Chapter 1

Foundations of EMT-Intermediate

Chapter Goals

- Understand roles/responsibilities of EMT-Intermediate (EMT-I) within an EMS system
- Know how roles/responsibilities differ from other providers
- Understand role of medical direction in out-of-hospital environment

Chapter Goals

- Identify importance of primary injury prevention activities as effective way to reduce death, disabilities, health care costs
- Value role that ethics plays in decision making in out-of-hospital environment
- Define certification & registration
Learning Objectives

- Define EMT-I licensure/certification, recertification, reciprocity requirements
- Evaluate importance of maintaining EMT-I license/certification
- Define EMS system

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Learning Objectives

- Describe benefits of EMT-I continuing education
- List current state requirements for EMT-I education
- Define profession, professionalism, health care professional
- Describe attributes of EMT-Is

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Learning Objectives

- Describe how professionalism applies to EMT-Is on & off duty
- Describe examples of professional behaviors in:
  - Integrity
  - Empathy
  - Self-motivation
  - Appearance & personal hygiene
  - Self-confidence
  - Communications
Learning Objectives

- Describe examples of professional behaviors in:
  - Time management
  - Teamwork & diplomacy
  - Respect
  - Patient advocacy
  - Careful delivery of service

- Provide examples of activities constituting appropriate professional behavior for EMT-Is

Learning Objectives

- Describe importance & benefits of quality EMS research to future of EMS

- Define medical direction & protocols

- Describe role of EMS physician providing medical direction

Learning Objectives

- Describe benefits of medical direction, both on-line & off-line

- Describe process for development of local policies & protocols

- Provide examples of local protocols

- Describe relationship between physician & EMS physician providing on-line medical direction
Learning Objectives

- Describe relationship between EMT-I & EMS physician providing on-line medical direction
- Describe components of continuous quality improvement
- Describe incidence, morbidity, & mortality of unintentional & alleged unintentional events in relation to injury & illness prevention

Learning Objectives

- Identify human, environmental, & socioeconomic impact of unintentional/alleged unintentional events in relation to injury & illness prevention
- Identify health hazards & potential crime areas within community

Learning Objectives

- Identify local municipal & community resources available for physical &/or socioeconomic crises
- Identify role of EMS in local municipal & community prevention programs
- Identify local prevention programs promoting safety for all age populations
Learning Objectives

- Identify ethical responsibilities
- Explain premise underlying EMT-I’s ethical decisions in out-of-hospital care
- Explain relationship between law & ethics in EMS
- Identify issues surrounding use of advance directives in making out-of-hospital resuscitation decisions

Introduction: What is an EMT-I?

- Completes training beyond EMT-Basic level
- Has varying degree of training & skills
- Completes training in advanced care
- Plays essential role in continuum of care
- Assures continuum of care during patient transfer

Introduction: What is an EMT-I?

- Can challenge your safety, composure, humanity
- Performs duties in uncontrolled, volatile circumstances
- Realistic
- Serves the public
EMT-I Training & Certification

- Possesses basic skills & key advanced skills:
  - Additional assessment skills
  - Use of advanced airway adjuncts
  - IV therapy
  - Management of tension pneumothorax

- Monitor & interpret basic cardiac dysrhythmias
- Administer key life-sustaining medications
- Defibrillate patients

EMT-I Training & Certification

- Requirements:
  - Complete EMT-I course
  - Complete written & practical examination
  - Become certified or licensed
  - Receive authorization from medical director of EMS agency or facility
  - Work under physician’s license
EMT-I Training & Certification

- The National Standard Curriculum (NSC)—foundation for training levels of EMTs
  - First responder
  - EMT-Basic
  - EMT-Intermediate
  - EMT-Paramedic

EMT-I Training & Certification

- NSC design
  - Addresses educational needs
  - Provides solid foundation; heavy emphasis on
    - Clinical problem solving
    - Decision making

