MODULE I

PREPATORY

LEARNING OBJECTIVES

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

- 1. Provide for the safety of self, patient, and fellow workers.
 - Discuss the importance of body substance isolation (BSI).
 - Describe the steps the EMT-Basic should take for personal protection from airborne and bloodborne pathogens.
- 2. Identify the presence of hazardous materials.
 - Break down the steps to approaching a hazardous situation.
- 3. Participate in the quality improvement process.
 - Define quality improvement and discuss the EMT-Basic's role in the process.
- 4. Use physician medical direction for authorization to provide care.
 - Define medical direction and discuss the EMT-Basic's role in the process.
- 5. Use body mechanics when lifting and moving a patient.
 - Relate body mechanics associated with patient care and its impact on the EMT-Basic.
- 6. Use methods to reduce stress in self, patients, bystanders, and co-workers.
 - Recognize the signs and symptoms of critical incident stress.
 - State possible steps that the EMT-Basic may take to help reduce/alleviate stress.
- 7. Obtain consent for providing care.
 - Define consent and discuss the methods of obtaining consent.
 - Discuss the implications for the EMT-Basic in patient refusal of transport.
 - Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or state provisions regarding EMS application.
- 8. Assess and provide care to patients and families involved in suspected abuse or neglect.
 - Discuss the special considerations for assessing and managing a patient with suspected abuse or neglect.

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 healthcare professionals to help deliver professional prehospital 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 (EMS) team.

SCENE SAFETY

"Ambulance 29, take in the shortness of breath at 4218 West Oakwood."

Jen, an EMT, and Sean, a paramedic, are the crew working this shift on Ambulance 29. As they arrive at the residence, they find a 40-year-old male, his 38-year-old wife, and their 4-year-old son complaining of weakness, dizziness, nausea, and vomiting.

Making the initial assessment, Jen learns that the family has just returned from the airport after a flight on Northeast Airlines 182. The husband thinks he heard other passengers with the same complaints and states that no food SCENARIO was served on the flight. It appears that he may be intoxicated. Suddenly, len tells Sean that she has a headache and might pass out. Sean escorts len

Jen tells Sean that she has a headache and might pass out. Sean escorts Jen out of the residence.

Sean and Jen don body substance isolation (BSI) gear and Sean calls for the assistance of two additional ambulances and a Hazmat team, all of whom arrive on the scene 4 minutes later. The Hazmat team takes over the scene, donning self-contained breathing apparatus to enter the residence, where they determine that there are dangerous levels of carbon monoxide. The Hazmat team removes the family members from the residence and turns over patient care to the ambulance crews.

Body Substance Isolation (Biohazard)

Sean and Jen began their shift, as they do every workday, with an equipment inventory. It cannot be stressed enough that personal safety is the foremost concern. You must first protect yourself so that you can protect your fellow responders and your patients. The body substance isolation (BSI) standard requires that proper equipment be utilized:

- 1. When responding to any incident, and
- 2. Before patient contact is made.

When they arrived at the patients' residence, Sean and Jen were wearing protective gloves. They carried a quick-response bag containing BSI supplies and an oxygen D-tank. However, after the initial assessment, Sean and Jen quickly donned the appropriate BSI gear. Although BSI gear would not provide sufficient protection in a Hazmat situation, the incident reminded them of the reason its use is required of all care providers.

EMT-BASICS AND PATIENT SAFETY

Handwashing

Handwashing is extremely important in preventing the spread of infection. In the process of treating a patient and when changing your gloves, use a liquid disinfecting agent that requires no water. In addition, after transferring your patient to hospital personnel, remove your gloves and scrub your hands vigorously, making sure to wash and thoroughly dry your wrists and forearms.

Eye Protection

Eye protection must be worn in highly contaminated situations. Upon arrival at the scene, the crews of Ambulances 5 and 30 joined Sean and Jen in using various methods to protect their eyes from splashing blood or other bodily fluids. Jen, who wears prescription glasses, attaches removable side shields to them. Sean puts on form-fitting goggles; although they are not required, they afford extra protection. Following good practice, Jen and Sean wear masks in addition to their eye protection.

Gloves (Vinyl and Latex)

Gloves are required when there is a possibility that you might come in contact with blood or bodily fluids. They can be made of vinyl or latex, with the warning that some people are allergic to latex. Jen and Sean are both wearing their gloves as they initiate patient care. When they are finished, they are careful to prevent the exposed gloves from touching anything and to dispose of the gloves safely.



Removing soiled gloves.

Step 1: Grasp the outside edge of the glove near the wrist; peel it away from the hand, turning the glove inside out; hold the glove in the opposite gloved hand.
Step 2: Slide the ungloved finger under the wrist of the remaining glove; peel it off from the inside, creating a bag for both gloves; discard the gloves.
Source: CDC, 2004: 32–33.

