# TABLE OF CONTENTS

EMS Risk Management and Safety (C0241)........................................................................................................... 3
Management of Emergency Medical Services (C0244)......................................................................................... 6
Legal, Political, and Regulatory Environment of EMS (C0246)................................................................. 19
EMS Quality Management (C0247).................................................................................................................... 28
Foundations of EMS Systems (C0297).................................................................................................................. 35
Community Risk Reduction in EMS (C0298)......................................................................................................... 40
EMS Risk Management and Safety (C0241)

Course Description

This course introduces the student to the risk management principles of an EMS agency. Students will focus on safety from the perspective of the field provider.

Prerequisites

None

Course Outcomes

Upon completion of this course, students will be able to:

1. Define risk management and differentiate this concept from the concepts of prevention and loss control.

2. Outline the steps that are required to conduct a comprehensive investigation into a workplace accident.

3. Identify five safety-related areas of concern within their organization that could be addressed or improved by the application of risk management principles and practices.

4. Identify and analyze the major causes of line-of-duty deaths related to health, wellness, fitness, and vehicle operations.

5. Draft a model policy, procedure, or guideline that can be implemented within an organization to address a specific area of safety or risk management

Available Text


Supporting References/Research for Faculty and Students


Research Reports:  http://www.usfa.fema.gov

Technical Reports:  http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series:  http://www.usfa.fema.gov/research

Learning Resource Center:  http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST):  http://www.fire.nist.gov (see Fire Tests/Data, Software/Models, Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

•  http://www.llis.dhs.gov/member/secure/index.cfm
•  http://www.usfa.fema.gov/applications/publications/techreps.cfm

Because of the dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Course Outline

I.  Introduction

   A.  Risk Management versus Loss Control
   B.  Safety

II.  Safety Program Management

   A.  Perspective on Safety
   B.  Management
   C.  Financial Aspects
   D.  Insurance

III.  Developing a Safety Program Goals

   A.  Description of Position
   B.  Program Components
   C.  Creating a Safety Culture
   D.  Required Postings
   E.  Safety Committee
IV. Risk Management Process
   A. What is Risk Management?
   B. Risk Identification and Prevention
   C. Cost of Risk Control

V. Vehicle Driving
   A. Defensive Driving Techniques
   B. Driver Selection
   C. Maintenance
   D. SOPs

VI. Station Safety
   A. Office Safety
   B. Compressed Gases
   C. Work Area
   D. Vehicle Maintenance Areas
   E. Storage

VII. Accident Investigation
   A. Preparation
   B. Reporting Process
   C. Investigation Process
   D. Investigation Phases

VIII. Record Keeping
   A. Infectious Diseases
   B. Safety Audits
   C. Training
   D. Accident Reports
   E. Injury Reports
   F. Safety Meetings

IX. Safety Officer
   A. Role of the Safety Officer

X. Resources for Risk Management and Safety
   A. Regulating Agencies
   B. Associations
   C. Education
Management of Emergency Medical Services (C0244)

Course Description

This is an upper-level baccalaureate course for students interested in the practice and principles of emergency medical services systems management and the processes that contribute to the effectiveness of day-to-day operations within an EMS organization. This course introduces the EMS professional to topics that include: government structure, strategic planning, injury prevention, risk management and safety, customer service, human resources management, financial management, fleet management, career development, quality management, data collection and research, labor relations and special operations.

Prerequisites

None

Course Outcomes

Upon completion of this course, students will be able to:

1. Discuss the basic philosophy, organization, and operation of injury prevention and risk reduction programs.
2. Compare and contrast management and leadership.
3. Provide practical examples of the principles of customer service in EMS.
4. Apply the techniques for conducting an effective performance appraisal.
5. Identify strategies to optimize reimbursements for EMS services.
6. Apply quality improvement techniques to various aspects of EMS operations.
7. Define due process, and apply the principles of a progressive disciplinary program.
8. Define ethical behaviors and the decision-making strategies when faced with an ethical dilemma.
Course Objectives

Module 1: Government Structure and EMS

After completing this module, you will be able to:

1. Identify key historical events and figures that have impacted the progress of emergency medical services (EMS), and discuss their collective influence.

2. Identify key Federal, State, and local legislative events that have formed the emergency medical services and discuss their collective influence.

3. Identify Federal, State, and local EMS system components, and discuss their interrelationship.

4. Identify the components of an EMS system.

5. Explain the various National Highway Traffic Safety Administration EMS agendas for EMS-related topics.

6. Identify the various trade organizations that support EMS activities.

Module 2: Strategic Planning for EMS

After completing this module, you will be able to:

1. Define strategic planning and the time frames that are incorporated in strategic planning.

2. Define the contingent planning model for strategic planning.

3. Use a multi-point plan to create components of a strategic plan.

4. Demonstrate how to prioritize strategic planning concepts and items.

5. Define the strategic planning items — and their purposes — that would be included in a fire or EMS plan.

6. Explain and incorporate a SWOT analysis into the planning cycle for a strategic plan.

7. Discuss the various considerations for calculating the cost of EMS services.

8. Define or identify the stakeholders in EMS.

9. Identify the management tools used to conduct project planning.
10. Describe the primary components of an EMS budget.

11. Identify proactive approaches to EMS funding.

Module 3: Manager to Leader

After completing this module, you will be able to:

1. Define the difference between management and leadership.
2. Identify the skills needed to be an EMS manager.
3. Identify the management processes and sentinel events in EMS operations.
4. Develop and define leadership activities and roles.
5. Understand how to create a vision and values statement.
6. Apply the concept of values to organizational leadership.
7. Understand and apply the principles of mentoring and coaching to EMS workers.