- Prerequisites
  - Certification as EMT-Basic
  - Proficiency in reading, writing, math

EMT-I Training & Certification

- 300–400 hours
  - Didactic instruction
  - Skills laboratory
  - Clinical education
  - Field internship
EMT-I Training & Certification

- Certification process
  - Knowledge & skill examinations
  - Completion of training:
    - Complete course
    - Complete written & skill examinations
  - Some states use own testing process
  - Others use NREMT-Intermediate examination
  - Some require both

- NREMT
  - Private, nonprofit agency
  - Provides testing & registration nationwide
  - Must meet requirements for registration
    - Complete EMT-I training program meeting DOT standards
    - Pass EMT-I written and practical skills examinations
  - Retain NREMT certification
    - Reregistration at 2-year intervals
    - Attend refresher program
    - Obtain required continuing education

EMT-I Training & Certification

- Credentialing
  - Certification & licensure—common forms
  - Follows completion of training & testing
  - Objectives
    - Protect public from incompetence
    - Provide professional identification
  - Process varies among states
EMT-I Training & Certification

- Meaning of certification
  - Grants authority to individual
  - Issued by government or nongovernmental entity
  - Certification does not:
    - Give right to work as EMT-I
    - Guarantee employment
  - Volunteer & paid systems may add other requirements
  - Reciprocity
    - Allows transfer of certification or licensure
    - Automatic in some states—National Registry certification

Recertification/CE

- To function as EMT-I
  - Recertify every 1–5 years
  - Legally necessary
  - Recertification involves
    - Refresher course
    - Continuing education
    - Written &/or skills testing
  - Failure to complete recertification procedures—certification expires

Recertification/CE

- Benefits of CE:
  - Reduce erosion of knowledge & skills
  - Keep current on procedures & treatments
  - Share real-life experiences with others
  - Encourage further professional development

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Recertification/CE

- CE
  - Local level in-service training programs
  - State and national level
  - 1–2 day training program:
    - Prehospital Trauma Life Support (PHTLS)
    - Advanced Cardiac Life Support (ACLS)
    - Basic Trauma Life Support (BTLS)
    - Pediatric Advanced Life Support (PALS)
    - Prehospital Education for Prehospital Professionals (PEPP)
    - Advanced Medical Life Support (AMLS)
    - Geriatrics for EMS (GEMS)
    - Weapons of Mass Destruction (WMD)

Recertification/CE

- EMS-related reading
  - Features latest changes
  - Provide continuing education
  - List employment opportunities, EMS conferences
  - Feature new products & equipment
  - Highlight usable tips
  - Review EMS-related books, videos, software
  - Provide opportunity to write articles

Recertification/CE

- Serving as instructor/preceptor
  - Keeps skills current
  - Source of continuing education credit
  - Establishes you as leader, reliable resource
Professionalism

- Defining professionalism
  - Promote quality patient care
  - Instill pride
  - Promote high standards
  - Earn respect of other team members

Role & Responsibilities

- Role
  - Provide basic, advanced care to persons experiencing medical, traumatic emergencies

- Responsibilities
  - Ensure your safety & safety of fellow workers

Ethics & Confidentiality

- Meaning of ethics
  - Sets standards for right & wrong
  - Foundation for conduct
  - Morals refer to social, religious, personal standards of right and wrong

- Essential to exemplify principles, values

- Emotion should not be a factor
Ethics & Confidentiality

- When working through ethical issues, ask yourself:
  - What is in patient’s best interest?
  - What are patient’s rights?
  - Does patient understand issues at hand?
  - What is my professional, legal, moral, ethical obligation?

