

Appalachian Search and Rescue Conference Center for Emergency Medicine of Western Pennsylvania

Wilderness EMT Textbook

Chapter XIX: Stress Management and Critical Incident Stress Debriefing (CISD)

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The ASRC-CEM Wilderness Emergency Medical Services Institute

The ASRC-CEM Wilderness Emergency Medicial Services Institute, previously named the Wilderness Emergency Medicine Curriculum Development Project, is devoted to developing curricula for wilderness EMS providers and medical control physicians, and fosters wilderness EMS research. It is a cooperative venture of the Appalachian Search and Rescue Conference and the Center for Emergency Medicine of Western Pennsylvania. The ASRC is a large, tightly-knit wilderness search and rescue organization with eight teams throughout the mid-Appalachian states. The Center for Emergency Medicine is an emergency medicine and prehospital care research and teaching organization. It provides a medical helicopter service, an emergency medicine residency, Emergency Medical Services for the city of Pittsburgh, and conducts a variety of related projects.

The WEMSI Wilderness EMT Curriculum

This chapter is one part of the ASRC-CEM Wilderness Emergency Medical Technician Textbook. In concert with the WEMT Curriculum, the Textbook has been in development since 1986, and took as its starting point a program Dr. Conover developed for the National Association for Search and Rescue in 1980. The Project has also drawn on many other sources in creating this Textbook. These include the Wilderness EMT program of SOLO (Stonehearth Open Learning Opportunities), the WEMT program developed by Wilderness Medical Associates, and the Winter Emergency Care Course of the National Ski Patrol. The Wilderness Medical Society's educational and research publications provide needed background for the Textbook. The National Association of EMS Physicians has developed and has published clinical guidelines for delayed/prolonged transport; WEMSI protocols are also available as a model.

With textbooks used by its EMT and SAR prerequisites, this Textbook provides all the training material needed to complete the Wilderness Prehospital Emergency Care curriculum established by the Wilderness Medical Society. (Indeed, early drafts of this textbook were a major resource for the WMS curriculum.) We assume that students have the knowledge and skills of an EMT-Basic or EMT-Paramedic. (The curriculum can accommodate both EMTs and paramedics in the same class.) We also assume that students have the knowledge and skills of the Virginia Ground Search and Rescue Field Team Member standards or better. (EMT standards are available from state EMS offices or the U.S. Department of Transportation. The Virginia GSAR standards and GSAR Manual are available from the Virginia Department of Emergency Services, 310 Turner Road, Richmond, VA 23225-6491.) The curriculum is competency-based rather than hours-based, but can be competed in roughly five intensive days. The curriculum also recommends clinical training, for which guidelines are available in the Curriculum.

WEMT Textbook Chapter Development

An outline for each of the twenty sections of the WEMT curriculum was created by a Task Group of five to twenty selected members, but draws on many published sources and consultants. A Task Group Leader guides the Task Group in reviewing and revising the section, and the Curriculum Coordinator supervises all aspects of curriculum development.

When the outline satisfies the Task Group, it goes to our Editorial Board; this includes officers of the ASRC and CEM. It also includes experts in emergency medicine, search and rescue, and education, and a State EMS director. Once acceptable to the Board, it is released to the public.

The Task Group Leader and Editor-in-Chief then produce a Textbook chapter based on the outline. Having a single editor provides a coherent, unified style. Basing chapters on the Task Group's Lesson Plans, as approved by the Editorial Board, ensures accuracy. Each chapter provides a glossary of terms new to a reader with basic EMT and SAR training. In the complete textbook, these glossaries will be merged and alphabetized. Each chapter also provides references to support its statements and for further reading. Background that need not be presented in a class based on the Curriculum appear *in this small, italic font*.

The textbook will be commercially published when completed. All profits will be used to support curriculum development. The textbook will be submitted for publication in 1994. Until then, preliminary versions of the chapters will be printed in this format. These preliminary versions are for use only at classes authorized by the Executive Director.

A Course Guide with information about Wilderness Emergency Medical Technician training and course scheduling, will also be available in late 1994; a checklist for recommended in-hospital training is available now. For a price list of available publications, write to: Center for Emergency Medicine, 320 McKee Place, Suite 500, Pittsburgh, PA 15213-4904, (412) 578-3203.