When the glove on Jen's right hand tore while she was administering care to the patients, she removed it, disinfected her hands, and replaced the torn glove with a new one. If a

glove tears while you are administering patient care, immediately (or as soon as it is safe to do so) remove it following agency guidelines, disinfect your hands, and replace the torn glove with a new glove.

Sean and Jen discard their gloves after completion of patient contact and put on a new pair when they prepare to see their next patients. Never reuse gloves. Gloves should be changed each time you see a new patient. Upon completion of patient contact, remove your gloves and wash or disinfect your hands.

Gloves (Utility)

Utility gloves may be used only for cleaning vehicles and equipment.

Gowns

Gowns are available for additional protection of EMS personnel in highly contaminated situations. Gowns are worn where there may be bodily fluid exposure, such as might be encountered in childbirth situations or major trauma scenes. Gowns should be removed and disposed of upon completion of patient contact. Disposable gowns are preferred and they should never be reused.

Even where you wear a gown, it is still possible that bodily fluids will contaminate your uniform. It is preferable to carry a second uniform to address such an emergency.

Masks

During their initial assessment, Jen and Sean considered the possibility that their patients might have an airborne infectious disease, so they placed masks on their patients. If you suspect that the patient may have any airborne infectious disease, including tuberculosis, wear a high-efficiency particulate air (HEPA) or N-95 respirator. First, place one on yourself. Then place one on your patient. If weather permits, open the windows to ventilate the ambulance while transporting patients who may have airborne infections.





Donning a respirator

Removing a respirator

Donning and removing a particulate respirator.

To don: First, select a fit-tested respirator. Place it over the nose, mouth, and chin; fit the flexible nose piece over the bridge of the nose; secure the elastic around the head; adjust to fit; perform a fit check by inhaling (respirator should collapse) and exhaling (check for leakage around the face.

To remove: First, lift the bottom elastic over your head; then, lift off the top elastic; finally, discard. Source: CDC, 2004: 24, 37.

Jen and Sean put on surgical-type (disposable) face masks for protection from blood or other bodily fluids that could come into contact with their nose or mouth. Care providers' masks and patient's mask should be discarded upon completion of patient contact. Dispose of masks in bags labeled with the biohazard symbol.



Donning a disposable mask.

First: Place the mask over nose, mouth and chin; then fit the flexible nose piece over the bridge of the nose; secure the mask to the head with ties or elastic; adjust to fit. Source: CDC, 2004: 23.

Specialty Training in Hazmat

Emergency medical personnel would be well served to locate a hazardous materials awareness class in their area. Such a class will alert the EMT to common precautions including the necessity of having binoculars available in the ambulance, carrying an emergency response guidebook (for first responders during the initial phase of a dangerous goods/hazardous materials incident), as well as stocking other useful equipment. Such training is generally available in continuing education programs to all levels of emergency medical care providers.

REGULATIONS ABOUT BODY SUBSTANCE ISOLATION (BSI)

Not all states follow OSHA regulations about body substance isolation. Follow your state and local regulations and your agency protocols. Always follow Universal Precautions.

NOTIFICATION AND TESTING OF AN EXPOSURE

When Jen removed her torn glove during the course of patient care, she noticed blood on her hand. Jen immediately cleansed her hand with a liquid disinfecting agent. After Jen and Sean transferred their patients to hospital personnel they remained at the hospital, where Jen was promptly treated for this exposure.

Jen notified her supervisor and prepared formal written documentation of the exposure for her department and for the hospital. She delivered a copy of the formal notification to her department. If you are exposed, document the exposure, notify your supervisor and the hospital, and promptly obtain the appropriate treatment and tests in the local hospital. It is advisable to keep a copy of all documentation for your personal records.

Personal protection

You must protect yourself first in situations involving hazardous materials so that you can protect your fellow responders and the public. This is often a difficult concept for individuals who are accustomed to putting others first. However, there is no possibility of helping others if you yourself are overcome by the same hazard.

HAZARDOUS MATERIALS

Always be prepared to identify possible hazards. Use binoculars to do so from a distance, when possible. Always approach a potential hazardous materials incident from upwind. Become familiar with the system of identifying hazardous materials. In your emergency vehicle, carry a current copy of the *Emergency Response Guidebook*, which is published by the United States Department of Transportation.

Hazardous materials incidents are controlled by specialized Hazmat teams. Hazardous materials teams should be called to the scene whenever you suspect such material may be present. The Hazmat team should bring the patient(s) to the EMTs after they have been decontaminated. Only then do the EMTs resume patient care. **Under no circumstances should the EMT go into the hot zone, even after the patient has been decontaminated.**

Be aware that low levels of carbon monoxide (CO) poisoning can be confused with flu symptoms, food poisoning, and even depression. High levels of carbon monoxide can cause death within a few minutes of inhalation. It is strongly recommended that all ambulances be equipped with handheld carbon monoxide detectors that attach to the hand with a finger probe.

