Module 2:

Preparatory

OBJECTIVES

At the completion of this lesson, the student will be able to:

COGNITIVE OBJECTIVES

2-1.1 Discuss the importance of body substance isolation (BSI).

2-1.2 Describe the steps the EMT-Basic should take for personal protection from airborne and blood borne pathogens.

2-1.3 List the personal protective equipment and preparation necessary for each of the following situations:
- Hazardous materials
- Rescue operations
- Violent scenes
- Exposure to bloodborne pathogens
- Exposure to airborne pathogens

2-1.4 Break down the steps to approaching a hazardous situation.

2-1.5 Define quality improvement and discuss the EMT-Basic's role in the process.

2-1.6 Define medical direction and discuss the EMT-Basic's role in the process.

2-1.7 Relate body mechanics associated with patient care and it's impact on the EMT-Basic.

2-1.8 Recognize the signs and symptoms of critical incident stress.

2-1.9 State possible steps that the EMT-Basic may take to help reduce/alleviate stress.

2-1.10 Define consent and discuss the methods of obtaining consent.

2-1.11 Define abandonment, negligence, and battery as they relate to the EMT-Basic

2-1.12 Discuss the implications for the EMT-Basic in patient refusal of transport.

2-1.13 Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or state provisions regarding EMS application.

2-1.14 Discuss the special considerations for assessing and managing a patient with suspected abuse or neglect.

AFFECTIVE OBJECTIVES

2-1.15 Assess areas of personal attitude and conduct of the EMT-Basic.

2-1.16 Explain the rationale for serving as an advocate for the use of appropriate protection equipment.

2-1.17 Explain the role of EMS and the EMT-Basic regarding patients with DNR orders.

2-1.18 Explain the rationale for properly lifting and moving patients.

PSYCHOMOTOR OBJECTIVES

2-1.19 Working with a partner, move a simulated patient from the ground to a stretcher and properly position the patient on the stretcher.

2-1.20 Working with a partner, demonstrate the technique for moving a patient secured to a stretcher to the ambulance and loading the patient into the ambulance.

PREPARATION

Motivation: The field of prehospital emergency medical care is an evolving profession in which the reality of life and death is confronted at a moment's notice. EMT-Basics work side by side with other health care professionals to help deliver professional prehospital emergency medical care. This course will help the EMT-Basic refresh previously learned material while gaining new knowledge, skills and attitudes necessary to be a competent, productive, and valuable member of the emergency medical services team.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to emergency medical care. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Body substance isolation equipment, Stair chair, Reeves stretcher, Ambulance cot, Blankets, Scoop stretcher, Long spine board, other patient lifting & moving devices

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in the EMT-Basic refresher course overview, administrative paper work, certification requirements, Americans with Disabilities Act issues, and roles and responsibilities of EMS.

Assistant Instructor: The instructor to Student ratio of 6: 1 for psychomotor skills practice. Individuals used as assistant instructors should be knowledgeable in the techniques of lifting and moving patients.

PRESENTATION

Declarative (What)

1. Scene Safety
    1. Safety precautions in advance - Suggested Immunizations
        1. Tetanus prophylaxis
        2. Hepatitis B vaccine
        3. Verification of immune status with respect to commonly transmitted contagious diseases
        4. Access or availability of immunizations in the community
        5. Tuberculin purified protein derivative (PPD) testing
        6. Other

    2. Body substance isolation (BSI) (Bio-Hazard)
        1. EMT-B's and patient's safety
            1. Hand washing
            2. Eye protection
                (1) Goggles or face shield should be used.
                (2) Prescription eyeglasses with removable side shields my be used in place of goggles.
            3. Gloves (vinyl and latex)
                (1) Needed for contact with blood or bloody body fluids.
                (2) Should be changed between contact with different patients.
            4. Gloves (utility) - needed for cleaning vehicles and equipment
            5. Gowns
                (1) Needed for large splash situations such as with field delivery and major trauma.
                (2) Change of uniform is preferred.
            6. Masks
                (1) Surgical type for possible blood splatter (worn by care provider)
                (2) High Efficiency Particulate Air (HEPA) or N-95 respirator if patient suspected for or diagnosed with tuberculosis (worn by care provider)
                (3) Airborne disease- surgical type mask (worn by patient)
            7. Requirements and availability of specialty training
        2. OSHA/state regulations regarding BSI
        3. Statutes/regulations reviewing notification and testing in an exposure incident.