We actively solicit suggestions from anyone reading any of our Lesson Plans or Textbook chapters. Please send your comments to the Editor-in-Chief, as listed on the title page.

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Educational Objectives

- 1. Describe the critical incident stress concept and its long-term consequences, and define Critical Incident Stress Debriefing (CISD).
- 2. Define three major types of stress reactions.
- 3. Give examples of the physical, emotional, cognitive, and behavioral effects of immediate stress reactions.
- 4. Describe the signs and symptoms of delayed stress reactions.
- 5. Describe six major psychological characteristics of emergency services workers.
- 6. Describe appropriate stress management for WEMTs and others involved in critical incidents. Specifically, discuss the effects of
- a. shift length,
- b. briefing about expected sights or smells,
- c. body part recovery,
- d. food,
- e. soap and water for hand-washing,
- f. caffeine and tobacco use,
- g. relief of those with behavioral clues suggesting the beginning of a stress reaction,
- h. post-operation CISD briefings, and
- i. criteria for instituting mandatory CISD sessions.
- 7. Describe stress factors that are common in wilderness search and rescue operations, including
- a. the experience and "hardening" of wilderness search and rescue personnel,
- b. the role of cumulative stress in wilderness search and rescue,
- c. the constant nature of environmental stress for wilderness search and rescue personnel, and
- d. the need for CISD workers, especially mental health professionals, to use re-

straint in "pulling" personnel, lest this cause additional stress.

- 8. Outline the principles of on-scene psychotherapeutic "first aid" during a wilderness search and rescue operation. Specifically, discuss:
- a. rest breaks,
- b. behavioral clues to an immediate stress reaction,
- c. sensory isolation,
- d. the role of group vs. one-on-one debriefing for on-scene use,
- e. techniques for starting a debriefing session, and
- f. methods for dealing with a person who "breaks down" during debriefing.
- 9. Identify four major kinds of CISD.
- 10. Name and describe seven major phases of a CISD session.

Notes: Stress Management and Critical Incident Stress Debriefing (CISD)

Anyone who is taking a Wilderness EMT course is likely to share the traits of other emergency services workers, including a macho attitude toward psychological stress. EMTs know all about denial in their alcoholic patients, and may be aware of stress in a theoretical way, but seldom does stress management become part of the EMT's training. This section aims to correct that fault.

Though this section mentions stress management for the WEMT's patient, the WEMT and the WEMT's wilderness coworkers are the true objects of the section. Judging by the criteria that Dr. Mitchell popularizes for critical incidents, almost every wilderness search and rescue operation qualifies. This section should prepare the WEMT to recognize immediate stress reactions, provide on-scene psychological "first aid," and recognize the need for and value of CISD.

We are privileged to have the participation of Dr. Jeff Mitchell, the "father" of CISD for emergency services workers in the U.S., in our Task Group.

- 11. Describe stress management techniques that can be used for wilderness and disaster patients. Specifically,
 - a. describe the applicability of these stress management methods (ones designed for emergency services workers) to a victim of a wilderness or other disaster;
 - b. describe the three most prevalent psychological states seen in the survivors of a disaster;
 - c. outline a screening mental status exam to be used for classifying disaster survivors;
 - d. outline the criteria for classifying a survivor as having psychosis; and
 - e. outline a management plan for shocked and hysterical disaster survivors.

Critical Incident Stress

The idea of critical incident stress is not new: for a long time, people have had trouble dealing with certain situations, especially disasters, and it's not a secret. Critical Incident Stress and its most severe consequence, Post-Traumatic Stress Disorder (PTSD) have been recognized as a consequence of World War II and the Viet Nam war. However, interest in this problem waned as each war receded into the past.

