

EMT–Mining Supplement

EMT–Mining Supplement

Revised 2005

Presented to:

**Curriculum and Education Committee
West Virginia Office of Emergency Medical Services**

and

**Coal Mine Training Board
West Virginia Office of Mine Health Safety and Training**

By the

**Curriculum and Education Curriculum Subcommittee
West Virginia Department of Health and Human Resources
Office of Emergency Medical Services**

Contributors

Mark Wigal
West Virginia Department of Health and Human Resources
Office of Emergency Medical Services

Rick Rice
West Virginia Department of Education
Regional Education Service Agency

Milton Smallwood
West Virginia Office of Mine Health Safety and Training

Wayne Persinger
Massey Coal

Bill Eades
Peabody Coal Company

Donnie Coleman
Southern Safety, Inc.

EMT Mining Supplement

Table of Contents

Equipment and Supplies	S-5
CPR	S-6
Patient Assessment	S-7
Disaster Scene Operations – Mining	S-8
Disentanglement	S-16
Lifting and Moving	S-18
Transporting the Patient	S-21
Communications	S-22

Chapter 1 - Equipment and Supplies - Required Equipment

Item Number	Quantity	Description
1	4	Oral pharyngeal airways, assorted adult sizes
2	3	Nasal airways, adult size
3	2	Sterile universal trauma dressing, 2 each
4	24	Sterile gauze sponges, individually wrapped 4" x 4"
5	2	Soft roller bandages, self adhering 6" x 5 yard
6	2	Rolls, adhesive tape, 3" x 10 yard
7	1	Pair bandage scissors, 7 ½"
8	1	Mouth-to mask resuscitation device, with oxygen inlet or valve mask with one-way valve
9	1	Blood pressure cuff adult size (aneroid phygmomanometer)
10	1	Stethoscope
11	1	Bite stick
12	4	Sterile ABD dressing, 5" x 9" or equal
13	6	Soft roller bandages, self adhering, 4" x 5 yard
14	4	Soft roller bandages, self adhering, 6" x 5 yard
15	2	Chest wound sealer
16	1	Blood pressure cuff, adult size (aneroid phygmomanometer)
17	1	Stethoscope
18	1	Portable suction unit with large bore tip
19	1	Portable oxygen unit; pressure gauge; flow meter indicator (adjustable 2 – 15 lpm; 300 liter ("D") cylinder or equal; delivery tube; non-rebreather mask and nasal cannula)
20	1	Spare 300 liter ("D") cylinder or equal
21	1	Plastic disposable tubing, 6' (for mouth to mask or bag valve mask)
22	1	Traction splint with padded ankle hitch
23	12	Safety pins, large
24	2	Sterile sheets, disposable for burns
25	1	Sterile water, 1,000 ml.
26	1	Oral glucose

1 - AED

Item Numbers 1 - 10 (Inclusive) are required in a 1st Response Kit.

Item Numbers 1 – 26 (Inclusive) are required in 2nd Response Kit.

Module 1 – CPR

Objective

Describe step-by-step, how to provide CPR when moving a patient.

Major problems occur when moving a patient in a mining environment. Obstacles such as machinery, equipment limits visibility, awkward body position, overhead obstructions, and uneven floor are major problems in the mining industry when moving a patient while performing CPR.

CPR could be continued once the patient is loaded into the means of transportation, from underground to the outside and then to the ambulance. Problems that may occur during transportation could be:

1. Coal height (low coal).
2. Type of transportation.
 - a. Jeep.
 - b. Bus/mantrip.
 - c. Motor.
 - d. Ambulance car.
 - e. Scoop with transport car.
 - f. Belt.
3. Time of transportation to outside.
4. Problem in transportation (loss of power, wreck, etc.).
 - a. AED use on metal decking and water.
5. Safety and your surroundings.

Module 4 – Patient Assessment

Objective

List at least five problems at the emergency scene that can complicate the information gathering process.

Problems with Assessment

Hazards to the patient and/or the rescuer in the mining environment can include, but are not limited to:

1. Toxic gas.
2. Fire/explosion related injuries.
3. Unstable material (roof and rib, dirt, rock and coal slides, equipment).
4. Electrical hazards.
5. Visibility.
6. Noise.
7. Confined space (low coal).
8. Lighting.
9. Awkward body position of patient and/or rescuer.
10. Heights (in prep plant; heavy surface equipment).
11. Water (transport routes; potential hypothermia of patient).
12. Infection control.