    3. Personal protection
        1. Hazardous materials
            1. Identify possible hazards
                (1) Binoculars
                (2) Placards

(3) *Hazardous Materials, The Emergency Response Handbook*, published by the United States Department of Transportation

2. Protective clothing
   (1) Hazardous material suits
   (2) Self Contained Breathing Apparatus
3. Hazardous materials scenes are control by specialized Haz-Mat teams.
4. EMT-Basics provide emergency care only after the scene is safe and patient contamination limited.
5. Requirements and availability of specialized training

2. Rescue
   1. Identify and reduce potential life threats.
      (1) Electricity
      (2) Fire
      (3) Explosion
      (4) Hazardous materials
   2. Dispatch rescue teams for extensive/heavy rescue.
3. Violence
   1. Scene should always be controlled by law enforcement before the EMT-Basic provides patient care.
      (1) Perpetrator of the crime
      (2) Bystanders
      (3) Family members
   2. Behavior at crime scene
      (1) Do not disturb the scene unless required for medical care
      (2) Maintain chain of evidence

2. Quality improvement
   1. Definition - a system of internal/external reviews and audits of all aspects of an EMS system so as to identify those aspects needing improvements to assure that the public receives the highest quality of prehospital care.

   2. The role of the EMT-Basic in quality improvement
      1. Documentation
      2. Run reviews and audits
      3. Gathering feedback from patients and hospital staff
      4. Conducting preventative maintenance
      5. Continuing education
      6. Skill maintenance

   3. Medical Direction
      1. Definition
         1. A physician responsible for the clinical and patient care aspects of an EMS system.

2. Every ambulance service/rescue squad must have physician medical direction
3. Types of medical direction
(1) On-line
(1) Telephone
(2) Radio
(2) Off-line
(1) Protocols
(2) Standing orders
4. Responsible for reviewing quality improvement

2. The relationship of the EMT-Basic to medical direction
1. Designated agent of the physician
2. Care rendered is considered an extension of the medical director's authority (varies by state law)

3. Specific statutes and regulations regarding EMS in you state
1. Public Health Law Article 30
2. Part 800
3. Local regulations and protocols, if any

3. Health and Safety
1. Lifting techniques
1. Safety precautions
1. Use legs, not back, to lift
2. Keep weight as close to body as possible

2. Guidelines for lifting
1. Consider weight of patient and need for additional help
2. Know physical ability and limitations
3. Lift without twisting
4. Have feet positioned properly
5. Communicate clearly and frequently with partner
6. Safe lifting of cots and stretchers. When possible use a stair chair instead of a stretcher if medically feasible
(1) Using power-lift or squat lift position, keep back locked into normal curvature. The power-lift position is useful for individuals with weak knees or thighs. The feet are a comfortable distance apart. The back is tight and the abdominal muscles lock the back in a slight inward curve. Straddle the object. Keep feet flat. Distribute weight to balls of feet or just behind them. Stand by making sure the back is locked in and the upper body comes up before the hips.
(2) Use power grip to get maximum force from hands. The palm and fingers come into complete contact with the object and all fingers are bent at the same angles. The power-grip should always be used in lifting. This allows for maximum force to be developed. Hands should be

at least 10 inches apart.
(3) Lift while keeping back in locked-in position
(4) When lowering cot or stretcher, reverse steps
(5) Avoid bending at the waist

2. Carrying
    1. Precautions for carrying - whenever possible, transport patients on devices that can be rolled
    2. Guidelines for carrying
        1. Know or find out the weight to be lifted
        2. Know limitations of the crew's abilities
        3. Work in a coordinated manner and communicate with partners
        4. Keep the weight as close to the body as possible
        5. Keep back in a locked-in position and refrain from twisting
        6. Flex at the hips, not the waist; bend at the knees
        7. Do not hyperextend the back (do not lean back from the waist)