Module 4: Injury Prevention and EMS

After completing this module, you will be able to:

1. Describe the extent of the injury-prevention problem.
2. Establish what constitutes an injury.
3. Define the CDC injury-prevention model.
4. Describe the EMS manager's role in the public-health model.
5. Explain the implementation process for injury-prevention programs.
6. Identify resources available for EMS agencies to conduct injury-prevention activities.
7. Design and implement prevention activities.
8. Evaluate prevention activities.
9. Build and manage a prevention program to disseminate information.
10. Stimulate change through policy, enforcement, engineering, and education.

11. Define and describe concepts of attributable risk and explain how injuries are preventable.

12. Describe general approaches to prevention, and demonstrate how conceptual models are used to describe multiple risk factors.

Module 5: Customer Service and Marketing

After completing this module, you will be able to:

1. Understand the principles of customer service.

2. Create a customer-service program for an EMS organization.

3. Understand and apply marketing concepts for any EMS agency.

4. Identify image-building activities to be conducted by EMS agencies.

5. Analyze and modify customer-service programs from EMS industry standards.

6. Understand the branding process for EMS agencies.

Module 6: Risk Management and Safety

After completing this module, you will be able to:

1. Identify principles of risk management.

2. Identify how to calculate the risk in EMS operations.


4. Create an infection control program for EMS agencies.

5. Recognize and identify the safety issues surrounding EMS operations and how to mitigate those events.

6. Diagram the progression and response to litigation against an EMS organization.
Module 7: EMS Human Resources Management

After completing this module, you will be able to:

1. Identify the issues surrounding the EMS workforce of the future and the generation-specific issues that apply to managerial techniques in an organization.
2. Employ techniques to identify staffing needs for future EMS operations.
3. Perform a job-task analysis on an EMS position in the organization.
4. Identify and apply the techniques to conduct an effective performance appraisal, and identify problems associated with conducting performance appraisals.
5. Identify the components of a positive discipline program, and implement a due-process procedure involving a disciplinary action.
6. Create a list of and identify the warning signs of workplace violence, and employ management activities to contain or prevent workplace violence.
7. Build an employee screening and hiring process.
8. Understand the application of labor laws that influence EMS operations.

Module 8: Management of EMS Education

After completing this module, you will be able to:

1. Understand the EMS Education Agenda for the Future.
2. Identify national resources to conduct EMS training.
3. Understand the national curriculums and application to each provider level.
4. Build an EMS refresher course for any level of EMS provider.
5. Identify EMS management training programs and opportunities.
6. Conduct a training analysis of EMS needs.
7. Identify how to conduct training encompassing psychomotor skills, affective domain, and didactic knowledge.
8. Apply standard procedures to evaluate training in accordance with accreditation standards.
Module 9: Financial Management

After completing this module, you will be able to:

1. Discuss the Medicare Ambulance Fee Schedule Final Rule, and identify strategies for optimizing reimbursement within its requirements and limitations.
2. Describe the historical development of programs administered by the Centers for Medicare and Medicaid Services.
3. Identify the requirements of Medicare Part B as they apply to ambulance suppliers, including levels of service, medical necessity, physician certification, origins and destinations, vehicles, and staffing.
4. Explain the alternative components used to fund ambulance service.
5. Describe the financial policies that are addressed in budgeting and in types of budgets.
6. Calculate the unit hour utilization and various benchmarks, as well as seasonal fluctuations for various levels of service for their local areas.
7. Discuss various methods and considerations for costing-out service.
8. Understand managed-care contracting strategies.

Module 10: Medical Practice

After completing this module, you will be able to:

1. Understand and define the role of the physician medical director for an EMS service.
2. Understand the selection process and qualifications desired in a medical director.
3. Differentiate between on-line and off-line medical control.
4. Identify the areas of responsibility that need physician involvement in an EMS organization.
5. Understand and create a system that can be used for the physician in due process to discipline an EMS worker.
6. Identify the training and opportunities to promote professional development for a physician involved with or entering the field of EMS.
7. Understand the role of the EMS medical director in developing on-line and off-line medical control.

8. Describe the network opportunities for a physician medical director.

**Module 11: Fleet Management**

After completing this module, you will be able to:

1. Discuss various considerations for calculating the cost of an EMS service.

2. Distinguish between functional and direct services for operating budgets.

3. Describe the inspection processes for equipment.

4. Compare and contrast the concepts of unit-hour utilization and in-service ratios when determining workload.

5. Calculate cost per capita and cost per response for EMS runs.

6. Apply cost-out strategies for a variety of EMS system components.

7. Track and apply costing mechanisms for soft supplies.

8. Understand the types of inventory systems and replacement plans.

9. Track fleet maintenance and vehicle cost, including failure rates.

10. Determine the equipment needed in the system and the specifications of that equipment.

12. Understand and apply Federal, State, and local specifications and procurement processes for ambulances, biomedical equipment, and durable equipment.