Widespread recognition of the stress faced by emergency services workers, however, had to wait for the work of Jeffrey Mitchell, Ph.D., an erstwhile EMT/firefighter who is a clinical psychologist. In the past several years, Dr. Mitchell has popularized the idea that critical incident stress occurs in many emergency services workers, and needs to be recognized as an immediate problem with potential long-term consequences. Long-term consequences of unresolved immediate stress reactions include severe depression (sometimes leading to suicide), marital problems (sometimes leading to divorce), and a variety of other psychological disturbances. Largely through Dr. Mitchell's work, Critical Incident Stress Debriefing teams have sprung up across the country and across the world. CISD is a form of limited intervention that can greatly decrease delayed problems from critical incident stress. An excellent example is the number of emergency services workers who quit their jobs, became divorced, or committed suicide after the recent San Diego and Cerritos air crashes. Both incidents were similar in terms of deaths, injuries, and impact on emergency services workers. After the Cerritos incident, though, most emergency services workers participated in a CISD session, and the rate of delayed problems was much decreased.

Although WEMTs don't need to be fullytrained CISD team members, an understanding of the concept and the CISD process can help you recognize and manage stress in yourself and in other search and rescue team members. Stress awareness can help you understand and deal with stress reactions in your patients. On a search and rescue mission or during a disaster, understanding stress reactions and CISD allows you to recognize situations requiring the services of a CISD team, and to diagnose immediate stress reactions and start psychological "first aid."

A critical incident is any situation faced by an emergency services worker that generates unusually strong emotional impact. These include:

- the serious injury or death of an emergency services worker in the line of duty;
- * the serious injury or death of a bystander from an emergency services operation;
- * multiple deaths or serious injuries;
- serious injury or death of a child or infant;
- * any situation that attracts an unusual amount of attention from the media;
- * any loss of life after extraordinary and prolonged search and rescue efforts; and,

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* any situation that is charged with emotion and that causes an emotional response that is beyond the normal coping mechanisms of emergency services workers.

We can classify stress response syndromes into three categories. Immediate Stress Reactions occur at the scene or within 24 hours. Delayed Stress Reactions occur a variable time after the stressful incident, and are often triggered by something reminiscent of the first stressful incident. Sometimes the inciting event may be trivial to others. Cumulative Stress Reactions (also known as "burnout") occur from mild but unrelenting stress ("not devoured by lions, but nibbled to death by ducks").

Immediate Stress Reactions

The immediate stress reaction may include physical, emotional, cognitive, and behavioral components. Any of these signs and symptoms may be present.*

It generally occurs at the time of the incident or within 24 hours. A most important point: an immediate stress reaction is the response of a normal person to an abnormal situation, and not a sign of any psychological weakness or chronic psychiatric problems.

Physical symptoms include:

- * profound fatigue and weakness;
- * fine tremor or muscle twitches;
- * diaphoresis;
- * vasovagal orthostatic hypotension or vasovagal syncope (simple fainting);

- * nonspecific lightheadedness;
- * nonspecific headache;
- * difficulty focusing one's eyes;
- * nonspecific difficulty hearing;
- * palpitations;
- dyspnea and chest pain with or without hyperventilation;
- nausea, vomiting, diarrhea, or abdominal pain; or
- * sensation of a lump in the throat (globus hystericus).

Emotional symptoms include:

- * anticipatory or generalized anxiety (anxiety about the future, or unconnected with any present danger or fear);
- * strong fear or even panic reactions;
- * psychological shock (described later);
- * survivor guilt uncertainty (guilt over surviving when others have died);
- * acute grief reactions;
- * depression; or
- * intensified or inappropriate emotional reactions to normal occurrences.

Cognitive symptoms include:

- * blaming others (sometimes even those who are logically blameless) for the critical incident;
- * generalized confusion;
- * inability to concentrate;
- * inability to perform simple calculations;
- * poor attention span;
- * memory lapses;
- anomia (inability to find the right words);
- inability to distinguish the difference between serious and trivial concerns;

^{*} The term "immediate stress reaction" is now favored over the term "acute stress reaction." "Acute" implies severe as well as sudden onset, and some immediate stress reactions may be mild yet bothersome.

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Delayed Stress Reactions

- * inability to make decisions; and
- greatly increased (or greatly decreased) alertness and awareness of surroundings.

Behavioral symptoms are relative to the person's normal behavior patterns, which may vary widely between individuals. They include:

- * changes in normal activity patterns;
- * changes in speech patterns;
- withdrawal;
- * angry outbursts;
- hypervigilance (increased suspicion and attention to one's environment or even outright paranoid behavior;
- * changes in interactions with others (i.e., wife, friends, team members);
- increase or decrease in appetite or alcohol consumption;
- * sleep disturbances, including early morning awakening, early insomnia, hypersomnia, and generalized fatigue; or
- visits to health professionals (possibly including the team WEMT) for seemingly minor or even nonexistent problems.