3. Reaching
    1. Guidelines for reaching
        1. Keep back in locked-in position
        2. When reaching overhead, avoid hyperextended position
        3. Avoid twisting the back while reaching
    2. Application of reaching techniques
        1. Avoid reaching more than 15 - 20 inches in front of the body
        2. Avoid situations where prolonged (more than a minute) strenuous effort is needed in order to avoid injury

4. Pushing and pulling guidelines
    1. Push, rather than pull, whenever possible
    2. Keep back locked-in
    3. Keep line of pull through center of body by bending knees
    4. Keep weight close to the body
    5. Push from the area between the waist and shoulder
    6. If weight is below waist level, use kneeling position
    7. Avoid pushing or pulling from an overhead position if possible.
    8. Keep elbows bent with arms close to the sides

4. EMT and Stressful situations
    1. Simple definition of Stress
        1. Any response, physical, emotional or behavioral , we have to things that happen in our lives, on and off the job.

    2. Examples of situations that may produce a stress response
        1. Mass casualty situations
        2. Infant and child trauma
        3. Amputations

4. Infant/child/elder/spousal abuse
5. Death/injury of co-worker or other public safety personnel

3. The EMT-Basic will experience personal stress as well as encounter patients and bystanders in severe stress.

4. Stress management
    1. Recognize warning signs
        1. Irritability to co-workers, family, friends
        2. Inability to concentrate
        3. Difficulty sleeping/nightmares
        4. Anxiety
        5. Indecisiveness
        6. Guilt
        7. Loss of appetite
        8. Loss of interest in sexual activities
        9. Isolation
        10. Loss of interest in work
    2. Life style changes
        1. Helpful for "job burnout"
        2. Change diet.
            (1) Reduce sugar, caffeine and alcohol intake.
            (2) Avoid fatty foods.
            (3) Increase carbohydrates.
        3. Exercise
        4. Practice relaxation techniques, meditation, visual imagery.
    3. Balance work, recreation, family, health, etc.
    4. EMS personnel and their family and friend's response
        1. Lack of understanding.
        2. Fear of separation and being ignored.
        3. On-call situations cause stress.
        4. Can't plan activities.
        5. Frustration caused by wanting to share.
    5. Work environment changes
        1. Request work shifts allowing for more time to relax with family and friends.
        2. Request a rotation of duty assignment to a less busy area.
    6. Seek/refer professional help.

5. Critical incident stress debriefing (CISD)
    1. A team of peer counselors and mental health professionals who help EMTs deal with critical incident stress.
    2. Meeting is held within 24 to 72 hours of a major incident.
        1. Open discussion of feeling, fears, and reactions
        2. Not an investigation or interrogation
        3. All information is confidential.

4. CISD leaders and mental health personnel evaluate the information and offer suggestions on overcoming the stress.

3. Designed to accelerate the normal recovery process of experiencing a critical incident.
    1. Works well because feelings are ventilated quickly.
    2. Debriefing environment is non-threatening.
4. How to access local system.

6. Comprehensive Critical Incident Stress Management includes
    1. Pre-incident stress education
    2. On-scene peer support
    3. One-on-one support
    4. Disaster support services
    5. Diffusing
    6. CISD
    7. Follow up services
    8. Spouse/family support
    9. Community outreach programs
    10. Other health and welfare programs such as wellness programs

5. Medical - Legal
    1. Informed Consent
        1. Patient must be of legal age and able to make a rational decision.
        2. Patient must be informed of the steps of the procedures and all related risks.
        3. Must be obtained from every conscious, mentally competent adult before rendering treatment.

    2. Implied Consent
        1. Consent assumed from the unconscious patient requiring emergency intervention
        2. Based on the assumption that the unconscious patient would consent to life saving interventions

    3. Children and mentally incompetent adults
        1. Consent for treatment must be obtained from the parent or legal guardian.
            1. Emancipation issues
            2. State regulations regarding age of minors
        2. When life threatening situations exist and the parent or legal guardian is not available for consent, emergency treatment should be rendered based on implied consent.