Module 7 – Disaster Scene Operations Mining

Objectives

By the end of this module, you should be able to:

1. List some of the problems associated with gaining access.
2. List the minimum protective gear you should wear.
3. Describe the precautions to take if you find yourself in a burning building.
4. Select the tools to be used in gaining access.
5. List the six phases of a vehicle rescue operation.
6. Compare and contrast the primary situation assessment and the secondary situation assessment.
7. List some of the sources of information for locating patients at a motor vehicle accident.
8. Describe the use of flares, define “accident zone” and state the basic rule of thumb for flare placement.
9. Describe the procedures for the emergency moving of downed wires, if you have been fully trained in the procedures and carry the necessary safety equipment.
10. Describe how to fight a fire in the vehicle engine compartment when the hood is open and the hood is closed (compared to fighting a spilled fuel fire), if you have been specifically trained in firefighting and carry the necessary equipment.
11. Describe the principles behind the stabilization of a vehicle.
12. Compare and contrast gaining access and disentanglement.
13. Indicate the tools of choice and list, step by step, the basic procedures to *gain* access through vehicle doors.
14. Indicate the tools of choice and list, step by step, the basic procedures to *gain* access through vehicle windows.
15. Indicate the tools of choice and list, step by step, the basic procedures to gain access through the body of a vehicle.

Skills

As an EMT-M, you should be able to:

1. Control hazards at the emergency scene, doing only what you have been trained to do and using the required safety equipment.
2. Protect yourself if you find that you are in a building that is on fire.
3. Reach patients trapped in buildings by gaining access through locked doors and windows, doing only what you have been trained to do.
4. Reach patients trapped in vehicles by gaining access through locked doors, through windows, and through the vehicle body (optional) - doing only what you have been trained to do.
5. Effectively evaluate an emergency and summon appropriate services to aid in scene control and gaining access.

Terms

You may be using these for the first time:

1. **Disentanglement** - creating a pathway through wreckage and removing wreckage from the patient to allow for proper care and the preparation for removal and transfer.
2. **Packaging** - completing the care procedures needed (dressing, bandaging, splinting, immobilizing) for transfer to the ambulance.
3. **Transfer** - moving the packaged patient from the mine to the ambulance for transport.

Gaining Access to Patients

Often, control at the accident scene will be the concern of the EMT-M. There will be times when you respond to an accident and arrive before anyone else. In such cases, you must assure your own safety.

Reaching a person injured in an accident may involve nothing more than opening a door, or it may be necessary to use a variety of tools to gain access to patients who are trapped.

1. Assure your own safety.
2. Do what you can to protect the patient, or take an entry route that reduces the chance of harming him/her.
3. Gain entry by the quickest, safest way possible.

Extrication

The term extrication refers to all activities that disentangle and free a patient from entrapment. Often, the extrication aspects of rescue are not stressed in training sessions. There are distinct phases of a rescue operation. As an EMT-M, you may be involved in all of these phases; however, your main duties are to perform patient assessment and to provide basic EMT-M level emergency care.

The Phases of a Rescue Operation

Assessment - In this phase, the EMT-M in charge assesses the need for service; assesses the capabilities of the emergency service unit to control the situation; and locates the accident victims.

Hazard Control - Different types of hazards may be encountered at the scene. In almost every accident, hazards must be controlled before patients can be reached.

Support Operations - There may be a need for flood lighting, patient protection, special rescuer protection, fire prevention, and warning and signaling operations.

Gaining Access - It is during this phase of activity that an opening is made in the debris large enough for an EMT-M to pass through with a life-support kit.

Patient Assessment and Emergency Care - This phase begins when an EMT-M reaches the patient and initiates the primary survey or begins talking with the patient. The emergency care phase does not end until the patient is transferred to the care of the emergency department personnel.