Delayed Stress Reactions

The **Delayed Stress Reaction** is characterized by more than three weeks of symptoms. Symptoms usually begin after two or three days, and continue for three to four weeks or more. Delayed stress reactions sometimes persist for months or years.

Sometimes the symptoms are continuous. Other times, the symptoms may occur unexpectedly, often after a "trigger" stimulus. The "trigger" is, at some level, reminiscent of the critical incident. The trigger may seem trivial: a particular smell, a particular street corner or trail, or a particular grocery-store vegetable or a particular type of tree. Symptoms of a delayed stress reaction include:

- behavioral, cognitive, physical, or emotional symptoms as described above for immediate stress reactions;
- * constricted affect (a limited range of emotions, compared with normal);
- a sense of detachment from normal life events ("derealization");
- * persistent guilt over survival (when others didn't survive);
- recurrent dreams, or intrusive waking images, about the incident ("flashbacks");
- fear and anxiety, sometimes overwhelming, and particularly, fear of another similar incident;
- regression (retreat to infantile or childish defense mechanisms);
- avoidance behavior (avoiding circumstances or places that remind the person of the stressful incident);
- * a preoccupation with death;
- * sleep disturbances as described for immediate stress reactions; or
- * olfactory (smell) hallucinations.

In its most severe form, a delayed stress reaction may become a full-fledged Post-Traumatic Stress Disorder, which may require significant psychological intervention.

Cumulative stress reaction, also known as "burnout," is beyond the scope of WEMT training. Those who wish to read further on cumulative stress would do well to start with Mitchell and Bray's *Emergency Services Stress.*¹

Emergency Services Workers

Special characteristics of emergency services workers mandate a special style of psychological intervention. Emergency services workers do not respond to some types of psychotherapeutic

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approach. For example, one technique, which, to oversimplify greatly, tends to answer a question with another question, is ineffective. ("Why am I having trouble sleeping?" "What makes you believe that you're having trouble sleeping?" "Dammit, that's what I came to you for help with!" [Emergency services worker walks out. Or, if the emergency services worker is particularly action-oriented, emergency services worker punches mental health worker in the nose!!]) Techniques for use with emergency services workers, however, are also effective for the general populace.

Emergency services workers have obsessive/compulsive personality traits (the ones who don't have such traits seldom last long). Emergency services workers like to be in control; are used to being in control; and do not tolerate not being in control. Emergency services workers are risk oriented. They are careful risk takers, but risk takers nonetheless. Emergency services workers are action-oriented: they have little tolerance for inaction, indecision, or prolonged discussion. Emergency services workers "need to be needed"; they do not like to be in situations where they need help from others. Finally, emergency services workers are dedicated. Manv of these characteristics are laudable and even required character traits for an emergency service worker, yet they are seldom consciously acknowledged, and may complicate dealing with psychological problems.

Stress Management and the WEMT

At a wilderness search and rescue or disaster mission, you may be the on-scene "expert" in psychological stress and its management. (As with many things taught to WEMTs, you may know only a little compared with a clinical psychologist. Still, you may be the best available.) Most search and rescue operations are not critical incidents, but all have the potential to abruptly change into one. Here are guidelines for disaster stress management with adaptations for wilderness search and rescue.

1. Keep shifts to a maximum of 12 hours. This is a good general rule for disasters, and is the ideal for search and rescue operations. However, the sustained level of stress is lower for search and rescue than for most disasters, and the search may go on for days. Therefore, search and rescue ICs and mental health professionals must take this 12-hour "maximum" as merely an ideal, rather than a rule to be followed.)

2. Those new on-scene should be fully briefed, especially about any particularly disturbing sights or smells.

3. Keep an eye on any group involved with recovery of bodies or body parts. They are particularly likely to need early relief.

4. Ask the Logistics Section to arrange for appropriate food. This means food that has no skin, bones, or fat, and that is not burned. Fresh or dried fruit and granola bars are better than fried chicken. Concentrated sweets are probably best avoided (like caffeine, they may accentuate the stress response, and tend to cause a delayed surge of insulin and thus hypoglycemia; and, they may require large amounts of water for dilution and absorption).