    4. Confidentiality
        1. Confidential information
            1. Patient history gained through interview

2. Assessment findings
3. Treatment rendered

2. Releasing confidential information
    1. requires a written release form signed by the patient. Do not release on request, written or verbal, unless legal guardianship has been established.
    2. When a release is not required
        (1) Other health care providers need to know information to continue care.
        (2) State law requires reporting incidents such as rape, abuse or gunshot wounds.
        (3) Third party payment billing forms
        (4) Legal subpoena

5. Refusal of Care
    1. The patient has the right to refuse treatment.
    2. The patient may withdraw from treatment at any time. I.E. an unconscious patient regains consciousness and refuses transport to the hospital.
    3. Refusals must be made by mentally competent adults following the rules of expressed consent.
    4. The patient must be informed of and fully understand all the risks and consequences associated with refusal of treatment/transport, as well as signing a "release from liability" form.
    5. When in doubt, err in favor of providing care.
    6. Documentation is a key factor to protect the EMT-Basic in refusal.
        1. Competent adult patients have the right to refuse treatment.
        2. Before the EMT-Basic leaves the scene, he should:
            (1) Try again to persuade the patient to go to a hospital.
            (2) Ensure the patient is able to make a rational, informed decision, e.g., not under the influence of alcohol or other drugs, or illness/injury effects.
            (3) Inform the patient why he should go and what may happen to him if he does not.
            (4) Consult medical direction as directed by local protocol.
            (5) Consider assistance of law enforcement.
            (6) Document any assessment findings and emergency medical care given, and if the patient still refuses, then have the patient sign a refusal form.
            (7) The EMT-Basic should never make an independent decision to not transport.

6. Assault
    1. Unlawfully touching a patient without his consent.
    2. Providing emergency care when the patient does not consent to the treatment

7. Abandonment - termination of care of the patient without assuring the continuation of care at the same level or higher.

8. Negligence - deviation from the accepted standard of care resulting in further injury to the patient. Components are:
    1. Duty to act
    2. Breach of the duty
    3. Injury/damages were inflicted
        1. Physical
        2. Psychological
    4. The actions of the EMT-Basic caused the injury/damage.

9. Duty to Act
    1. A contractual or legal obligation must exist.
        1. Implied
            (1) Patient calls for an ambulance and the dispatcher confirms that an ambulance will be sent.
            (2) Treatment is begun on a patient.
        2. Formal - ambulance service has a written contract with a municipality. Specific clauses within the contract should indicate when service can be refused to a patient
    2. Legal duty to act - May be moral/ ethical/ contractual considerations in nature.
        1. There are no NYS laws regarding duty to act.

10. Advance Directives
    1. Do Not Resuscitate (DNR) orders
        1. Patient has the right to refuse resuscitative efforts.
        2. Requires written order from physician on NYS DOH form.
        3. Review state and local legislation/protocols relative to DNR orders and advance directives
            (1) Prehospital DNRs honored
            (2) Health Care Proxy not honored
        4. Refer to current NYS DOH memo.
            (1) Good faith efforts
            (2) Defined by state legislation

11. Abuse and neglect (child or elder)
    1. Definition of abuse - improper or excessive action so as to injure or cause harm.
    2. Definition of neglect - giving insufficient attention or respect to someone who has a claim to that attention.
    3. The EMT-Basic must be aware of condition to be able to recognize the problem.
    4. Physical abuse and neglect are the two forms of abuse that the EMT-Basic is likely to suspect.

5. Signs and symptoms of abuse
    1. Multiple bruises in various stages of healing.
    2. Injury inconsistent with mechanism described.
    3. Repeated calls to the same address.
    4. Fresh burns.
    5. Parent or guardian seem inappropriately unconcerned.
    6. Conflicting stories
    7. Fear on the part of the patient to discuss how the injury occurred.
6. Signs and symptoms of neglect
    1. Lack of adult supervision.
    2. Malnourished appearing child.
    3. Unsafe living environment
    4. Untreated chronic illness; e.g., asthmatic with no medications.
7. CNS injuries are the most lethal - shaken baby syndrome
8. Do not accuse in the field
    1. Accusation and confrontation delays transportation.
    2. Bring objective information to the receiving facility

6. Domestic Violence
    1. Definition - Domestic violence is a pattern of coercive behavior that can include physical, sexual, economic, emotional, and/or psychological abuse of one individual by another in order to establish and maintain power and control.