RESCUE

Although your instinct may be to make a quick response, you must utilize self-control in order to correctly identify and reduce potentially life-threatening situations. Use extreme caution when approaching any situation involving the following dangers:

- Electricity
- Fire
- Explosion
- Motor vehicle accidents
- Hazardous materials incidents

Call for specialized assistance from the utility company, the fire department, or other appropriate agency to assist in the rescue.

VIOLENCE

A violent or potentially violent scene should be controlled by law enforcement before the EMT provides patient care. Perpetrators of the crime may still be on the scene. Bystanders and family members who are agitated, angry, or upset may intentionally or unintentionally interfere with patient care. Use extreme caution.

Domestic disturbances are potentially the most dangerous for the EMT or other care provider. You may not be aware until your arrival that you have been called to a scene of domestic violence. Such situations are characterized by irrational and unpredictable behaviors that can readily turn violent. Police presence is a necessary component for ensuring the safety of the care provider and the patient. Be prepared to retreat if you are faced with imminent danger or a threat to your personal safety.

QUALITY IMPROVEMENT

Medical Direction

Each state sets up its own EMS system. These systems are based upon the standards recommended by the National Highway Traffic Safety Administration (NHTSA). Some of the standards concern medical direction. **Medical direction** refers to the process by which physicians oversee patient care. Under this system, the physician determines the proper medical response in a given emergency and delegates that action under standard medical orders (SMOs) to EMTs, paramedics, and other emergency medical personnel.

Laws and regulations about medical direction vary from state to state, but all states mandate medical direction for EMS personnel. The medical director is responsible for reviewing the EMS system with the goal of ensuring quality patient care. Toward that end, the medical director requires documentation and audits. This enables the director to measure the success of the EMS system and plan for improvements where needed.

Ensuring your personal safety and protection is another responsibility of medical direction. You will read over and over again about the priority given to your safety and protection, and that of all other emergency medical personnel. This is not just because the system values your safety and well-being, but it recognizes that you will be unable to provide for your patient's needs until your own safety is secured. Further, it is important that others in the public safety system be available to perform their roles and not be diverted or endangered by the need to come to your rescue.

Protecting your own safety includes wearing protective clothing, using safe practices (such as seat belts), and taking care on the road and in your vehicle. It also requires that you follow appropriate direction from police, fire, and utility company personnel.

The medical direction system also provides the basic requirements for EMT education, training, and certification, as well as continuing education requirements and periodic training in specialized programs. In general, the EMT-Basic is taught to function in three areas:

- Controlling life-threatening situations (maintaining an open airway, controlling bleeding, treating shock)
- Stabilizing non-life-threatening situations (dressing wounds, stabilizing fractures, and addressing the psychological trauma of the patient's family members, as well as the patient)
- Applying nonmedical skills (communications, driving, maintaining supplies and equipment, recordkeeping)

The medical director is specifically responsible for the clinical oversight of care provided by EMS personnel. The director is also responsible for providing updated continuing education and training in response to the needs of the EMS personnel and the community served.

The care you provide to your patients is an extension of the medical director's authority. It includes the following:

- **On-line direction:** Every ambulance, public or private, must have radio or telephone communication that enables the physician or other medical personnel to provide you with instruction or guidance as you care for your patients in medical emergencies. This is considered on-line direction.
- **Off-line direction:** The medical director may delegate this responsibility to a nurse or physician located at the receiving hospital or other site. Such direction and guidance may also come in the form of *protocols* or *standing orders*. This is considered off-line direction.
- The medical director or his or her designate can also assist you with patient **refusal of treatment**, either *on-line* or *off-line*.

The medical director is responsible for providing the public with the highest quality of prehospital emergency care. As such, the medical director creates a system in which each call is documented. The data collected allows for careful review of equipment, protocols and procedures, and personnel infractions. In this way, the EMS system can remediate problems by revisions of protocols or procedures, by review of EMS personnel infractions, and by remedial testing or training. The data can also be useful for research purposes and for determining the need for particular continuing education programs.

HEALTH AND SAFETY

In the course of patient care, you will be required to lift, carry, reach, push, and pull. The circumstances will often be less than ideal. In responding to a call, you may find yourself in dwellings with multiple stories without elevators or with elevators that are out of service. You may have to deal with stairways that are steep, poorly lit, and not well maintained. You may have to deal with slick surfaces and inclement weather. You may have to deal with obese or otherwise-compromised patients. You may find yourself needing to maneuver your patient from compromised positions. There are countless circumstances that will require you to use your physical strength, power, stability, and flexibility to serve the needs of your patient as well as the other rescuers.

It is essential that you keep your body fit, paying special attention to maintaining strength in your core muscles. This will enable you to avoid some injuries and will limit the severity of injuries that do occur. We cannot overstate the importance of calling for additional resources or backup and of sharing the load; these are important methods of avoiding or limiting the risk of injury to you and your patient.

