airway – Oral   |             |                 |
| Bag-Valve-Mask (BVM)  |             |                 |
| Supraglottic Airway   |             |                 |
| CPAP  |             |                 |
| End tidal CO <sub>2</sub> monitoring and interpretative of waveform capnography |             |                 |
| Head tilt – Chin lift   |             |                 |
| Jaw-Thrust  |             |                 |
| Mouth-to-Barrier (mask with one-way valve)                                      |             |                 |
| Mouth-to-Mouth  |             |                 |
| Mouth-to-Nose   |             |                 |
| Mouth-to-Stoma  |             |                 |
| Airway Obstruction/FBAO – Manual dislodgement                                   |             |                 |
| Oxygen tank use/Safety/Administration   |             |                 |
| Oxygen Therapy – Nasal Cannula  |             |                 |
| Oxygen Therapy - Humidifiers  |             |                 |
| Oxygen Therapy – Non-Rebreather Mask  |             |                 |

|   |  |  |
|---|--|--|
| <b>Oxygen Therapy – Partial Rebreather Mask</b>                             |  |  |
| <b>Oxygen Therapy – Simply Face Mask</b>                                    |  |  |
| <b>Oxygen Therapy- Venturi Mask</b>   |  |  |
| <b>Pulse Oximetry</b>   |  |  |
| <b>Suctioning – Upper Airway</b><br><b>Rigid Tip</b><br><b>Flexible Tip</b> |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

| <b>II. Skill – Cardiovascular/Circulation</b>  | <b>Date</b> | <b>Approved</b> |
|--|-------------|-----------------|
| <b>Cardiopulmonary Resuscitation (CPR)</b>   |             |                 |
| <b>Cardiac Monitoring – 12-Lead ECG Acquisition and Transmission</b>                         |             |                 |
| <b>Defibrillation – Automated/Semi-automated</b>   |             |                 |
| <b>Hemorrhage Control – Direct pressure</b>  |             |                 |
| <b>Hemorrhage Control – Tourniquet</b>   |             |                 |
| <b>Hemorrhage Control – Wound packing</b>  |             |                 |
| <b>Mechanical CPR device</b>   |             |                 |
| <b>Telemetric monitoring devices and transmission of clinical data, including video data</b> |             |                 |
|  |             |                 |
|  |             |                 |
|  |             |                 |



| <b>III. Skill – Splinting, Spinal Motion Restriction (SMR) and Patient Restraint</b> | <b>Date</b> | <b>Approved</b> |
|--|-------------|-----------------|
| Cervical Collar  |             |                 |
| Long Spine Board   |             |                 |
| Manual Cervical Stabilization  |             |                 |
| Seated SMR (KED, etc.)   |             |                 |
| Extremity stabilization – Manual   |             |                 |
| Extremity splinting  |             |                 |
| Splint - Traction  |             |                 |
| Mechanical Patient Restraints  |             |                 |
| Emergency moves for endangered patients  |             |                 |
|  |             |                 |
| <i>NOTE:</i>   |             |                 |
|  |             |                 |

| <b>IV. Skill – Medication Administration - Routes</b> | <b>Date</b> | <b>Approved</b> |
|---|-------------|-----------------|
| Aerosolized/nebulized                                 |             |                 |
| Inhaled   |             |                 |
| Intramuscular – Epinephrine 1:1,000 for Anaphylaxis   |             |                 |
| Intramuscular – auto-injector                         |             |                 |
| Intranasal – unit-dosed, premeasured – Naloxone       |             |                 |
| Mucosal/Sublingual                                    |             |                 |
| Oral  |             |                 |
|   |             |                 |