Disentanglement - This procedure can be regarded as the “extrication: phase of a rescue operation. The phase has two parts:

1. First, rescuers make a pathway through the debris by which other rescuers and tools may reach the patients. The pathway also will serve as a means of egress.
2. Second, the rescuers remove debris from the patient so that the patient can be moved.

Removal and Transfer - This is another two part operation. Once properly packaged, the patient is removed from the debris and transferred to the waiting conveyance.

Attitude and Personal Safety - It may sound obvious, but when you think of your responsibilities at the scene of an accident, think positively! In the majority of accidents, access to trapped persons was gained quickly and with no more than basic hand tools. You can control almost every situation with basic supplies.

Let us consider personal safety. Fix in your mind the image of firefighter properly dressed for dangerous duty. They wear: a specially designed helmet; a wrap-around shield or coverall-type goggles; a multi-layered coat that resists both penetration by sharp objects and fire; waterproof, slip resistant gloves; and rubber boots that probably have steel insoles and shin guards. Moreover, they may be wearing canvas and rubber turnout pants for additional lower body protection, and coat and pants may be made with a special fire resistant material.

How will you be protected at the scene of an accident? Obviously, a firefighter's gear offers the utmost protection from accident scene hazards. Many EMT-Ms find that this gear limits their mobility, however, and they choose articles of clothing lighter and less cumbersome. A construction-type helmet offers excellent protection without the height, length, and weight of an ordinary fire helmet. Keep it strapped on. Coverall-type goggles provide excellent eye protection. A fringe benefit of chemical or mechanical safety goggles is that they can be held securely on a helmet by the elastic strap. Use only the better grade goggles that are vented and keep fogging at a minimum. Select gloves that are light but strong. Ordinary garden gloves often fit the needs of EMT-Ms, and are not as bulky as those firefighters often wear. A short turnout coat offers adequate protection. Few EMT-Ms wear boots; instead many wear either high-top or low quarter style work shoes with steel toe protectors.

Whatever your choice of protective gear, wear it! A rescuer is of little value when an on-the-scene mishap causes him to become one of the victims.

The Importance of Proper Assessment

The scene of a serious mining accident is often a nightmare of sights and sounds that tax the emotional stability of even the most experienced EMT-Ms. Inexperienced EMT-Ms often wish to rush to the assistance of accident victims without regard for their own safety. Unfortunately this basic desire to help may place an entire rescue operation in danger. Independent activity, with little regard for a sequence of operations or a team effort, can have serious consequences. For example, an EMT-M may be electrocuted if he brushes against a downed wire that he overlooked in his rush to aid the injured. He/she *may* spend valuable time trying to remove persons only slightly injured, while persons with life-threatening problems go unattended. Injuries may be aggravated or death caused by attempting to pull those persons from the wreckage who require immobilization. Or, he may injure himself while trying to accomplish difficult extrication procedures while in a highly emotional state.

Assessing the Situation

An Emergency Medical Technician-Miner makes a two part assessment of the patient to determine the extent of injuries; the initial and focused history/physical exam surveys.

Likewise, an on-the-scene assessment of a mining accident situation has two parts. First the EMT-M should make a primary assessment to determine if the services of emergency service units are needed. Then he should determine by a secondary assessment if the immediately available resources are sufficient to control the situation.

The primary assessment for need is a natural reaction for people who witness an accident to call for help. The problem is that in many instances they overact. To determine if services are needed, you must answer two questions. Are there injuries? Are people or property endangered? The second of these questions embraces the objectives of the EMT-M namely, to protect life and property.

The secondary assessment for capabilities is to determine if there a sufficient number of rescuers in the responding force to cope with the accident situation. Are the rescuers properly trained and equipped?

Even when you can answer all of these questions affirmatively, you will not be able to determine whether the responding force is sufficient to cope with the problem until you complete your assessment. Consider the following factors in the secondary assessment: The number and type of equipment involved; the number of persons injured and the apparent extent of their injuries; roof, rib and mine gas hazards; apparent extrication problem.

A trained EMT-M is able to call for assistance logically, properly, and strictly on the basis of information that he has gathered in the secondary assessment of the situation. Some of the kinds and sources of specialized aids include:

1. Additional ambulances or transport vehicles when many people are injured.
2. Fire apparatus either when equipment is on fire or when there is danger of fire.
3. Helicopter ambulances to move seriously injured persons.
4. A medical team to assist when the removal of injured persons will be delayed.
5. Clergymen to meet an accident victim's religious needs.

