# The Role of Emergency Medical Services

## Course

**Principles of LPSCS**

## Unit VI

**Fire Protection Services**

## Essential Question

**How do emergency medical services work within the scope of public safety?**

## Rationale

The main purpose of Emergency Medical Services (EMS) is to provide immediate medical care to those who need it. No one wants to imagine themselves or a loved one in medical peril, but it is a possibility that we may have to face at some point in our lives. EMS provides aid and medical assistance from primary response to definitive care, involving personnel trained in rescue, stabilization, and transportation. EMS improves the quality of life in the community it serves.

## TEKS

§130.292(c)

(3)(A)(B)(C)

(8)(F)

## Prior Student Learning

Understanding the roles and responsibilities of police and fire professionals

## Estimated Time

3 hours

## Objectives

The students will be able to:

1. Define the following key terms: EMS, private EMS, public EMS, professionalism, core values, continuous care and transfer, patient advocacy, and public safety answering point (PSAP).
2. Distinguish between public EMS and private EMS.
3. Identify the purpose of public safety answering points (PSAP).
4. Describe the role and responsibilities of the EMS professional.
5. Discuss the history of EMS.
6. Detail various careers in EMS.
7. Explain how ethics affect interactions with patients, healthcare professionals, and the public.

## Engage

View a video clip that introduces the concept of EMS. To find a video do an Internet search for the following: Emergency Medical Technicians CollegeGradCareers video. Ask the students if they have ever been personally involved with a medical emergency or an emergency with a friend or loved one. Ask the students to discuss how they felt during this time. Then ask the students how the EMS professional helped them during the emergency. Use the Discussion Rubric for assessment.

## Key Points

1. **Definition of EMS**
   - A coordinated network of professionals whose function is to provide a variety of medical services, such as pre-hospital medical and trauma care and transportation for those in need of emergency care
   - Begins with a call for service made to a 9-1-1 call center
   - Ends when the patient is delivered to a source of more advanced medical treatment, such as a hospital
   - The gateway to the healthcare system
   - Components in the private and public sectors
     1. Public EMS
        - Provided by a city, county, or other political subdivision
        - Funded by a combination of user fees and taxes
c) May be provided as part of a local fire or police department

2. Private EMS
   a) Places to handle emergencies, such as hospitals
   b) Can include both for-profit and non-profit

II. The History of EMS
   A. 1797
      1. Baron Dominique-Jean Larrey
         a) Chief physician of Napoleon’s army
         b) Instituted the first triage-like system for injured soldiers in battle
         c) Suggested the introduction of “ambulances volantes”
            (1) “ambulances volantes” (flying ambulance) – horse drawn wagons used to collect and carry wounded from the battlefield to base hospitals
      B. 1865 – America’s first ambulance service was instituted by the US Army
      C. 1869 – America’s first city ambulance service was instituted in New York City by Bellevue Hospital
      D. 1937
         1. A 5-fatality fire on Wimpole Street in Britain was caused by the delayed reporting of phone calls
         2. Britain implemented its 999 emergency telephone system serving police, fire, and EMS
      E. 1940s – ambulance services were turned over to local police and fire departments due to a shortage of manpower caused by WWII
      F. 1951 – helicopters began to be used for medical evacuations during the Korean War
      G. 1957 – the traffic emergency number zenith 1-2000 was debuted by the California Highway Patrol
      H. 1959 – North America’s first three-digit (999) emergency telephone system was introduced in Winnipeg, Canada
      I. 1966
         1. The National Research Council published a research paper known as “The White Paper”
            a) Considered the catalyst for improving emergency medical care
            b) Actually titled “The Neglected Disease of Modern Society”
            c) Recommended that ambulance service should be provided by local government, helicopter ambulance services, streamlined communications between ambulances, emergency rooms, and other health-related agencies
      J. 1967 – President Lyndon B. Johnson’s Commission on Law Enforcement recommended one phone number for calling the police
      K. 1968 – 9-1-1 was designated the emergency number at a press conference in Washington, DC
L. Feb. 16, 1968 – the first 9-1-1 call was made in Haleyville, AL
M. 1990 – the fire department pushed to expand into EMS Services