Learn and practice the principles of good body mechanics. Keeping fit and using proper techniques for lifting, carrying, reaching, pulling, pushing, and all other functional movements will significantly reduce your risk of on-the-job injuries. Review the general guidelines that follow with your own individual strengths and weaknesses in mind.

Consult your doctor before beginning any strenuous training program. Work with a fitness trainer or physical therapist who will understand the physical demands of your job. The trainer or therapist can direct your training based on an evaluation of your strength, cardio-endurance, and flexibility. These professionals are trained to assess any past injuries as well as your genetic predispositions.

Lifting Techniques

SAFETY PRECAUTIONS

Use your **core muscles** (quadriceps, hamstrings, gluteus, and abdominal muscles) to assist you when moving a heavy person or object. Tighten your abdominal and other core muscles when lifting. Exhale when you lift. Bring yourself and the object to be moved closer together.

Limit the stress on your lower back by keeping the weight of the object or person as close to your body as possible. Tell your patient not to shift the weight. Give the patient something to hold, or ask the patient to place both hands on the straps, to prevent the patient from reaching out toward you and putting you both off balance.

GUIDELINES FOR LIFTING

It is important to know the limits of your own physical strength, as well as those of your partner. Don't proceed with lifting until you have assessed the patient's weight and determined whether additional human resources or equipment are needed. When you do use additional rescuers, try to achieve balance with them as you lift the patient.

Use stretchers or stair chairs as a conveying device when moving the patient. When lifting a patient, keep the weight close to your body and avoid twisting your body when possible. Take the time to learn the proper form for the power lift and the squat lift techniques. If you feel that it may be necessary to utilize these maneuvers, strongly consider calling for additional aid.

In the **power lift** position, your feet are a comfortable distance (shoulder width) apart. Tighten your core muscles and hold your back in a position with a slight inward curve. Straddle the object. Bend your knees slightly. Distribute the weight to the balls of your feet. Use a **power grip** to get maximum strength from your hands. The palm and fingers should come into complete contact with the person or object being lifted and all fingers should be bent at the same angles. Hands should be shoulder width apart. When lowering a cot or stretcher, reverse the power steps. Always avoid bending at the waist.

Carrying

Again, it is important to learn proper body mechanics and to maintain your fitness, strength, stability, and flexibility to avoid or limit the risk of injury. Whenever possible, transport patients on devices that can be rolled.

Guidelines for carrying:

- Assess the patient's weight before lifting.
- Know the limitations of the crew's abilities.
- Work in a coordinated manner and communicate with partners.
- Keep the weight as close to the body as possible.
- Refrain from twisting when possible.
- Do not bend at the waist. Bend slightly at the knees.
- Do not hyperextend the back (do not lean back from the waist).

Reaching

As in the case of the other functional movements, maintain fitness and practice proper body mechanics. Guidelines for reaching include:

- Reposition the object or person so it is closer to you.
- Keep core muscles tight and knees slightly bent.
- When reaching overhead, avoid the hyperextended position.
- Avoid twisting the back while reaching.
- Avoid reaching more than 15 to 20 inches in front of the body.
- Call in additional help to avoid situations where prolonged (more than a minute) strenuous effort is needed.

Pushing and Pulling

Pushing and pulling guidelines include the following:

- Push, rather than pull, whenever possible.
- Keep core muscles tight and knees slightly bent.
- Keep weight close to the body.
- Push from the area between the waist and the shoulder.
- If weight is below waist level, use a kneeling position.
- Avoid pushing or pulling from an overhead position if possible.
- Keep elbows bent with your arms close to your sides.

Stressful Situations

It's 10 p.m. and the police have engaged in a high-speed chase that ended with the driver (offender) plowing into a vehicle waiting at a stoplight. The two occupants in the second vehicle are pronounced dead at the scene due to traumatic injuries. The offender, now in police custody, is complaining of neck and back pain. You get out the stretcher, cervical collar, head immobilizer, and backboard and approach the offender.

SCENARIO A substantial crowd gathers in front of the neighborhood restaurant where this incident occurred. As members of the crowd learn what happened, you hear angry cries and begin dodging beer bottles meant for the offender.

While you are treating the offender in the back of the ambulance, a police officer informs him that he just killed a young couple on the eve of their wedding. The offender shows no empathy or remorse.

EMS caregivers, as well as patients and bystanders, are subject to severe stress responses in circumstances such as the scenario above. Other traumatic situations can include:

- Death or injury of a co-worker or other public safety personnel
- Infant and child trauma
- Amputations
- Infant, child, elder, or spousal abuse
- Mass casualty situations

Emergency care providers can be expected to exhibit stress responses from long hours, sleep deprivation, the high demands of their calls, the need for instant decision-making during calls, the lack of recognition, dealing with dying patients and grieving survivors, and other aspects of the daily work life of the EMT. A stress response may also result from the *accumulation* of frequent, difficult, and trying calls.