**Module 12: Career Development and Staff Focus**

After completing this module, you will be able to:

1. Create a map of a career plan and personal growth path to an EMS leadership position.

2. Understand how to develop and participate in a mentoring program.

3. Identify activities that enhance professional development.

4. Recognize, select, and participate in staff development opportunities.
5. Identify education pathways for career and staff development.
6. Identify common experiences needed to be an effective EMS manager or leader.
7. List possible outside activities that enhance professional growth within the organization.

**Module 13: EMS Quality Management**

After completing this module, you will be able to:

1. Define the activities involved with quality assurance.
2. Define the activities involved with quality improvement.
3. Apply QI techniques to various aspects of EMS operations.
4. Identify the techniques to measure quality indicators in EMS operations.
5. Locate and identify other sources of quality data information that can improve EMS operations.
6. Create and implement a customer service assessment as part of a quality-improvement program.
7. Understand and create a process that helps document trends that require increased education or modification of the EMS systems.
8. Evaluate and apply the historical aspects of quality improvement to modern EMS efforts.
9. Chronicle the history of CQI activities

**Module 14: Incident Management**

After completing this module, you will be able to:

1. Apply the National Incident Management System to a mass-casualty incident.
2. Describe the major components of an incident management system.
3. Describe the functions of the Incident Commander at all EMS incidents.
4. Describe the Federal typing of the EMS resources.
5. Identify the component of an EMS strike team and EMS task force.
6. Map the Federal requirement and resources for NIMS training and EMS.
7. Differentiate between types of incident management teams and their applications.
8. Develop an incident management system for an EMS incident.

**Module 15: Interagency Relations and Operations**

After completing this module, you will be able to:

1. Compare and contrast mutual aid and automatic aid.
2. Identify the hierarchical organization of resources that respond to disaster from a regional, State, and Federal perspective.
3. Identify the intrastate and interstate mutual-aid components.
4. Understand the needs and organizational applications of area and unified command.
5. Identify the components of the national response plans.
6. Match and define the emergency-support functions within the national response plan.
7. Navigate the progress and communication chain for an agency to secure resources from local, State, and Federal resources.

**Module 16: Data Collection and EMS Research**

After completing this module, you will be able to:

1. Evaluate the different types of research.
2. Understand the domains of EMS research.
3. Deploy specific research methodologies to the prehospital setting.
4. Define validity and reliability in scientific research and data.
5. Apply GIS concepts to EMS-related activities.
6. Recognize the Federal, State, and local data-collection systems.
7. Link data to quality improvement initiatives in EMS.
Module 17: Legal and Labor Relations

After completing this module, you will be able to:

1. Define the types of law applicable to EMS.
2. Identify and apply the Federal legislation to EMS.
3. Understand and apply legislative mandates to EMS operations.
4. Design and understand the privacy compliance for an EMS operation that meets federal HIPAA regulations.
5. Identify case law affecting EMS operational systems.
6. Define due process, and apply the principles of progressive discipline to labor disputes involving EMS.
7. Recognize the Fair Labor Standards Act (FLSA) applications to EMS workers and fire-based EMS.
8. Define ethical behaviors, and apply decision-making strategies when faced with ethical decisions.
9. Identify contemporary issues in EMS litigation.

Module 18: EMS Management of Communications Centers

After completing this module, you will be able to:

1. Establish programs that use emergency medical dispatch.
2. Administer emergency medical dispatch programs.
3. Monitor and improve emergency medical dispatch operations.
4. Select and train personnel for emergency medical dispatch operations.
5. Evaluate and implement quality improvement/assurance programs.
6. Identify and implement training programs for emergency medical dispatch.
7. Recognize the legal case law related to communication centers.
Module 19: EMS Special Operations

After completing this module, you will be able to:

1. Explain the new mission of customer service in an all-hazards environment.
2. Describe the risk-analysis process.
3. Describe the mitigation role of local community officials as it relates to EMS response.
4. Define an all-hazards approach, and apply a checklist to preparing special events.
5. Given a medical evacuation of a patient by helicopter, identify the elements that affect or support local EMS special operations.
6. Identify existing documentation resources to use for special operations during a special event.
7. Identify the methods for developing and accessing State or Statewide regional resource pools.
8. Contrast the missions of tactical EMS.
9. Analyze the role of EMS in a special operations environment as it relates to the medical support of hazardous materials operations.
10. Explain the medical-legal issues involved in spectator care at mass gatherings.
11. Discuss the process for implementing care systems at mass gatherings.

Available Text


Supporting References/Research for Faculty and Students


Research Reports: http://www.usfa.fema.gov
Technical Reports:  http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series:  http://www.usfa.fema.gov/research

Learning Resource Center:  http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST):  http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Because of the dynamic nature of this subject material, we suggest the instructor build content to include contemporary readings.