Resources may be limited in many communities. Keep in mind these points:

1. You must know where community resources are and how to contact them quickly.
2. You must be willing to call for resources.
3. You must be willing to use them.

An accident may produce dangerous situations that will test the capabilities of the most proficient and experienced EMT-M.

Locating Accident Victims

Once the EMT-M in charge has completed his assessment of the situation, he must be sure that he has located all of the accident victims. The likelihood of one or more victims being away from the wreckage, even far away, is very real.

Moreover, injured persons may walk away from the scene in a dazed state. It is not uncommon for an injured person to leave the scene and seek help from someone who is trapped. Nor is it uncommon for those injured persons to fall unconscious away from the scene.

Whatever the case, injured persons must be located and cared for before their condition deteriorates.

Information about the number and location of accident victims can be obtained from various sources. If they are conscious and coherent, patients are the best sources of information about the number of persons involved in the accident. If possible, get the names of all persons involved in the accident. If possible, get the names of all persons so that a comparison can be made between names and numbers. Frame apprehension to injured persons. Make no reference to the severity of injuries and above all, do not ask questions or make statements in such a way that suggests that some of the victims are not accounted for. Learning that a family member or friend is lost may cause an injured person to become emotionally unstable or to slip into deep shock.

Witnesses are not always reliable. However, you should ask if they saw anyone walk away from the scene.

Downed Electrical Wires

Caution: The EMT-M should not enter an area where there are downed electrical wires until a safety zone has been created. Always keep in mind the following warnings when confronted with the problem of a downed wire or when a patient is in contact with an electrical source.

1. Never assume that a downed wire is de-energize.
2. Do not touch any equipment near downed power lines.
3. Do not touch a patient that is in contact with the electrical source.
4. If possible, de-energize power.

If the victim is in contact with a power source, and must be removed, the EMT-M should be properly protected, use proper equipment, and make sure he/she is in contact with the power source.

The EMT-M's major responsibilities at the accident scene are safely gaining access, and basic EMT-M level emergency care.

Unstable Vehicles (Surface)

Any motor vehicle involved in an accident may be unstable. This is true of a vehicle that is on all four wheels, sitting on what appears to be a level road surface. The rule is to stabilize "any vehicle-every time."

1. An upright vehicle may be unstable in the following situations:
 - a. Inclined surface - the vehicle may have come to rest on a slanted surface and may roll forward or backward. Chock the wheels.
 - b. Slippery surface - oil, ice or snow may have produced a road surface that will allow the vehicle to slide away without warning. This often happens when a door of the vehicles is opened. Chock the wheels.
 - c. Tilted surface - the vehicle may be on a surface that causes it to tilt to one side or slant down a hill. Chocking the wheels may offer some degree of stability. When practical, tie strong lines to the vehicle frame (not the bumper), and then secure the lines to large trees, guardrails, or heavy, secured vehicles. Do **not** work on the downhill side of the vehicle.
 - d. Stacked vehicles - the vehicles maybe be upright, but part of one vehicle may be resting on part of another vehicle.

Equipment Fires (Underground)

The EMT-M should be familiar with the firefighting equipment and its location at each mine. When fighting an equipment fire underground, the EMT-M should be positioned so the mine ventilation is at their back to allow the air current to carry smoke and fumes produced by the fire away from the EMT-M.

Fighting a fire in spilled fuel with a portable extinguisher may be an exercise in futility. When there is a fire under equipment in which victims are trapped, you must try to extinguish it nonetheless. Attempt to sweep the flames away from the operator's compartment as you apply the agent. If you are unable to extinguish the fire, be sure sources of future ignition are kept away from the equipment.

The equipment fire should be fought only as long as you can fight it safely. Each mine has a firefighting procedure which the EMT-M should be familiar with and follow.

Reaching Persons Trapped in Cave-Ins (Trench Rescue)

Cave-in and trench rescue are skills requiring special training. The following is an introduction to a complex problem of gaining access and providing care.