To manage stress, you must recognize the warning signs. They may apply to you or your partner. Some of the warning signs listed below may also be signs of depression, which can include suicidal thoughts. Warning signs include:

- Irritability and confrontational behavior toward patients, co-workers, family, and friends
- Inability to concentrate, mental exhaustion
- Difficulty sleeping or nightmares
- Anxiety
- Indecisiveness
- Guilt
- Loss of appetite
- Loss of interest in sexual activities
- Isolation and reduced self-esteem
- Loss of interest in work
- Increased cynicism about your job, yourself, and others

Actions to Manage Stress

Emergency personnel must recognize and acknowledge that stressful situations occur every day in this job. We must also understand that it takes time and attention to learn to adjust and cope with stress. Failure to allow ourselves this time and opportunity can result in self-destructive behavior and a chronic inability to take care of ourselves. This inability may be expressed in drinking excessively, smoking, gambling, and a host of other inappropriate coping mechanisms. It is essential that we become our own loving caretakers.

Emergency management must be encouraged to provide maintenance programs to assist EMS personnel with stress management. An effective employee assistance program requires:

- Complete confidentiality
- Unconditional support from management
- Management by quality leadership from the mental health field (psychiatrists and psychologists) and
- Development of the program to meet the growing and changing needs of EMS personnel. This should include education and outreach programs that teach the techniques of self-care.

Other actions that can enhance well-being include achieving a better balance between your work and family life. Make sure to provide a space in your life for individual and personal activities, including recreation, health needs, hobbies, and other areas of interest.

Lifestyle changes that can help to postpone job burnout might include:

- Adding or increasing exercise, including stretching and deep-breathing techniques
- Adjusting the diet to
 - Reduce sugar, caffeine, and alcohol intake
 - Avoid fatty foods
 - Increase carbohydrates
- Practicing relaxation techniques, yoga and meditation, and visual imagery

Your family and friends may also suffer stress as a result of your job. Some of this may be due to the following:

- They may lack knowledge and understanding of the demands your job.
- They may be distressed by your long hours away from them, and they may feel unimportant and ignored.
- On-call situations may evoke fear of the dangers of your work.
- They may be frustrated by the inability to plan activities.
- They may be frustrated in their desire to share, and to provide support and help to you, when you find it difficult to talk about incidents that occurred on your shift.

From a practical standpoint, it may be difficult to achieve changes in your work environment that will address the concerns of friends and family. If able to do so, you could:

- Request time off occasionally specifically for family and friends
- Request a rotation or duty assignment to a less busy area
- Take breaks during your shift for a workout or even a brisk walk to reduce your own stress
- Encourage, and assist in providing, an atmosphere of support for your co-workers

Often you will not have the freedom or flexibility to change your schedule or duty hours. Sometimes you may need to request a temporary medical leave. At other times, you may want to seek independent professional assistance in dealing with the extraordinary tensions connected to your work.

Establish a relationship with a trusted psychologist who can help you to gain selfknowledge so that you can anticipate periods of increased stress and avoid some of the destructive behaviors associated with the stress response. Such a relationship will then be available when unanticipated traumatic events occur. Doing this may also assist you in career advancement and educational choices.

Your employer may have an employee assistance program or provide options for mental health services. Utilizing these services on a regular basis, in advance of severe stress reactions, can greatly benefit you, your family, and your patients.

Critical Incident Stress Debriefing (CISD)

Critical incident stress debriefing (CISD) is a process in which a team of peer counselors and mental health professionals help EMS personnel to deal with the phases of stress that may occur because of a critical incident.

What is a **critical incident**? The following are examples:

- Death or serious injury of an EMS co-worker in the line of duty
- Suicide of an EMS co-worker
- Death or injury of a friend or family member
- Death of a patient under especially tragic circumstances, or after prolonged or intense efforts to rescue or revive
- Sudden death of a child, or child abuse-related death or injury
- Death or injury to civilians resulting from EMS actions, such as a collision between an ambulance and a civilian automobile
- An event that attracts unusual media attention, that threatens your life, or that contains particularly stressful sensory stimulation (eg, sights, sounds, smells)
- A mass casualty incident, such as a plane crash or multiple vehicle crash

A CISD meeting includes any caregivers who were involved in an incident—for example, law enforcement, firefighters, and EMS or hospital emergency personnel. The meeting should occur as soon as possible following the event. Sometimes it may be

delayed, however, and occur as late as 72 hours after the critical incident. The meeting proceeds through seven steps, which include:

- Reassurance of confidentiality (that nothing said will have an impact on job status)
- Review of the facts
- Exploration of the feelings of the participants about what happened
- Exploration of any physical, mental, or emotional symptoms of the participants
- Assistance of skilled professionals in looking closely at these feelings
- Assistance in overcoming the stress and planning for the participant's return to the job
- Follow-up meeting several weeks later to review and resolve lingering issues

In the last scenario, the EMS care provider could have had conflicted feelings, caught between a desire to render aid to the offender and feelings of anger or disgust toward the offender. The EMS care provider may experience ethical dilemmas about:

- The obligation to treat the offender when you are concerned about your own safety (the potential for violence to erupt from the bystanders)
- The possibility that you may have to protect the patient-offender
- The obligation to treat the offender when you feel that there are family members and bystanders who may need care

The EMS care provider must be keenly aware of the impact of procedural details: placing a tarp over the vehicle to cover the deceased couple, towing the vehicle with the bodies still in it, preserving the crime scene tape, limiting photos, and other details.