    2. Relationships which may lead to Domestic Violence
        1. Child
        2. Spousal
        3. Elders (parents and others)
        4. Sibling
        5. Living companion
        6. Dating partners
        7. Health care provider or attendant

    3. Forms of Abuse either by Commission or Omission including, but not limited to:
        1. Physical Abuse - inflicting or attempting to inflict physical pain including slapping, biting, hair pulling, hitting, stabbing, shooting, and withholding access to medication and medical care.
        2. Emotional Abuse - constant criticism, belittling someone's abilities and competency, name-calling and other attempts to undermine someone's self-image and sense of worth.
        3. Psychological Abuse - controlling access to friends, family, school, or work; forced isolation; intimidation; threats; and blackmail.
        4. Environmental Abuse - withholding appropriate climate control, lighting, or clothing for the environmental conditions.

5. Sexual Abuse - any exploitive or coercive, non-consensual sexual contact including marital and acquaintance rape; attacks on the sexual parts of the body; and treating someone in a sexually derogatory manner.
6. Economic Abuse - attempts to make a person completely dependent on the abuser for money and economic survival.

4. Role of the EMS Provider
    1. Assess and treat the patient
       Identify:
        1. Health ramifications
        2. Social ramifications
        3. Psychological ramifications
        4. Environmental ramifications
    2. Legal responsibility
        1. Part 800.15 (b)
        2. BLS Protocols - General approach to Prehospital management
    3. Observation
        1. Conditions at the scene
            (1) environment
            (2) temperature and light
            (3) foul odors
            (4) isolation
        2. The Patient
            (1) hesitant when questioned
            (2) fearful of those present
            (3) hygiene/clothing/cleanliness
        3. Household members
            (1) angry
            (2) indifferent
            (3) refusing necessary assistance
            (4) obstructing questioning and care
        4. Information Gathering
            (1) The right question at the right time.
                (1) Out of hearing and sight of the possible abuser
                (2) Stress confidentiality
                (3) Does the patient feel safe
                    1) at the scene
                    2) in the ambulance
                (4) Be direct; non-threatening and empathetic
                (5) Listen to what children have to say
                (6) Be positive and receptive but do Not ask questions related to the suspected abuse.
            (2) Other Information
                (1) Conflicting accounts of the incident

(2) Conflicts between the accounts of the incident and the physical findings
(3) Patient History
(4) Physical findings
    1) Old bruises
    2) Sores and ulcers
    3) Topical infections - neglected injuries
    4) Injuries in uncommon places
        1) back of legs
        2) soles of feet
    5) Patterned injuries - hand, belt buckle or other imprints.
    6) Thermal injuries - burns and cold
(5) History of calls to the same location or patient
(6) History, circumstances, setting, condition or environment inconsistent with injury or illness (e.g. child fell off a bike; where is the bike? and what does it look like?)
(7) The presence of obvious alcohol and other substance use/abuse.

5. Documentation
    1. The PCR
        1. Be factual and specific - not judgmental
        2. Document
            (1) patient condition
            (2) conditions found at the scene
            (3) interaction with those at the scene
            (4) history
            (5) patient "states...."
            (6) "reported to....."
    2. Make a verbal report of findings and suspicions at the receiving hospital.
    3. Have a policy for cases of refusal of care/transportation
    4. Report suspicions to Social Service agencies
        1. Child Protective Services
        2. Adult Protective Services
    5. Reports to other Agencies

6. Other issues
    1. The providers safety
    2. The emotions of the provider
    3. maintaining a professional attitude
    4. consider Critical Incident Stress Management (CISM)
    5. Dealing with a suspected abuser