Lessons Learned Information Sharing:

•  http://www.llis.dhs.gov/member/secure/index.cfm
•  http://www.usfa.fema.gov/applications/publications/techreps.cfm

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Points of Contact

Robert Seitz, University of Pittsburgh, seitzsr@upmc.edu
David S. Becker, IAFC, dsbeckermo@msn.com

Course Outline

I. Strategic Planning for EMS
II. Manager to Leader
III. Risk Management and Safety
IV. Injury Prevention and EMS
V. Data Collection and EMS Research
VI. Management of EMS Education
VII. EMS Human Resources Management
VIII. Career Development and Staff Focus
IX. Government Structure and EMS
X. Legal and Labor Relations
XI. Medical Practice
XII. EMS Quality Management
XIII. Interagency Relations and Operations
XIV. Incident Management
XV. EMS Management and the Role of Communications Centers
XVI. Financial Management
XVII. Customer Service and Marketing
XVIII. Fleet Management
XIX. EMS Special Operations
Legal, Political, and Regulatory Environment of EMS (C0246)

Course Description

This is an upper-level baccalaureate course for students interested in the field of legal, political, and regulatory environment of EMS. This course introduces the EMS professional to the legal aspects of Emergency Medical Services. Students explore issues in malpractice, consent, and refusal of treatment, OSHA, employment issues, and risk management. EMS students gain insights into the legal liabilities in Emergency Medical Services.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1. Identify potential legal and political issues in EMS.

2. Describe legal lessons learned from recent cases, and identify best practices in EMS to avoid legal liability.

3. Analyze and apply legal rules and political issues to manage risk.

4. Formulate political and legal conclusions and recommendations based on the analysis.

5. Locate and apply recent legal and legislative online resources.

Course Objectives

Basic Framework of the United States Legal System

After completing this module, you will be able to:

1. Identify Federal and State laws which affect EMS.

2. Describe how the three branches of government work together to form laws and regulations that apply to EMS.

3. Differentiate between statutory law and case law, and explain their applicability to the EMS world.
4. Possess a basic understanding of administrative and regulatory law, and be familiar with how administrative laws apply to the EMS system.

5. Identify several situations where EMS personnel could be subject to various provisions of the criminal laws.

6. List checks and balances built into the EMS system.

7. Describe the legal systems (Federal and State courts) in the United States and their impact on EMS.

8. Within the context of the United States legal system, describe what challenges EMS organizations face in ensuring compliance with various laws.

**The Many Faces of Negligence**

After completing this module, you will be able to:

1. Identify the elements of a negligence claim, and apply situational factors to each element.

2. Recognize common EMS negligence scenarios, and explain how to avoid them.

3. Identify the burden of proof placed upon a plaintiff in an EMS negligence case.

4. Apply knowledge of negligence to the special factors involved in EMS patient refusals to explain their special “high risk” nature.

5. Analyze best practices in the areas of training, record keeping, and equipment logs and their significance in defense of a negligence claim.

6. Distinguish best practices to avoid liability during emergency vehicle operations.

**History of EMS Law**

After completing this module, you will be able to:

1. Examine the “White Paper” and understand how the principles contained therein apply to today’s EMS system.

2. Grasp how the National Highway Transportation Act has shaped the development of EMS.

3. Comprehend EMTALA and how it affects EMS services.
4. Explain COBRA and its purpose.

5. Identify how “KKK-A-1822 Federal Specs for Ambulances and Revisions” were developed with future application of NFPA specifications.

**Forming an EMS System**

After completing this module, you will be able to:

1. List and explain the primary differences between public and private EMS services in the areas of funding, oversight, and regulatory issues.

2. Analyze the strengths and weaknesses of different structural concepts for EMS services.

3. Examine the role of the EMS medical director, and describe the role of the medical director in the EMS system.

4. Describe the various EMS reimbursement systems and Federal regulations on billing for ALS and BLS ambulance transports.

**Safety Considerations**

After completing this module, you will be able to:

1. Identify security issues faced by EMS personnel, including the scene, patient transport, and emergency rooms in hospitals.

2. Discuss the steps EMS personnel can take to enhance their personal safety while at the scene, during transport, and at hospital emergency rooms.

3. Describe the risks of exposure to infectious disease, and discuss the key elements of an infection control policy.

4. Describe why Congress established OSHA, and its applicability to EMS, including those in public service in various jurisdictions, and to those employed in private EMS companies.

5. Describe the background and purpose of the Ryan White Care Act and how that statute impacts the EMS service.

6. Discuss workers’ compensation system and the concept of an administrative system to compensate injured employees, without regard to whether the employee was “at fault” when injured.
Employment

After completing this module, you will be able to:

1. Analyze the issues associated with recruiting and retaining EMS personnel, and identify best practices in each area.

2. Describe the importance of background checks, and be familiar with the rules and regulations governing employer and employee rights during background checks.

3. Develop a basic understanding of the Civil Rights Act of 1964, and relate its provisions to the hiring of EMT’s.

4. Identify the applicability of the Immigration and Naturalization Act, the Rehabilitation Act of 1973, and the Fair Credit Reporting Act, and analyze the ways in which each statute governs hiring practices.

5. Identify the critical incident stress management services available to EMS, and the importance of confidentiality for those who receive such services.

Staffing

After completing this module, you will be able to:

1. Review best practices in staffing of EMS personnel, including background checks (criminal history and credit history).

2. Identify the advantages of conducting skills testing of EMS applicants.

3. Describe the staffing requirement in your state for an ambulance responding to a scene and transporting a patient to the hospital.