1. As an EMT-M, there may be little that you can do for a cave-in victim. Start, however, by calling for help, notify the dispatcher and crew. If you are to begin rescue activities, dig with hand tools. Try to determine the location of the victim from witnesses. Dig carefully and be alert for a shifting of the material that may in turn bury you.
2. Do not pull the patient free. Instead, uncover his body and remove him. As you do, remember that the accident may also have produced a neck or back injury. Package the patient accordingly.

Summary

The EMT-M's major responsibilities at the accident scene are patient assessment and basic EMT-M level emergency care. However, there are times when the EMT-M will have to control the scene and gain access to the patient.

When gaining access to patients trapped, the EMT-M may have to face problems caused by hazards.

Module 7 – Disentanglement

Objectives

By the end of this chapter, you should be able to:

1. Define “disentanglement.”
2. Name the **two** groups of activities carried out during disentanglement.

Terms

You may be using these for the first time:

Disentanglement - the process of altering or revolving wreckage so that proper care can be rendered and the patient can be prepared and removed for transfer to the ambulance.

A-posts, B-posts, C-posts - the first, second and third roof pillar from the windshield of a vehicle.

Disentanglement involves making a pathway through the debris of an accident and removing debris from patients. During the entire process, patients are protected from harm communication with the patients should continue throughout disentanglement.

Remember - As an EMT-M, your primary duties are patient assessment and emergency care. You should not overlook these duties in order to perform other activities at the accident scene.

There will be times when you can gain access to the patient, but there is no room to reposition the patient for care, or to provide needed care. You may find that you can provide initial care, but you are unable to remove the patient for transport due to confined space or the patient being entrapped by the debris. These problems must be solved by the process of disentanglement.

The first series of activities described here is intended to make a pathway in debris through which properly prepared patients can be removed without danger of further injury making a pathway may involve nothing more than opening a door, or it may be an operation as complex as completely removing debris from the patient.

Activities in the second group are designed to remove debris from the victim so that he can be prepared for safe transfer to an ambulance.

Remember - Personal safety is a prime consideration at all times during gaining access and disentanglement operations. Wear your helmet, eye protection, gloves and whatever body protection is available.

Patient Protection

Disentanglement activities often expose trapped persons to diverse hazards, produced by either the accident or the disentanglement operations themselves. Particles of roof and rib, sharp metal edges are common in mining accidents. Mine gases can also present a hazard and the scene should be periodical checked for hazard mine gases.

During the disentanglement operation, you should explain to the patient what is being done and:

1. Protect trapped accident victims with blankets, clothing, or even dressing and bandaging materials, taking particular care to shield the eyes.
2. Make sure that there is adequate ventilation under protective coverings.
3. If it appears that the disentanglement operations will cause patients to come in contact with metal parts or the tools being used, provide some sort of rigid protection such as that offered by a spine board.

Summary

Disentanglement involves altering and removing debris so that appropriate care can be rendered, the patient can be made ready for transfer to the ambulance, and the patient can be moved for transfer. The activities of disentanglement involve making a pathway in the debris and removing debris.

Remember - the major duties of an EMT-M at an accident are patient assessment and care. Call for the help you will need to disentangle a patient.

Personal safety of the rescue workers and the patient is the prime concern during disentanglement. Take special care to guard the patient's eyes and to assure adequate ventilation.

Disentanglement in a mining environment does not lend itself very well to established procedures. Working in eternal darkness, with only artificial light takes adjustment on the rescuers part. Conditions such as footing, limited field of vision, lack of overhead clearance, lack of mobility, and overhead obstructing must be overcome by the rescuer. Disentanglement underground must be adapted to the available resources, keeping in prospective the adverse conditions and the patient and rescuer's safety.

Module 7 – Lifting and Moving

Packaging the Patient

Packaging refers to the sequence of operations required to ready the patient to be moved and to combine the patient and the patient-carrying device into a unit ready for transfer. A sick or injured patient must be packaged so that his condition is not aggravated. Necessary care -for wounds and fractures should be completed. Impaled objects must be stabilized. All dressings and splints must be checked before the patient is placed on the patient-carrying device. The properly packaged patient is covered and secured to the patient carrying device.