You must decide how and where to treat the offender, which may include walking or carrying the offender to the ambulance in a highly charged environment of grief and violence. (For example, you may have to drive the ambulance a few blocks to a safer location, and treat the patient there. Always notify the police of any relocation.)

Ask your employer—or otherwise make yourself aware—about the availability of CISD through your EMS system.

What is included in critical incident stress debriefing?

- Pre-incident stress education
- One-on-one support (with psychologist trained in EMS-related stress)
- Disaster support services
- Diffusing emotions
- Follow-up services
- Spouse/family support
- Community outreach programs
- Other programs, such as a wellness program

MEDICAL/LEGAL

It is a late Sunday afternoon during football season. You arrive on the scene at the local supermarket to find a middle-aged man lying on the floor. Bystanders tell you the man was in the checkout line to buy beer. He seemed anxious and fatigued. While in line, he grabbed a can of soda pop from the cooler and started drinking it. But suddenly he dropped the can of pop and fell to the floor.

When you arrive, you roll the patient over. You find him semi-coherent. He has a patent airway, is responsive to painful stimuli, and is bleeding from his head. He is oriented as to person and time, but doesn't know where he is. He says he's "OK." He insists that nothing is wrong and that he doesn't want to go to the hospital.

You apply a cervical collar, and then immobilize him by placing him on a backboard and securing him with straps. Then you place the backboard onto the stretcher, and apply the stretcher straps. You check his vitals. His blood sugar is low. You administer oxygen.

You ask the bystanders "Does anyone know him? What happened?"

SCENARIO "Joe, he's a diabetic, I think," answers one of the bystanders. Someone else tells you that the patient had a seizure and fell. Others say he fell first and then appeared to have a seizure. You check his neurosensory reactions.

> Doing further assessment in the ambulance, you find no other trauma except the lacerations on his forehead. His right pupil is reactive to light. The left one is sluggish. You place him on a nonrebreather mask at 15 liters. You note that his medical alert bracelet that says he is a diabetic.

> You feel strongly that he should be seen and evaluated at the hospital. You call medical direction for assistance and support. The doctor supports the position that the patient is not competent to refuse medical treatment and should be transported to the hospital. You maintain his patent airway during transport.

> After writing up your report at hospital, you are about to leave. The ER doctor sees you and confirms your decision to transport him to the hospital despite his reluctance. The doctor confirms that the patient is a diabetic but he also had a seizure, which caused a bleed on the brain. He would not have survived the head injury had he not been transported to the hospital.

Expressed Consent

The above scenario illustrates some of the issues of patient consent and refusal of treatment. As you know, a patient has the right to accept or refuse medical treatment. But you also know, from your experience, that the matter of consent can be ambiguous and complicated.

When is **expressed consent** required? Expressed consent is required before any conscious, mentally competent adult may be treated. The patient must be of legal age, capable of making a rational decision, and fully informed of the procedure you will be performing and of all of the risks of that procedure. Then the patient may consent verbally or with an affirmative gesture such as a nod of the head.

Implied Consent

Implied consent refers to the assumption that an unconscious or disoriented patient, if able to make a rational decision, would consent to life-saving emergency intervention. If the patient is not conscious and rationale, and there is no family member to consult, you may assume implied consent for treatment.

Children and Mentally Incompetent Adults

What if your patient is a child or a mentally incompetent adult? Consent for treatment of a child or mentally incompetent adult must be obtained from a parent or guardian, unless:

- The child is emancipated, according to state law. The term *emancipated* may include a child who is not of legal age, but is married, pregnant, or already a parent, is a member of the armed forces, or is financially independent and living away from the parents' home.
- A life-threatening situation exists and the parent or legal guardian is not available for consent. In those cases, implied consent may be assumed and emergency treatment rendered. Keep in mind that you when you transport the minor to the hospital you must **release** the minor to the custody of the emergency department. Be certain to record the name of the ED staff member to whom you release the minor, and keep thorough documentation of the transfer of custody as well as the incident.

Confidentiality

Laws pertaining to confidentiality vary from state to state, and have been changed (and expanded) significantly in recent years. Best practice is to obtain updated information on the status of confidentiality constraints in your jurisdiction from your EMS system advisor or from a recognized continuing education program in your jurisdiction.