- Global concepts for protecting patients
  - Provide care that benefits patient
  - Do no harm
  - Recognize patient autonomy

Ethics & Confidentiality

- Ethical issues in contemporary EMT-I practice
  - Resuscitation
  - Patient confidentiality
  - Consent
  - Care in futile situations
  - Obligation to provide care
  - Conflicting physician orders

- Code of ethics—provides model of ideal conduct

EMS System

- Network of coordinated services

- Primary responsibilities
  - Respond for medical assistance
  - Lifesaving, stabilizing treatment
  - Transport

- Support services—other components indirectly involved
EMS System

- EMS systems
  - Result of geographic, political, demographic, economic pressures

- Different system types:
  - Fire service
  - Third-service
  - Private ambulance service
  - Hospital-based
  - Volunteer systems

Phases of Emergency Care

- Emergency call
  - System access & dispatch
    - Universal emergency number (9-1-1)
    - Emergency medical dispatchers (EMDs)
EMS System

- Prehospital care
- Delivery to hospital

EMS System

- Preparation for next event

Medical Direction

- Care provided in field
  - Extension of hospital & physician services
- Ensures appropriate high-quality care
- Ultimately responsible for all medical care
  - Many duties delegated
Medical Direction

- Role of EMS physician
  - Educating, training
  - Personnel selection process
  - Equipment selection
  - Developing clinical protocols
  - Quality improvement & problem resolution
  - Direct input in patient care
  - Interface between EMS & other health care agencies
  - EMS advocate
  - "Medical conscience" of EMS system
  - Patient care advocate

Medical Direction

- Types:
  - Direct
  - Indirect
  - Combination

Types of Medical Direction

- Initial training
- Treatment protocols
- Trauma protocols

- Concurrent
- Emergency medical direction
- Transport guidelines
- Continuous quality improvement

- Retrospective
- Case review
- Continuing education
- Continuous quality improvement

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Medical Direction

- Medical record keeping
  - Accurate, thorough documentation essential
  - Documentation:
    * Provides record of on-scene events
    * Conveys vital information about patient
    * Serves as key element in quality improvement activities

Medical Direction

- Continuous quality improvement
  - Performance improvement
  - Documentation
  - Direct observation
  - Response time data

Medical Direction

- Research
  - Proves which patient care protocols/techniques are useful & beneficial
  - Empirical data—evidence-based medicine
  - Helps eliminate uncertainty
  - Has immediate potential to save lives, limit morbidity
  - Important to recognize difference between:
    * Research
    * Magazine article
Public Information & Education

- Prepares public to respond appropriately
  - Recognize signs/symptoms of serious illnesses or injuries
  - Access EMS
  - Provide lifesaving interventions

- Reduce/prevent disease and injuries

- Increase compliance with treatment regimens

- Reduce unnecessary use of EMS/non-EMS resources

- Citizen involvement

- Marketing campaigns
Illness & Injury Prevention

- Epidemiology
  - Incidence/morbidity/mortality
    - Trauma—one of most prevalent health problems
    - Injury—intentional/unintentional
    - Accidental injury—unintentional
    - Intentional injury—purposeful action
    - Injury risks—real/potentially hazardous situations
    - Primary injury prevention—keeping injury from occurring

- Feasibility of EMS involvement
  - 600,000 EMS providers
  - Rural setting—EMS provider may be most medically trained
  - Welcome in schools, other environments

- Essential leadership activities
  - Save lives, reduce injury

- Recognize need for outside resources
  - Preventive education—challenge for EMS system to do alone
  - Collaboration with other groups
  - Financial support
Illness & Injury Prevention

- Implementation of prevention strategies:
  - Provide on-scene trauma prevention
  - Report to physician
    - Sexual abuse
    - Domestic abuse
    - Elderly abuse
  - Consider different program types

Summary

- EMS system
  - Network of coordinated services that work as unified whole to meet emergency care needs of community
  - Bridge between community & medical facilities

- To practice as EMT-I
  - Complete recognized EMT-I course
  - Complete written & practical examination
  - Become certified/licensed

Summary

- 300-400 total hrs (avg.) required for EMT-I training

- Reciprocity allows transfer of certification/licensure between states

- EMT-I must recertify every 1–5 yrs (avg. 2 yrs)