Covering the Patient

Covering a patient helps to maintain body temperature, prevents exposure to the elements, and helps assure privacy. A sheet may be all that is required in warm weather. Do not leave the foot and sides of the stretcher. In wet weather, a plastic cover should be placed over the blankets during transfer. If a scoop-style stretcher is used, you will have to fold a blanket under the patient. When a basket stretcher is used, line the basket with a blanket prior to positioning the patient. If this is not done, cover the patient as you would in a scoop stretcher.

Methods of Transporting Patient from Injury Site

1. **Carrying by Stretcher** - A stretcher could be the only equipment available to transport an injured person safely from the site. No matter what type of stretcher used, it should be tested thoroughly before placing a patient on it. Correct use of a stretcher has been covered previously. Problem areas you could encounter while transporting patients with a stretcher are:
 - a. **Doors** - Extra precaution should be used when transporting patient through doors. One bearer may have to hold one end of stretcher by himself while the other bearer goes through the door first. At this time the bearer or the stretcher would slowly hand his end of the stretcher through the door to the other stretcher bearer. Caution should be taken to make sure the door does not shut on bearers or patient.
 - b. **Overcasts-Undercasts** - When overcasts or undercasts are encountered by the stretcher bearer, extra precaution should be used. Undercasts could be full of water or have slipping and tripping hazards. The bearer should slow down and make sure they get the patient through these areas safely.

- c. **Low Coal** - EMT-Ms transporting patients in low coal may have special equipped stretchers with wheels on them. Extra precautions should be used in low coal for back injuries from lifting patients.
- d. **Steps or Steep Inclines** - Remember when transporting a patient with a severely bleeding head going up steps or a steep incline; he/she should be carried head first. The EMT-M should take his time making sure all stretcher bearers must have sure footing as not to fall or slip with the patient.
- e. **Narrow Passageways** - The three-man lift and carry may have to be used when transferring a patient through narrow passageways. If using a stretcher in a narrow passageway, make sure the patient is secure and does not slip when the backboard or stretcher is turned to the side.

2. **Mobile Equipment.**

- a. **Scoop** - if a scoop is used for transporting a patient, make sure the patient is secure in the bucket. The scoop should be trammed backwards so if a hole or rock is hit and the patient is thrown from the scoop, he will not be run over.
- b. **Jeep** - make sure the patient is lying down and secured in the jeep. The operator should slow down and not complicate matters by excessive speeds or wrecking jeep.

3. **Truck Surface** - Trucks or cars can be used to transport patients if the patient can be secured and put in the correct position for transportation.

Securing the Patient

All patients, including those receiving CPR, must be secured to the patient carrying device. This is typically done by fastening body straps.

If the stretcher is the folding type, make sure the pins are properly set.

Summary

The specific procedures covered in this chapter should be studied in a step-by-step fashion. Patients can be moved during emergencies by emergency moves, non-emergency moves and transfer to the ambulance.

You may have to perform an emergency move of a patient if the scene is hazardous; if the scene is hazardous; if care requires repositioning the patient; or if you must gain access to other patients in need of basic life support.

Sometimes it is necessary to perform a non-emergency move of a patient to prevent the decline of his condition, to reach other patients, to provide better patient care, or because the patients insists on being moved.

For a non-emergency move, the patient must be conscious, fully assessed, and having normal, stable vital signs. He/she should have no serious wounds, bleeding or any indications of spinal injury. All fractures must be immobilized.

One-rescuer drags can be used on both conscious and unconscious patients. Three rescuers can use the three rescuers carry for conscious and unconscious patients.

When using a patient carrying device, the patient must be covered and secured to the device.

Basket stretchers are useful when moving patients from high places, down ladders, or across rough terrain. They can be hand carried or lowered by ropes depending on the situation.

Patients with possible spinal injuries found seated, or those who must be moved to a seated position before removal from equipment should be secured to a short spinal board or a Kendrick extrication device. An extrication or rigid collar must be applied before applying the board or K.E.D.

After a patient is secured to a short spine board, he must be moved to a long spine board.

Module 7 – Transporting the Patient

Transport

Transport includes more than the movement of a patient to an ambulance. Transport must be prompt, yet safe. During transport, vital signs are taken, emergency care is provided, and when possible, additional patient information is obtained. As part of the EMT-M's duties during transport radio communication with dispatcher are established to provide information to the ambulance service staff and to inform them of any changes in the patient's condition.