4. Describe why affirmative action consent decrees were issued in the 1970s, requiring dual hiring or dual promotions.

5. Identify best practices in managing EMS personnel to avoid EEOC complaints concerning racial or religious discrimination.

Compensation and Benefits

After completing this module, you will be able to:

1. Describe the Equal Pay Act, and apply its implications to a modern EMS organization.
2. Analyze the Fair Labor Standards Act (FLSA), and gain an understanding of its basic provisions that apply to EMS, including hours of work and overtime pay requirements.

3. Develop an understanding of the Family Medical Leave Act (FMLA), and identify its applicability to the EMS organization.

4. Identify the components of the Uniformed Services Employment and Reemployment Rights Act (USERRA), and identify best practices for EMS organizations who have service members going into active military service.

5. Describe 401(k) plans and cafeteria plans and the advantages to employees to participate in such employer plans.

**Operational Laws**

After completing this module, you will be able to:

1. Define sexual harassment, identify the components of a sexual harassment claim, and describe best practices for preventing or handling such issues.

2. Identify the components of the Americans with Disabilities Act (ADA), and apply the components to common scenarios faced by EMS organizations.

3. Describe the Age Discrimination in Employment Act (ADEA).

4. Identify the responsibilities of the EMS organization in a “Drug-Free Workplace” program.

5. Identify the issues associated with random drug testing and other substance abuse issues.

6. Analyze the issues associated with EMS blood draws for police-related matters, and be able to apply the analysis to the needs of the individual EMS organization.

**Funding Laws**

After completing this module, you will be able to:

1. Develop a conceptual understanding of the Federal Anti-Kickback Statute as it relates to Medicare/Medicaid billing.

2. Identify business practices that could potentially place the EMS organization in violation of the Federal Anti-Kickback Statute.
3. Define “Whistleblower Protection,” identify the many areas within EMS where a “whistleblower” may have protections, and analyze best practices for the EMS organization to handle these issues.

4. Identify the various methods of “fee-for-service” arrangements, and identify pros and cons of each type of arrangement.

5. Describe the special issues associated with an EMS service that is a “Not-For-Profit” organization under the IRS code.

6. Analyze the role of the EMS organization in grant writing and grant acceptance.

**Legal Pitfalls of Discipline, Terminations, Layoffs**

After completing this module, you will be able to:

1. Define due process, and apply the concepts of due process to common situations encountered during employment investigations in EMS organizations.

2. Describe the concept of retaliation, and review best practices to minimize the risk of a retaliation claim.

3. Define the Workers Adjustment and Retraining Notification Act (WARN), and define its purpose and compliance requirements.

4. Identify the importance of adequate policy manuals, and be able to apply the concepts to several scenarios within the EMS organization.

5. Explain “Employment-at-Will” legal doctrine, which applies in many states, and its affect on EMS personnel issues.

6. Discuss “Right-to-Work” statutes, which apply in some jurisdictions, and how these laws affect EMS personnel issues.

7. Analyze the issues associated with severance and layoffs, and form conclusions with best practices for the EMS organization.

**Records Retention**

After completing this module, you will be able to:

1. Gain an understanding of the components of the Health Insurance Portability and Accountability Act (HIPAA), and analyze the issues that face EMS organizations in the areas of compliance, training, and handling violations.
2. Analyze the issues associated with maintaining patient confidentiality with regards to written reports and other patient documents.

3. Identify the confidentiality requirements for employment records, and develop a basic understanding of public records law.

4. Draw conclusions on best practices for maintaining patient, employment, and other necessary records that EMS organizations possess.

**National EMS Representation**

After completing this module, you will be able to:

1. Identify where EMS falls in the United States’ political structure.

2. Develop an understanding of how EMS fits into various types of interagency operations and how NIMS affects EMS organizations.

3. Identify the pitfalls associated with EMS’ position within the governmental structure of the United States.

4. Analyze how local EMS organizations can play a role in the national EMS response programs.

**Professional Organizations**

After completing this module, you will be able to:

1. Identify the professional organizations that play a role in the EMS field, and describe what the role of each organization plays.

2. Identify key standards written by the organizations and how they apply to the EMS organization.

3. Gain a general understanding of EMS Accreditation and the steps EMS organizations must take to achieve accredited status.

**Lobbying for Change**

After completing this module, you will be able to:

1. Define “lobbying” and the role lobbyists play in the development of EMS legislation.
2. Describe the various rules and regulations associated with lobbying and how to avoid ethical violations.

3. Analyze the pros and cons of political activity at both the local and national levels.

4. Explain the role that organized labor and other professional organizations play in the political process.

Available Texts


Supporting References/Research for Faculty and Students


Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Because of the dynamic nature of this subject material, we suggest the instructor build content to include contemporary readings.
Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Point of Contact

Dr. Jeffrey Lindsey, Professor EMS, St. Petersburg College/NAEMSE rep. jtlindsey1@aol.com

Course Outline

I. Basic Framework of the United States Legal System
II. The Many Faces of Negligence
III. History of EMS Laws
IV. Forming an EMS System
V. Safety Considerations
VI. Employment
VII. Staffing
VIII. Compensation and Benefits
IX. Operational Laws
X. Funding Laws
XI. Legal Pitfalls of Discipline, Terminations, Layoffs
XII. Records Retention
XIII. National EMS Representation
XIV. Professional Organizations
XV. Lobbying for Change
EMS Quality Management (C0247)

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1. Demonstrate an understanding of quality and performance management as it pertains to EMS.