In general, your patient interview, assessment and findings, and treatment are all confidential information. You are not permitted to release confidential information unless you obtain a written release form signed by the patient, or, if the patient is an unemancipated child or a mentally incompetent adult, from the parent or guardian. Sometimes a release is not required because:

• Other healthcare providers need to know information to continue care

- State law requires reporting incidents such as rape, abuse, or gunshot wounds.
- Third-party payment billing forms require the information
- A valid subpoena has been served.

Refusal of Care

A competent adult has the right to refuse treatment. Competence means that the adult is capable of making an informed decision. Patients may not be competent if under the influence of alcohol or other legal or illegal substances that impair judgment. The refusal of care may be verbal or it may be indicated by the patient shaking the head or pushing or gesturing you away, or some similar action.

Just as in the case of consent, a patient who refuses treatment must have been fully informed about the risks and benefits of the treatment as well as the risks and consequences of refusing the treatment.

The patient who refuses treatment must be presented with and asked to sign a "release from liability" form. The form states that the patient has been advised to accept medical treatment, informed of the consequences of not receiving the treatment, refuses to accept the treatment, and releases the city or ambulance service of liability for any consequences of the patient's refusal. If the patient refuses to sign, you may ask a police officer or other family member to sign that they have witnessed the patient's refusal.

The patient may withdraw from treatment at any time. For example, an unconscious patient who regains consciousness may refuse further treatment and transport to the hospital. Again, the patient must be of legal age, fully informed about the treatment and about the risks of refusing treatment, and must sign a "release from liability" form.

Medical Director Comment

In some areas, competency can only be established by the legal system. On the scene, you need to focus on the patient's decision-making capacity. Any care provider can form a judgment about this. When you inform patients of your medical concerns and spell out the medical risks they may incur by refusing care, you are providing them with information on which they can base an informed decision.

It is important to ask patients *why* they want to refuse this care. Even if you don't agree with their answer (I cant afford it, I have to pick up my kids from school), if it demonstrates a decision-making capacity and the patient voices understanding of the risks involved, the patient is probably competent to refuse care. If their answer makes no sense (Because it rained today, Because the voices told me to), they are not demonstrating decision-making capacity are likely *not* competent to refuse care.

It is important to document your reason for believing that the patient demonstrated decision-making capacity, and to include the patient's stated reason for refusal.

When the Patient Refuses Treatment

The EMT needs protection in the event of a refusal of care. The key to your protection is to prepare and keep complete and accurate documentation of the circumstances of the refusal. Always attempt to obtain the patient's vital signs and glucose level.

You may also wish to reconsider whether the patient is competent to refuse. Is it possible that the patient is in shock, and therefore, mentally not capable of making an informed decision? Is it possible that the patient is overwhelmed emotionally by the circumstances? Is it possible that the patient is impaired by illness, alcohol, drugs, or other medication, or by the lack of proper medication? Seek the assistance of medical direction to determine whether treatment may be justified on the basis that the patient is not currently competent to refuse.

Do not leave the scene without making further appeals to the patient or the patient's family:

- Review the possible consequences of refusing treatment. Explain again why treatment is essential.
- Appeal to the patient's family or friends to assist the patient in seeing the benefits of treatment and the risks of refusal.
- If you are unable to persuade the patient to agree to treatment, ask the medical director to speak directly to the patient; sometimes the patient will listen to a medical doctor's advice.
- Stay around while completing your reports and continue trying to persuade the patient to agree to treatment.
- Consider whether the police might be of assistance under the circumstances.

Medical Director Comment

It is tempting to think that having a patient sign AMA is the most convenient way to deal with difficult patients, but this is a dangerous trap. These patients are far more likely to suffer a bad outcome and they or their relatives are more likely to seek legal investigation into the reason care was not provided. To protect yourself from legal repercussions, make sure you thoroughly document your reasons for allowing the patient to sign AMA.

Make sure you do not turn refusal of care into a personal battle, and always offer patients a chance to change their mind and seek care later, or elsewhere. While not violating patient confidentiality, try to get any family members already involved aware of the medical risks so they may also try to convince the patient to seek appropriate care.

In doing so, you demonstrate to the family that you are concerned about the patient and have tried to provide care, and that it is the patient that is refusing.

Do Not Resuscitate (DNR)

Do Not Resuscitate (DNR) orders arise most often in cases of terminally ill patients. A patient (or the family) may have an advance directive, or written instructions, that have been prepared in advance, to document and clarify their refusal of resuscitative efforts.

The written instructions may come in the form of a do not resuscitate (DNR) order, a living will, or a healthcare proxy. Become familiar with the documents that may be used for this purpose in your jurisdiction. Be aware of the specific language they must contain in order to be effective.

The do not resuscitate (DNR) order is in writing and signed by the physician. The physician's instructions must be clear and unambiguous. In general, check for the required signatures and the effective and/or expiration dates.