The Handoff from EMT-M to EMS Professionals

It is usually the EMT-B whom the EMT-M most directly relates, through face-to-face contact during patient transfer. The following are steps that you might take to see that handoff is accomplished smoothly and without incident. Handoff is the transition from EMT-M to EMT-B it is a crucial period during which your primary concern must be the continuation of patient care activities.

As soon as you are free from patient care activities, either orally or by written report, transfer to an EMS staff member all information about the patient and his illness or injury remember to relate any changes in the patient's vital signs and level of consciousness noted during the initial emergency care and subsequent transfer and transport activities.

Module 7 – Communications

Objectives

1. Define communications.
2. List four ways to improve your oral communication skills.
3. State the four basic components of an emergency communications system.
4. List at least four ways in which this communications system can be expanded.
5. List the information that can be gained from an accurate and complete ambulance run report.

Communication

In emergency care, communication means more than radio transmissions. Being able to talk with people is an important trait of an EMT-M. You must be able to talk with employees at the scene so that they will give you information and let you take charge. An efficient patient assessment may depend on your ability to ask a patient questions and listen to his statements. Personal interaction is one of the most important things in gaining patient confidence and it is the main approach that you take when dealing with patients having stress reactions, emotional emergencies, or psychological emergencies.

Your ability to communicate with others is very important when interacting with the members of the EMS system. On a typical emergency, you may have to talk with the dispatcher, other members of the crew, responders or other EMT-Ms responding to the scene and the emergency room. You must be able to speak clearly and calmly, using the communication. You also must be able to listen to others. The ability to listen to others so that they have confidence in you as a member of the patient care team is a major skill you must develop as an EMT-M.

To improve your skills in oral communications while on duty:

1. Use correct terminology whenever possible. Do not use laypersons' terms or slang.
2. Do not use a term unless you know its meaning.
3. Use complete sentences when you speak.
4. Speak calmly using a neutral tone.

In addition to oral communications skills, you will have to develop written skills as they apply to your duties as an EMT-M. Just as listening is an important part of oral communication; reading is a major element in written communication skills. Make certain that you read reports and memoranda. Too many people scan over documents, missing important information.

Your written reports are very important. Make certain that they are filled in correctly; are complete and accurate; and the correct terminology has been used. The EMT-M should be very familiar with all reports and records he/she may be responsible for at their operation.

Communications Procedures

When using the radio:

1. Do not try to transmit if other personnel are using the radio or the dispatcher is sending to you.
2. Speak into the microphone using normal voice volume. Keep the tone of your voice neutral, and slow down your rate of speech.
3. Speak clearly, making an effort to pronounce each word distinctly.
4. Be brief, using the correct terms and phrases needed to make your message understood. Know what you are going to say before you press the transmit key.
5. Avoid using codes and abbreviations, unless they are part of your system and will be understood by the person receiving the message.
6. Receive a full message from the sender. Do not attempt to cut him off so that you can send.
7. Do not use slang or profanity.
8. If you do not understand something that is said while receiving, ask for a repeat. NEVER pretend to understand what was said.

Remember - reports must be accurate and complete, using the proper terms (correctly spelled). The report should be completed in quarters, as soon as possible.

Summary

Communication involves both oral and written skills. In all communications involving EMT-M duties, you are to be brief, yet accurate and complete. You must use the correct terminology, written or spoken, so that it can be understood. You must communicate orally in a calm professional manner.

The basic components of an EMS radio communications system are the dispatcher base station, the ambulance transmitter/receiver, and the emergency department remote center. Telephone backup should be part of the system.

Radio communications should be limited to official use. Keep your transmission as brief as possible. Make sure you know what you are going to say before you go on the air. Make your transmission as accurate as possible. Do not interrupt someone else using the radio or the dispatcher. Remember to wait for the person who is transmitting to finish they are part of your system and the person receiving knows the codes.

Your written reports should be accurate, complete, and finished as soon as possible. You should use correct terminology in your reports. The patient information in your report becomes part of the patient's medical record.