5. For psychological reasons, those dealing with bodies or body parts must have water and soap available for hand-washing, even if wearing gloves,

6. Whenever possible, those involved in a critical incident should be kept away from caffeine and nicotine for at least 4 hours. Caffeine and tobacco markedly increase stress reactions. Seven hundred milligrams of caffeine, which is about 7 cups of coffee, is enough to cause primary psychiatric symptoms even in those without stress. Acute ingestion of 2000 milligrams, which is about 20 cups of coffee, is a fatal dose for an adult. Hot cocoa, while it contains theobromine that mimics some of caffeine's effects, is a good alternative; herbal teas are also good to serve in the mess tent.

7. The incident staff should be advised to pass on the word to relieve any personnel who are showing significant changes in behavior.

8. If a search and rescue mission or disaster operation turns into a critical incident in CISD terms, all personnel being released from Base should participate in a brief pre-release session that presents information about immediate and delayed stress reactions, ways of dealing with them, and where to turn if help is needed.

ICs may want to ask the local CISD team to respond to a SAR mission early, if it is likely to be particularly stressful.

Formal CISD sessions should be mandatory for suicides, incidents with many casualties, or serious injury or death of SAR team members or EMTs in the line of duty (or even not in line of duty, if very unexpected or of a particularly disturbing nature). This should include a quick defusing in 8-12 hours, and a full debriefing in 3-7 days. If needed, debriefings for coworkers and spouses must be held as second and third separate sessions, respectively.

What if a major stressful incident occurs during a search and rescue mission that must continue? (E.g., a team member is seriously injured but the lost person has still not been found.) CISD professionals can "spot check" for individuals showing signs of stress, and perform a defusing with the Field Team as soon as they get back to Base. Then, after the entire mission is completed, they can provide a formal CISD session. This is the only time that a group session might be appropriate during a mission.

While these standard emergency services stress guidelines apply well to search and rescue, you should know about several additional psychological aspects of search and rescue operations.

Many emergency services workers are "hardened," to a degree, to the grisly sights and smells of a disaster. This comes from repeated exposure to such experiences in their work. Wilderness search and rescue personnel, however, are usually volunteers who have much less exposure to such traumatic sights and smells in their daily work. Therefore, you must consider the background of search and rescue personnel when you estimate the impact of the incident's sights and sounds.

Many search and rescue operations are not, at the time, critical incidents. However, SAR operations may leave lingering traces of stress that are brought out by the sights, sounds, and stresses of subsequent missions. Therefore, WEMTs and CISD mental health professionals should expect that search and rescue debriefings will involve stresses brought out from prior missions.

In most critical incidents, a stressed person may be easily be brought out of the area to a psychologically safer area. When in the wilderness, though, the major stress comes from the hostile environment itself. On a wilderness search and rescue operation, "walking back to the truck to rest" may take the better part of a day. It is rare for a search and rescue team member to become psychologically disabled from to stress due to the environment. (Possibilities might include a difficult winter bivouac, or being stuck in a small crawlway in a cave.) However, you must account for the environment as continuing source of accumulating stress.

CISD mental health professionals and WEMTs should be conservative in "pulling" search and rescue personnel from operations. Search and rescue personnel are accustomed to levels of long-sustained chronic stress, unlike many other emergency services workers, who are used to shorter operations. Search and rescue personnel may show signs of an early stress reaction, yet continue to be completely functional for a long time. "Pulling" those with "soft" signs of a stress reaction, when the person is used to functioning for extended periods with such adaptive functioning, may actually increase stress on the person, and on those who must take up his or her burden.

With this knowledge, you, as a WEMT knowledgeable about stress and CISD, can be a valuable asset to any SAR operation, even if the whereabouts of the victim is still unknown.

Psychotherapeutic First Aid

You may encounter search and rescue team members having immediate stress reactions, and may be the person best qualified to deal with the situation. WEMTs are quite capable of performing on-scene psychotherapeutic "first aid," following the guidelines presented here.