2. Explain the various components of a quality management program:
   a. History.
   b. Domains.
   c. Measurement.
   d. Analysis.
   e. Management of the result.

3. Discuss the benefits of quality and performance management.

Course Objectives

Module 1: Why Quality

After completing this module, you will be able to:

1. Identify the need for quality improvement.

2. Recognize the current status of medical errors.

3. Choose to engage in quality activities and offer quality initiatives.

4. Analyze the current state of medicine and issues in quality.

5. Locate and identify the source of current medical errors information.

6. Choose to participate in comparing and contrasting the need for quality improvement.
Module 2: History of Quality in EMS

After completing this module, you will be able to:

1. Identify the historical figures that have contributed to modern quality improvement initiatives.

2. Identify the government structures that support and facilitate quality in EMS.

3. Create and identify the components of a key indicator.

4. Defend the use of, or share, quality improvement initiatives with private industry or trade groups.

5. As an EMS manager, locate and review five major trade or government projects fostering quality improvement projects.

Module 3: Domains of a QI System

After completing this module, you will be able to:

1. Define the three domains of quality improvement in EMS.

2. Identify the three components of EMS quality management.

3. Apply a strategy for each domain of quality.

4. Apply an appropriate technique to the proper domain of EMS quality, using a given a list of QI processes.

5. Differentiate the levels of measurement on outcomes for EMS patients.

6. Identify how an outcome in the system is influenced by structure or process.

7. Construct a flow chart of an EMS process within their organization, using a legend of shapes and rules.

Module 4: Defining Quality

After completing this module, you will be able to:

1. Understand how to create a standard within their organization.

2. Identify quality standards in the EMS industry and profession.
4. Using a variety of management tools, diagrams, and other processes, map and define quality in their processes.
5. Differentiate a performance measure, indicator, and benchmark.

**Module 5: Measuring Quality**

After completing this module, you will be able to:

1. Recognize areas of the EMS attributes that need quality improvement activities.
2. Identify the components of a service audit.
3. Extrapolate the out of hospital unit of service model.
4. Apply a mathematical tool as a decision-making strategy for EMS QI projects.
5. Define the intervals for measuring quality.
6. Apply techniques on how to make accurate observations and measure field activities.
7. Describe the challenges of measuring EMS activities.
8. Identify how measurements can be collected from episodic points of field care.
9. Identify technology that assists in data measurement.

**Module 6: Databases and Data Collection**

After completing this module, you will be able to:

1. Define a database.
2. Identify databases that are used to collect EMS-related information.
3. Evaluate the applicability of the National EMS Information system to an EMS organization.
4. Recognize relational databases with EMS information.
5. Create a system that tracks a patient longitudinally through the health care system.
6. Identify how a database interacts with the GIS system.
Module 7: Data & Quality Analysis

After completing this module, you will be able to:

1. Identify and calculate what the measures of central tendency are.
2. Interpret and apply test of correlation to determine causation and correlation with a set of data.
3. Identify patterns in statistics, and apply formulas to identify and interpret those patterns as significant or correlating.
4. Given a set of data, select the proper displays and ways to communicate the results or analysis of the data.
5. Distinguish between comparative and non-comparative measurement scales.
6. Describe efficient ways of ordering, analyzing and summarizing qualitative data.
7. At the end of the data analysis, designate what additional activities are needed to test, confirm and prove their validity.

Module 8: Quality Improvement Program and Project Management

After completing this module, you will be able to:

1. Describe the characteristics of a QI project or program.
2. Discuss how QI proposals are selected.
3. Identify the components of a well-designed project plan.
4. Explain how a QI project or program is controlled.
5. Develop and establish clear goals and objectives of a program or project.
6. Discuss how QI projects are scheduled and budgeted.
7. Identify the parts of an effective written project plan.

Module 9: Creating and Maintaining a Culture of Quality

After completing this module, you will be able to:

1. Apply techniques to help create a cultural change.
2. Understand how to assess culture in an organization.
3. Identify the components of a high reliability organization.
4. Using standardized assessments, determine the attitudes and beliefs in an organization.
5. Differentiate between values, beliefs, and attitudes.
6. Identify sample reward systems to promote a system of quality.
7. Recognize the components of a “just culture”.
8. Match the necessary parts to bring an organization into alignment.

**Module 10: Legal Considerations and Corrective Action**

After completing this module, you will be able to:

1. Describe the types of legal and regulatory influences on the quality improvement processes.
2. Identify existing statutes and laws from the various states outlining those processes that shall be utilized in the QA process.
3. Identify the statutory protections for quality improvement processes *Protected from Disclosure*.
4. Outline and list the steps necessary for remediation and due process for quality improvement.
5. Understand the regulatory and legal structures for quality improvement.
6. Identify how the legal process progress in the discovery phase and quality improvement issues related to civil litigation *Generally protected from discovery*.
7. Discuss HIPAA events that identify the need for discipline.
8. Identify the progression of a lawsuit and the responsibilities of an EMS manager with that process.