6. Remember: The severity of an injury is not necessarily a good indicator of the severity of the situation.

7. DOMESTIC VIOLENCE INDICATORS
    1. OBSERVATIONS
        1. Patient fearful of household member.
        2. Patient reluctant to respond when questioned.
        3. Patient is in an unusually isolated, unhealthy or unsafe living environment.
        4. Patient exhibits poor personal hygiene/inappropriate clothing.
        5. Patient and household member give conflicting accounts of incident.
        6. A history which is inconsistent with the injury or illness.
        7. Household member is angry or indifferent towards patient and refuses to provide necessary assistance.
        8. Household member refuses/hesitates to permit transport to hospital.
        9. Household member seeks to prevent the patient from interacting privately or speaking openly.
        10. Household member concerned about a minor patient problem but not the patient's serious health issue.
        11. Previous or repeat police/EMS response to scene, indicating frequent violence in household.
        12. Unexplained delay in seeking treatment for injury.

8. DOMESTIC VIOLENCE SUBJECTIVE ASSESSMENT

The ambulance may provide a "SAFE" environment for the victim of Domestic Violence to admit that there is a problem or ask for assistance. One or more of the sample questions must be asked of all victims of injury or in cases where there is a high level of suspicion based on the documented indicators. The only exception is when the cause of the injury is clearly known or obvious. All of the sample questions may not be appropriately asked of all patients. The EMS provider must decide which should be asked and how, if necessary, they may be modified. Ask the patient direct, non-threatening questions in an empathetic manner. Emphasize that these questions are asked of all injured patients and all other patients where there is particular concern.

If a child is involved who provides information that gives you reasonable cause to suspect child abuse or neglect, do not ask further questions. Simply be positive and receptive if the child continues to speak.

You may find it difficult to ask these questions. However, asking these questions should be part of your patient assessment. It is the first step toward appropriate care.

1. SAMPLE QUESTIONS:
    1. WE OFTEN SEE PEOPLE WITH INJURIES SUCH AS YOURS

WHICH ARE CAUSED BY SOMEONE ELSE, COULD THIS BE HAPPENING TO YOU?

2. YOU SEEM FRIGHTENED. HAS ANYONE HURT YOU?
3. MANY PATIENTS TELL ME THEY HAVE BEEN HURT BY SOMEONE CLOSE TO THEM. COULD THIS BE HAPPENING TO YOU?
4. SOMETIMES WHEN OTHERS ARE OVERPROTECTIVE AND JEALOUS, THEY REACT STRONGLY AND USE PHYSICAL FORCE. COULD THIS BE HAPPENING TO YOU?
5. ARE YOU AFRAID OF ANYONE IN YOUR HOUSEHOLD?
6. HAS ANY HOUSEHOLD MEMBER PHYSICALLY HURT YOU OR THREATENED YOU

SUGGESTED APPLICATION

Procedural (How)

Demonstrate proper lifting, carrying and reaching techniques.

Contextual (When, Where, Why)

EMT-Basics will use the concepts of scene safety, personal protection, body mechanics and stress management on a daily basis throughout their careers in EMS. Failure to do so may lead to a premature end to their careers through serious injury or even death. The well-being of the EMT depends on the his/her ability to practice these concepts at all times both on and off duty.

STUDENT ACTIVITY

Auditory (Hear)

1. Students should hear the specific expectations of the training program as well as what they can expect to receive from the training.
2. Students should hear actual case law and common law decisions relative to EMT-Basic care.

Visual (See)

1. Students should receive a copy of the cognitive, affective and psychomotor objectives for the entire curriculum.
2. Students should receive the final skill evaluation instruments.
3. Students should see various audio-visual aids or materials of scenes requiring personal protection
4. Students should see proper lifting, carrying and reaching techniques
5. Students should see audio-visual aids and materials of definitions of medical/legal terms such as consent, confidentiality, refusal of care.

Kinesthetic (Do)

1. Students should complete the necessary course paperwork.
2. Students should practice proper lifting, carrying and reaching techniques.

3. Students should practice making decisions while role playing the various medical/legal and ethical situations that occur in the EMTs environment. These scenarios should include, as a minimum, consent, confidentiality, refusal of care and DNR orders.

Instructor Activities

Supervise student practice.
Reinforce student progress in cognitive and affective domains.
Redirect students having difficulty with content.

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content.

SUGGESTED ENRICHMENT

What is unique in the local area concerning this topic?