III. Careers in EMS
   A. Emergency Medical Technicians (EMTs) and Paramedics
      1. Duties
         a) Care for the sick or injured in emergency medical settings
         b) Work in all types of environments
         c) Include work that is physically demanding and highly stressful
      2. Education
         a) Need a minimum of a high school education and a structured
            post-secondary training program
         b) Specific guidelines
            (1) Vary from state-to-state
            (2) Have been established by the National Registry of
                Emergency Medical Technicians (NREMT) which
                provides national certification of EMTs and Paramedics
                at three levels:
                (a) EMT basic
                (b) Advanced EMT
                (c) Paramedic
   B. Dispatchers
      1. Duties
         a) Answer emergency and nonemergency calls
         b) Take information from the caller and send the appropriate
            type and number of units
         c) Determine from the caller the type of emergency and its
            location
         d) Give over-the-phone medical help and other instructions
            before emergency personnel get to the scene
         e) Monitor and track the status of police, fire, and ambulance
            units on assignment
         f) Work in communication centers called Public Safety
            Answering Points (PSAP)
         g) Work between 8 to 12 hours and sometimes 24-hour shifts
      2. Education
         a) A high school diploma is essential for this career
         b) Some states have developed 40+ hour training programs

IV. Roles and Responsibilities of EMS Professionals
   A. Readiness
      1. More than just showing up to work on time
      2. Includes being physically ready and keeping supplies stocked and
         in working condition
   B. Safety
      1. A priority (the professional’s and the patient’s)
2. Requires an awareness of the physical and the psychological changes occurring during a crisis that can affect judgment
3. Requires keeping emotions under control
C. Advocate
D. Maintain effective communication skills because patient injuries are not always apparent by sight
E. Have a caring and patient attitude
F. Ensure that patients receive care that is in their best interest
G. Ensure that patients receive continuous care and transfer
H. Maintain patient confidentiality
I. Maintain professionalism
   1. Professionalism – the behavior, goals, or qualities such as skilled, caring, confident, and courteous demeanor that characterize a medical professional (Grafft, 2012)
   2. Includes core values

V. EMS Today
   A. Expanding into more areas than just providing advanced life support services
   B. For example, Fire Service EMTs
      1. Receive training in extrication procedures
      2. Train in using extrication tools
      3. Receive search and rescue training
      4. Use technologically advanced methods to locate wireless and voice-over-Internet protocol (VoIP) callers

Activities
1. **EMS Professional Guest Speaker.** Invite an EMT, paramedic, or dispatcher to come and speak to the class about his or her experiences as an EMS professional. Before he or she arrives have students write one question that they want to ask the speaker on a piece of paper. Check the questions and then give them to the speaker to read and answer as he or she speaks. Have students write a short reflection about the experience. Use the Individual Work Rubric for assessment.

2. **Mock Crisis Scenario.** Create a crisis scenario such as a natural disaster. Divide the students into four groups. Have the groups represent EMS, law enforcement, injured victims, and community members. Have each group discuss the main concerns and objectives for their group. Then reassign a member from each group to make a new group that includes a representative from each of the first groups. Have the new groups work together to create a plan of action. Use the Individual Work Rubric for assessment.

3. **History of EMS Research.** Have students research the history of EMS and create a “Top 10” list of the most important moments in EMS history. Have
the students explain why they selected each of the moments. Use the Research Rubric for assessment.

**Assessments**

The Role of Emergency Medical Services Exam and Key Cooperative Team Rubric Discussion Rubric Individual Work Rubric Research Rubric

**Materials**

The Role of Emergency Medical Services computer-based presentation Computers with Internet access or reference books

**Resources**


Do an Internet search for the following:

- Emergency Medical Technicians CollegeGradCareers video
- Whonamedit
- Medical-dictionary free
- Basic ems extrication procedures by Elizabeth Otto

**Accommodations for Learning Differences**

For reinforcement, students will create a Venn diagram comparing and contrasting private and public EMS. Use the Individual Work Rubric for assessment.

For enrichment, students will create a public service announcement about the new developments in EMS. Use the Individual Work Rubric for assessment.

**State Education Standards**

*Texas Essential Knowledge and Skills for Career and Technical Education*

§130.292. Principles of Law, Public Safety, Corrections, and Security (One-Half to One Credit).

(3) The student formulates ideas, proposals, and solutions to address problems related to law, public safety, corrections, and security in order to ensure effective and efficient delivery of
services. The student is expected to:
(A) use logical constructions to formulate ideas, proposals, and solutions to problems;
(B) formulate ideas, proposals, and solutions to ensure delivery of services; and
(C) use critical-thinking skills to solve ethical issues identified in law, public safety, corrections, and security.