Learn your EMS system protocols concerning DNR advance directives. Keep yourself knowledgeable about any updates of the protocols. If you have **any** doubt concerning the meaning or effectiveness of the order, begin resuscitation efforts and consult medical direction immediately. Remember, you must see the actual DNR order.

Medical Director Comment

You may be placed in a stressful situation in which family does not have the required documentation of a DNR order but insists the patient "would not want to be resuscitated." The best course is to explain politely to the family that without the required DNR order your protocol is to initiate resuscitation unless there are irreversible signs of death (rigor mortis, decapitation, dependent lividity).

Explain to families that care can always be withdrawn later, when more time is available to consult the primary care physician for more information after the patient arrives in the hospital. You must realize that any delay in care may cause irreparable damage that can not be repaired if it was later discovered that the patient did not have DNR status.

According to the American Heart Association, CPR is initiated without a physician order, based on implied consent for emergency treatment, and that a physician's order is necessary to withhold CPR. When a patient decides to adopt DNR status, they have a discussion with their doctor in which they should be told that this DNR order must be produced for medical personnel in order to stop or prevent resuscitation. It is the patient's and family's responsibility to keep copies of this order accessible at all times.

It is natural to fear that the family will become angry with you or for you to feel guilty about possibly going against patient wishes, but most of the time family realize you are trying to do the right thing, and that it was their responsibility to have this DNR documentation available.

There have been instances in which patients change their mind after initiating a DNR order, and they destroyed the order unbeknownst to relatives, or in which there is foul play by family members trying to mislead EMS care providers. The safest course of action is to preserve life until valid documentation of a DNR order is produced.

Keep in mind that DNR does not mean do not care! Provide supportive care that decreases patient suffering. Explain hospice care and its availability to patients and their families.

Domestic Violence, Abuse, and Neglect

Physical abuse occurs when improper or excessive actions injure or cause harm. **Neglect** occurs when someone who has a claim to attention (such as a child or elder) receives inadequate attention or respect. Abuse of elders can be physical, mental, or emotional in nature. Both children and elders may be victims of abuse (physical, emotional, or sexual) or neglect. **Domestic violence** is the emotional or physical abuse of one household member by another.

The EMT-Basic must be aware of the most common signs of abuse and neglect. Be alert to the following:

- Multiple bruises, abrasions, lacerations, and broken bones in various stages of healing, and defensive wounds such as bruises on the back of the arms (especially seen in victims of domestic violence)
- Injury on both the front and back of the patient
- Injuries that are inconsistent with the description of what happened; or there are conflicting stories of how the injuries occurred
- Unusual wounds, including cigarette and other burns
- A fearful patient
- Injuries to the genitals
- Injuries to the brain or spinal cord. These injuries may occur when an infant is violently shaken (shaken baby syndrome).
- Repeated calls to the same address
- Delay in reporting injuries
- Caregiver seems excessively concerned, guards the patient, and refuses to leave the patient's side (typically in domestic abuse and violence situations)
- Lack of supervision by the caregiver
- Malnourished-appearing child
- Unsafe living environment
- Signs of violence in the house (broken plates, furniture)

Be aware that scenes of possible **abuse** may arouse your emotions. Use self-restraint. Be objective and reserve judgment. Make an accurate and detailed description of the injuries and the history. Make an accurate record of your findings concerning the home environment, the conduct of the caregivers, and the victim's injury patterns and locations. Your documentation will assist the hospital physician in reaching the appropriate conclusions regarding the possible abuse.

Avoid acting in an accusatory or confrontational manner. This may escalate an already tense situation, putting you and the abuse victim at greater risk.

Although it is nearly impossible to separate the victim from the abuser in the residence, it is important that you attempt to do so. If you are unable to separate them, interview patients when you are alone together in the ambulance. Discourage the abuser from accompanying you and the victim in the ambulance during transport to the hospital. Suggestions include:

- "There isn't enough room in the ambulance."
- "It may be more convenient to have your own vehicle at the hospital."
- "Rules prohibit us from allowing family members to accompany the patient to the hospital."
- "The law requires me to provide a safe environment for the patient."

Be aware that patients may not view themselves as battered victims. Ask direct questions and avoid the words *battered* and *abused*. (Are you afraid of someone in your household? Has anyone hurt or threatened you?) Do not name the person (Did your husband/wife do this to you?), as this may cause the victim to feel the need to take sides.

Always request police assistance when you suspect abuse or neglect.

REPORTING REQUIRED BY STATE LAW

Make yourself aware of the laws in your jurisdiction concerning who is required to report suspected abuse or neglect. Keep yourself updated on the procedures and protocols of your EMS system about reporting requirements when abuse or neglect is suspected. Make sure that you understand how your EMS system approaches the requirements of confidentiality and balances them with the legal reporting requirements in cases of suspected abuse or neglect.