|   |             |                 |
|---|-------------|-----------------|
|   |             |                 |
| <b>V. Medical Director Approved Medications</b>   | <b>Date</b> | <b>Approved</b> |
| Use of Epinephrine (auto-injector) for Anaphylaxis (supplied by EMS)  |             |                 |
| Use of auto-injector antidotes for chemical/hazardous material exposure   |             |                 |
| Use of opioid antagonist auto-injector for suspected opioid overdose  |             |                 |
| Inhaled – beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing                                    |             |                 |
| Intranasal – opioid antagonist for suspected opioid overdose  |             |                 |
| Oral Aspirin for chest pain of suspected ischemic origin  |             |                 |
| Oral Glucose for suspected hypoglycemia   |             |                 |
| Oral over the counter (OTC) analgesics for pain or fever  |             |                 |
| Sublingual nitroglycerin for chest pain or suspected ischemic origin – limited to patient’s own prescribed medication |             |                 |
|   |             |                 |
| <b>VI. Skill – IV Initiation/Maintenance Fluids</b>   | <b>Date</b> | <b>Approved</b> |
| Intravenous – maintenance of non-medicated IV fluids  |             |                 |
| <b>VII. Skill – Miscellaneous</b>   | <b>Date</b> | <b>Approved</b> |
| Assisted delivery (childbirth)  |             |                 |
| Assisted complicated delivery (childbirth)  |             |                 |
| Blood pressure automated  |             |                 |
| Blood pressure – manual   |             |                 |
| Blood glucose monitoring  |             |                 |

|   |  |  |
|---|--|--|
| <b>Eye Irrigation</b>   |  |  |
| <b>Emergency Vehicle Operator/operations</b>                      |  |  |
| <b>Hand Washing</b>   |  |  |
| <b>Vital Signs</b>  |  |  |
| <b>Landing Zone</b>   |  |  |
| <b>Lifting and Moving</b><br><b>Urgent</b><br><b>Non urgent</b>   |  |  |
| <b>Personal Protective Equipment/Body Substance Isolation Use</b> |  |  |
|   |  |  |
| <b>NOTES:</b>   |  |  |
|   |  |  |
| <b>COMMENTS [affective domain]</b>                                |  |  |
|   |  |  |

**Skills and scenarios should include adult, pediatric and geriatric patients**

# **EMT PSYCHOMOTOR EXAMINATION**

The training program should conduct a Final Summative Psychomotor examination at the end of the course. This exam is separate from all other course related activities.

Emergency Medical Technician (EMT) candidates are tested in three main scenario skill stations with individual skills intertwined

- Patient Assessment – Trauma (SMR, tourniquets, bandaging, shock management, splinting)
- Patient Assessment – Medical (History, oxygen administration, medications administration)
- Cardiac Arrest Management – CPR / AED (OPA, BVM)

These three stations are scenario based and the same form will be used for all three scenarios all three must be tested. OSDH-EMS has provided some sample scenarios below, but the program may create their own scenarios that are consistent with the items listed above.

Training programs are responsible for ensuring the integrity of this exam and keeping all materials confidential and secure!



Oklahoma State Department of Health – EMS Division  
Emergency Medical Technician Psychomotor Examination



☐ MEDICAL ☐ TRAUMA ☐ CARDIAC ARREST SCENARIO

Candidate: \_\_\_\_\_

Examiner: \_\_\_\_\_

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Scenario: \_\_\_\_\_

Actual Start Time: \_\_\_\_\_

| Actual Start Time: _____  | Points Possible | Points Awarded |
|---|-----------------|----------------|
| <b>Scene Management</b>   |                 |                |
| Thoroughly assessed and took deliberate actions to control the scene, properly utilized all available resources   | 3               |                |
| Assessed the scene, identified potential hazards, advocated for safety at all times   | 2               |                |
| Incompletely assessed or managed the scene  | 1               |                |
| Did not assess or manage the scene  | 0               |                |
| <b>Patient Assessment</b>   |                 |                |
| Completed an organized assessment and integrated findings to expand further assessment while maintaining situational awareness  | 3               |                |
| Completed primary survey, secondary assessment and reassessment given patient condition   | 2               |                |
| Performed an incomplete or disorganized assessment  | 1               |                |
| Did not complete a primary survey or reassessment of the patient  | 0               |                |
| <b>Patient Management</b>   |                 |                |
| Managed all aspects of the patient's condition, anticipated further needs, identified changes and rapidly intervened after confirming critical interventions with partner | 3               |                |
| Appropriately managed the patient's presenting condition with appropriate timeliness, prioritization/sequence, adapted treatment plan as information became available     | 2               |                |
| Performed an incomplete or disorganized management  | 1               |                |
| Did not manage life-threatening conditions  | 0               |                |
| <b>Interpersonal relations</b>  |                 |                |
| Encouraged feedback, took responsibility for the team, established rapport and interacted in an organized, therapeutic manner   | 3               |                |
| Interacted and responded appropriately with patient, crew, and bystanders using closed loop communication and appreciative inquiry  | 2               |                |
| Used inappropriate communication techniques   | 1               |                |
| Demonstrated intolerance for patient, bystanders, and crew  | 0               |                |