**Available Text**

Supporting References/Research for Faculty and Students

**U.S. Fire Administration (USFA) Publications:** http://www.usfa.fema.gov/applications/publications.

**Applied Research:** Agency Research: http://www.usfa.fema.gov

**Research Reports:** http://www.usfa.fema.gov

**Technical Reports:** http://www.usfa.fema.gov/applications/publications

**Topical Fire Research Series:** http://www.usfa.fema.gov/research

**Learning Resource Center:** http://www.lrc.fema.gov

**National Institute for Standards and Technology (NIST):** http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Because of the dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

**Lessons Learned Information Sharing:**

- http://www.llis.dhs.gov/member/secure/index.cfm

**Assessment**

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

**Point of Contact**

Dr. Jeffrey Lindsey, Coordinator FES, University of Florida, Jeffrey.lindsey@ufl.edu

**Course Outline**

I. Background and Significance of EMS Quality Control and Improvement
   
   A. Recognizing the Need for Quality Control Measures
   B. Recognizing the Current State of Medical Errors
   C. Components of a Quality Control Program
   D. Sources of Data and Information Related to Quality Control and Improvement
II. History of Quality Control and Improvement

A. Significant Motivators of the Quality Assurance Movement
B. Government Structures that Support Quality Control and Improvement Programs
C. Key Indicators and Data Acquisition
D. Quality Control in Community Risk Reduction

III. Domains of Quality Control

A. Three Domains of Quality Improvement in EMS
   1. Workforce
   2. Fleet
   3. Data
B. Three Components of Quality Management in EMS
   1. Retrospective
   2. Concurrent
   3. Prospective
C. Outcomes Based Measurements

IV. Creating Quality Based Programs in Organizations
Foundations of EMS Systems (C0297)

Course Description

An overview of the design and operation of EMS systems, delivery of services, and the echelons of care. The history of EMS, the interface of public and private organizations, and review of the various personnel who comprise these systems will be examined in relation to their impact on the health care delivery system.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1. Define EMS system.
2. List the 15 components on the 14 attributes of EMS systems.
3. Recall important milestones in the evolution of EMS.
4. Describe the Federal role in EMS.
5. Describe the role of State government in EMS.
6. Identify laws and legislation associated with EMS.
7. Describe the levels of prehospital care providers.
8. Describe medical oversight.
9. Identify various configurations of EMS delivery systems.
10. Summarize the recommendations and findings in “EMS Education Agenda for the Future.”
11. State the role of public education and prevention in EMS.
12. Describe the role of EMS in disasters.
13. State the role of communications and communications technology in EMS.
14. Identify the fundamentals of emergency medical dispatching.

15. Describe the sources of EMS funding.

16. Describe the role of information systems and evaluation in EMS.

17. Summarize the role of research in EMS.

Available Texts


Supporting References/Research for Faculty and Students


Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Because of the dynamic nature of this subject material, we suggest the instructor build content to include contemporary readings.
Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm

*Journal of Emergency Medical Services Prehospital and Disaster Medicine Prehospital Emergency Care, http://naemsp.org/Pages/pecjournal.aspx*

**Assessment**

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

**Point of Contact**

Bruce Walz, Ph.D., UMBC, 410-455-3223, walz@umbc.edu

**Course Outline**

I. Introduction to EMS Systems
   A. Components of an EMS
   B. EMS Agenda for the Future

II. History of EMSS
   A. Pre-industrial Period
   B. Industrial Period
   C. Modern Era

III. Legislation and Regulation
   A. Federal Role
   B. State Role

IV. Human Resources
   A. Prehospital Providers
   B. Hospital-based Providers
   C. Others
   D. Sources of Providers
   E. Provider Stress
V. Transportation
   A. Service Providers
   B. Delivery Systems
   C. Staffing
   D. Vehicles
   E. Air medical
   F. Equipment

VI. Medical Oversight
   A. Historical Background
   B. Models
   C. Regulation and Legislation

VII. Educational Systems
   A. Historical Background
   B. National Standard Curriculum
   C. EMS Education for the Future
   D. National Registry
   E. Settings for EMS Education
   F. Provider Courses

VIII. Public Education
   A. Public Education
      1. Forms of Public Education
      2. Benefits of Public Education
   B. Public Education Process

IX. Prevention
   A. Injury Process
   B. Injury Event
   C. Injury Types
   D. Injury Prevention Concepts

X. Public Access
   A. Public Access
   B. Call Processing
   C. Non-emergency Access Numbers
XI. Communications
   A. Role of Communications
   B. Role of Dispatcher
   C. Systems Communication Technology

XII. Disasters
   A. Types of Disasters
   B. Disaster Mitigation
   C. Hazards
   D. Incident Command System

XIII. Clinical Care
   A. History of Clinical Care
   B. Categorization and Designation
   C. Trauma Care
   D. COBRA Legislation
   E. Critical Care Transport

XIV. Information Systems
   A. Strategic Information Planning
   B. Information System Design
   C. Information System Integration
   D. Data Formats

XV. System Finance
   A. System Organization
   B. Sources of Funds
   C. Accounting and Budgeting

XVI. Evaluation
   A. Quality and Performance Evaluation
   B. Measuring Performance
   C. High Performance Systems

XVII. Research
   A. Benefits of Research
   B. Introduction to Scientific Method
   C. Research Design
   D. The Research Study
Community Risk Reduction in EMS (C0298)

Course Description

This is an upper-level baccalaureate course for students interested in public information and community relations in EMS. This course introduces the EMS professional to benefits of community information and community relations. Students explore issues in marketing, crafting the message, identifying the audience, developing programs, and creating press releases.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1. Demonstrate an understanding of community risk reduction as it pertains to EMS.