(8) The student identifies the roles of the public safety professional. The student is expected to:
(F) examine the role of emergency medical services in public safety;

College and Career Readiness Standards
Cross-Disciplinary Standards
I. Key Cognitive Skills
C. Problem solving
   1. Analyze a situation to identify a problem to be solved.
   2. Develop and apply multiple strategies to solve a problem.
   3. Collect evidence and data systematically and directly relate to solving a problem
The Role of EMS Exam

1. _____ Dispatchers never work 24-hour shifts.
   A. True
   B. False

2. _____ Who developed the first triage-like system for Napoleon’s army?
   A. Baron Larrey
   B. Baron Jean
   C. Baron Jean Dominique
   D. None of the above

3. _____ What does the acronym EMS stand for?
   A. Emergency Mobile Services
   B. Emergent Medical Services
   C. Emergency Medical Services
   D. None of the above

4. _____ In which American war were helicopters first used to transport injured soldiers?
   A. WWII
   B. Korean War
   C. Vietnam War
   D. None of the above

5. _____ EMS is a coordinated network of professionals that provide
   A. Long-term medical care
   B. Care for minor injuries only
   C. Pre-hospital medical and trauma care
   D. None of the above

6. _____ Where was the first ambulance service in the US?
   A. New York City
   B. Boston
   C. Chicago
   D. None of the above

7. _____ Paramedics have more advanced training than Emergency Medical Technicians
   A. True
   B. False
   C.

8. _____ A person who makes sure that the care a patient receives is in their best interest is
   ____________.
   A. Paramedic
   B. Dispatcher
C. Patient advocate  
D. None of the above

9. _____ EMS is a coordinated network of professionals whose function is to provide a variety of medical services.  
   A. True  
   B. False

10. _____ An Emergency Medical Technician performing lifesaving medical services on a heart attack patient until the patient is received at the local hospital emergency room is an example of ___________.  
    A. Airway maintenance  
    B. Bleeding control  
    C. Continuous care and transfer  
    D. None of the above

11. _____ EMS services provided by city or county level government is ___________.  
    A. Public EMS  
    B. Private EMS  
    C. Minor emergency clinic  
    D. None of the above

12. _____ Ambulance services were turned over to fire and police departments during the Vietnam War.  
    A. True  
    B. False

13. _____ Which of the following was NOT a recommendation of the White Paper?  
    A. The privatization of emergency medical services  
    B. Ambulance service should be provided by local government  
    C. Streamlined communication between emergency care providers  
    D. None of the above

14. _____ Hospitals are an example of ___________.  
    A. Public EMS  
    B. Private EMS  
    C. Minor emergency clinic  
    D. None of the above  
    E.

15. _____ EMS professionals are expected to keep their equipment stocked, working, and ready for an emergency.  
    A. True  
    B. False

16. _____ Which of the following is NOT a duty of dispatchers?  
    A. Determining the nature of the emergency
B. Give over-the-phone medical advice
C. Oxygen administration
D. None of the above

17. _____ Where was the first 9-1-1 call made in the United States?
   A. Hartford, CT
   B. Harrisburg, PA
   C. Haleyville, AL
   D. None of the above
The Role of EMS Exam Key

1. B
2. A
3. C
4. B
5. C
6. A
7. A
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9. A
10. C
11. A
12. B
13. A
14. B
15. A
16. C
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### Cooperative Teams Rubric

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<td>Encourages others to join the conversation</td>
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<td>Maintains the pace of the discussion to achieve goals</td>
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<td>Shares ideas and thoughts</td>
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<td>Offers constructive criticism and recommendations</td>
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<td>Credits others for their contributions and ideas</td>
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<td>Empathizes with others</td>
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<td>Requests input from others to reach an agreement</td>
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<td>Expresses ideas and thoughts</td>
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## Discussion Rubric

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<td>Keeps the discussion progressing to achieve goals</td>
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<td>Shares thoughts actively while offering helpful recommendations to others</td>
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<td>Gives credit to others for their ideas</td>
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<td>Respects the opinions of others</td>
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<td>Involves others by asking questions or requesting input</td>
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<td>Expresses thoughts and ideas clearly and effectively</td>
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<td>Follows directions</td>
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<td>Student completed the work as directed, following the directions given, in order and to the level of quality indicated</td>
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<td>Time management</td>
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<td>Student used time wisely and remained on task 100% of the time</td>
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<td>Organization</td>
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<td>Student kept notes and materials in a neat, legible, and organized manner. Information was readily retrieved</td>
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<td>Evidence of learning</td>
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<td>Student documented information in his or her own words and can accurately answer questions related to the information retrieved</td>
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<td>Student used a variety of methods and sources to gather information. Student took notes while gathering information</td>
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## Research Rubric

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<td><strong>Question/goal</strong></td>
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<td>Student identified and communicated a question or goal of the research</td>
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<td><strong>Conclusion/Summary</strong></td>
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<td>Student drew insightful conclusions and observations from the information gathered. Information is organized in a logical manner</td>
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<td>Student communicated the information gathered and summary or conclusions persuasively. Student demonstrated skill in the use of media used to communicate the results of research</td>
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<td>Student reflected on the importance of the research and its potential application</td>
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