Actual Time Patient Transported: \_\_\_\_\_

CONTINUED ON BACK

| Integration (Field Impression and Transport Decision)   |   |                   |
|---|---|-------------------|
| Provided appropriate management, offered a brief summary of prioritized differential diagnoses and considered alternate transport options | 3 |                   |
| Provided appropriate management and identified appropriate field impression, patient acuity and transport destination to team             | 2 |                   |
| Provided correct management but did not identify appropriate field impression, patient acuity or transport destination                    | 1 |                   |
| Did not provide correct management, appropriate field impression, patient acuity or transport destination                                 | 0 |                   |
| Actual Time Ended: _____ (15 minutes max)   |   | TOTAL 15 (Min 10) |

### Critical Criteria

#### \*\*\*\*Scenario Specific\*\*\*\*

Medical:

- ☐ Failure to administer medication
- ☐ Failure to administer correct med dose

Trauma:

- ☐ Failure to manage shock
- ☐ Failure to apply tourniquet
- ☐ Failure to control bleeding

Cardiac Arrest:

- ☐ Failure to admin oxygen
- ☐ Failure to manage airway
- ☐ Failure to provide ventilation
- ☐ Failure to properly use AED
- ☐ Failure to perform proper CPR

#### \*\*\*\*Overall\*\*\*\*

- ☐ A score of 1 or less in any category above
- ☐ Failure to appropriately address any of the scenario's "Mandatory Actions"
- ☐ Failure to manage the patient as a competent EMT
- ☐ Exhibits unacceptable professional affect with patient or other personnel
- ☐ Uses or orders a dangerous or inappropriate intervention

**You must factually document your rationale for checking any of the above critical items below. Please provide details.**

## Sample Scenarios

### **Medical Patient**

A patient reports severe mid-sternal chest pain while moving furniture. Patient is conscious and alert complaining of stabbing chest pain on a scale of 8 with no relief from rest. Patient has taken one nitroglycerin tablet without any relief. Patient feels short of breath and has pain in left jaw.

Vital signs are BP 118/70, P 96, R 20, SpO2 94% on room air.

Skin is pale, warm and clammy

Lung sounds are clear

History of stable angina and hypertension

Meds include atenolol and nitroglycerin

#### Treatment must include:

Request EMS response

Oxygen nasal cannula

Consider aspirin (assist)

Assist in administering patients' nitro and repeat if no relief and BP remains stable

### **Trauma Patient**

A patient has been involved in a motorcycle with car collision. Patient is conscious and responsive to pain. The left leg has been amputated below the knee with moderate bleeding. They complain of pain on the left side of the chest and has abrasions and severe bruising. Patient was wearing a helmet.

Vital signs are: BP 100/56, P 120, R 28 and very shallow, SpO2 90% on outside air

Skin is pale and cool, cap refill 3 seconds

Lung sounds are clear

History -none, healthy

Meds – none

#### Treatment must include:

Request EMS response (consider helicopter)

Treat for shock

Administer high-flow oxygen

Direct pressure and bandaging of leg,

Applies tourniquet as bleeding continues,

*Consider spinal motion restriction????? (verbally)*

## Cardiac Arrest

Patient is in cardiac arrest at a local gymnasium. Reported having chest pain while playing basketball and collapsed on the bench approximately 5 minutes ago. AED is present at the gym.

Vital signs: BP 0/0, P 0, R 0

Skin is cool and clammy

History – diabetes

Meds – metformin

### Treatment must include:

Request EMS response

High quality CPR (one rescuer or two-rescuer)

BVM ventilations with OPA and high-flow oxygen

Use of AED for shockable rhythms

Patient has ROSC:

Obtain vital signs: BP 98/52, P 66, R 12, SpO2 95% after ventilations

If patient regains consciousness- place in recovery position

If remains unconscious- continue positive pressure ventilations