2. Explain the various components of a community risk-reduction program as it pertains to EMS including:
   a. Analysis.
   b. Public health.
   c. Identification.
   d. Program Development.
   e. Results measurement.

3. Discuss the benefits of a risk-reduction program in the community as it pertains to EMS.

Course Objectives

Module 1: Overview of Injury Prevention

After completing this module, you will be able to:

1. Discuss the history of injury prevention.

2. Explain injury prevention countermeasures.

3. Discuss the epidemiology of injuries.
Module 2: Categorizing Injuries

After completing this module, you will be able to:

1. Discuss unintentional injury, including:
   a. Motor vehicle accidents.
   b. Falls.
   c. Poisonings.
   d. Fires and burns.
   e. Drowning.
   f. Asphyxiation.
   g. Sports and recreational injuries.
   h. Occupational injury.

2. Discuss intentional injury, including:
   a. Self-inflicted violence.
   b. Homicide.
   c. Violence.
   d. Sexual assault.
   e. Child abuse.
   f. Elder abuse.

Module 3: Injury Prevention Program Development

After completing this module, you will be able to:

1. Explain the general principles of injury prevention.

2. Describe educational strategies.

3. Describe environmental strategies.

Module 4: Policy and Resource Development

After completing this module, you will be able to:

1. Discuss injury prevention laws.

2. Explain the role of advocates.

3. Describe community partners.

4. Discuss state and federal players.
Module 5: Injury Surveillance

After completing this module, you will be able to:

1. Define real-time surveillance.
2. Provide examples of information sources.
3. Discuss how to provide information to the public.
4. Discuss access to patients.
5. Discuss reporting patterns.

Module 6: Public Health

After completing this module, you will be able to:

1. Explain health promotion.
2. Discuss the role in immunization.
3. Describe surveillance.
4. Describe their role in public education.
5. Describe their role in home health care.
6. Describe their role in behavioral health care.
7. Describe their role in environmental health.
8. Discuss the functions of the health department.

Module 7: Public Health Community

After completing this module, you will be able to:

1. Discuss the various associations.
2. Describe the role of the U.S. Department of Health and Human Services.
3. Compare and contrast EMS and public health.
Module 8: Assessment of Injury Prevention Program

After completing this module, you will be able to:

1. Discuss benefits of data collection.
2. Describe risk assessment.
3. Explain cost versus benefit.
4. Discuss an evaluation of program.

Available Texts


Supporting References/Research for Faculty and Students

Risk Reduction in the Community, NFA, Emmitsburg, MD


Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Because of the dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.
Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Point of Contact

Dr. Jeffrey Lindsey, Professor EMS, St. Petersburg College/NAEMSE rep. jtlindsey1@aol.com

Course Outline

I. Overview of Injury Prevention
   A. Discuss the History of Injury Prevention
   B. Explain Injury Prevention Countermeasures
   C. Discuss the Epidemiology of Injuries

II. Categorizing Injuries
   A. Discuss Unintentional Injury, including:
      1. Motor Vehicle Accidents
      2. Falls
      3. Poisonings
      4. Fires and Burns
      5. Drowning
      6. Asphyxiation
      7. Sports and Recreational Injuries
      8. Occupational Injury
   B. Discuss Intentional Injury, including:
      1. Self-inflicted Violence
      2. Homicide
      3. Violence
      4. Sexual Assault
      5. Child Abuse
      6. Elder Abuse
III. Injury Prevention Program Development
   A. Explain the General Principles of Injury Prevention
   B. Describe Educational Strategies
   C. Describe Environmental Strategies

IV. Policy and Resource Development
   A. Discuss Injury Prevention Laws
   B. Explain the Role of Advocates
   C. Describe Community Partners
   D. Discuss State and Federal Players

V. Injury Surveillance
   A. Define Real Time Surveillance
   B. Provide Examples of Information Sources
   C. Discuss how to provide Information to the Public
   D. Discuss Access to Patients
   E. Discuss Reporting Patterns

VI. Public Health
   A. Explain Health Promotion
   B. Discuss the Role in Immunization
   C. Describe Surveillance
   D. Describe their Role in Public Education
   E. Describe their Role in Home Health Care
   F. Describe their Role in Behavioral Health Care
   G. Describe their Role in Environmental Health
   H. Discuss the Functions of the Health Department

VII. Public Health Community
    A. Discuss the various Associations
    B. Describe the role U.S. Department of Health and Human Services
    C. Compare and Contrast EMS and Public Health

VIII. Assessment of Injury Prevention Program
     A. Discuss Benefits of Data Collection
     B. Describe Risk Assessment
     C. Explain Cost versus Benefit
     D. Discuss an Evaluation of Program