Look for those who are showing some signs of stress (even if not a full-blown immediate stress reaction) and try to arrange rest breaks for them. Look for those with immediate stress reactions: a person walking about aimlessly, a person sitting and staring blankly (unless simply exhausted), or a person behaving irrationally.

The first step in managing an immediate stress reaction is to isolate the person from the sights, sounds, and smells of the incident. Having the person face away from the incident, or get on the other side of a vehicle, may be effective. If smells are prominent, move the person upwind. If you determine that the patient should not be moved, place an object to block the patient's view.

When engaged in on-scene psychological "first aid," peers (e.g., WEMTs) can ask "Hey, are you OK?" (A CISD-trained peer must be an emergency services worker. For SAR personnel, an ideal "CISD-trained peer" is a SAR team member with CISD training.) However, this is not an acceptable question coming from a mental health worker at the scene. For this kind of psychological "first aid," you just need to lend a sympathetic ear. If you need to prompt the person to start talking, start asking about facts first, and only after some rapport is established, start asking about feelings. The section describing the formal CISD process (below) provides an outline that may be used in individual sessions. When an emergency services worker "breaks down" in the course of formal debriefing or informal peer debriefing, it is important to validate the person's feelings ("hey, this is pretty hard for all of us to take.") and back off, going to another person or another topic. Do not abandon the person; monitor him or her, and arrange extra help if it seems necessary.

Group interventions are never appropriate at a scene where hazards are still a problem. Group intervention moves participants from a cognitive level to an emotional level. Emotional ventilation may be important for the long-term mental health of the person. However, the intensive emotional charge of a group session causes diminished cognitive function. This can interfere with people's ability to deal with the very real hazards of wilderness search and rescue operations. Group debriefing might be appropriate at a stable Base Camp, but only when people will have several hours of rest after the group session, and thus be able to regain full cognitive function. A defusing session at Base Camp at the end of each shift, or when a particular Field Team returns to Base, might be appropriate for very stressful operations. According to Dr. Mitchell, more formal CISD sessions should be held only completely away from the hazards and distractions of a Base Camp during a search. (In certain circumstances, it might be appropriate to have a session at the Base Camp but after the operation has concluded.)

Critical Incident Stress Debriefing

There are four major types of critical incident stress intervention:

On-Scene Support Services are the briefest form of critical incident stress intervention, usually performed by CISD-trained peer support personnel, and sometimes by mental health professionals. As with psychological first aid provided by WEMTs which is always one-on-one, mental health professionals' on-scene services are almost always one-on-one. (As discussed above, group intervention during the mission is more likely to cause problems than to help. The only potential exceptions are short defusing sessions for specific Field Teams or at the end of shifts as described above.) During the mission, CISD-trained peers and mental health professionals can serve three major roles:

1. "Spot check" to monitor for individuals showing signs of stress.

2. Advise the Incident Staff as to psychological aspects of the operation. (E.g., whether a given Field Team should be reassigned to the field or sent to the rest area.)

3. Assist with the psychological care of disaster victims, bystanders, or family members. Even though this not a standard part of the CISD team's role, they are often the most capable people at Base for dealing with such problems. And, as noted before, techniques for dealing with stress in emergency services workers can be used for the general public, even though the reverse isn't true.

On-scene support services are very effective in reducing military post-traumatic stress disorder, and help prevent stress reactions in civil disasters as well.²

Defusing is a brief form of CISD that occurs within a few hours of the critical incident. Defusing is best led by a CISD professional or a CISD-trained peer, but for remote search and rescue operations, may need to be led by the Incident Commander (IC) if CISD-trained personnel are not available. A defusing should last about an hour, and should be separate from any post-mission critique. If led by the IC, a defusing session tends to gradually metamorphose into a critique; ICs must take great care to keep this from happening. The critical point is that the atmosphere is positive and supportive, with an interest in the feelings of those present. All present should be encouraged (but not forced) to express their feelings, and no one should be

criticized for their feelings by the IC or anyone else.

The Formal CISD is described in detail below.

Follow-up Services are provided, when needed, for several weeks after an incident. Follow-up support services include telephone conversations, visits to a fire or police station or to a SAR team meeting, one-on-one contacts, and possibly small group sessions. When necessary, follow-up services often start with a single group meeting one week after the full CISD session, allowing an assessment of the need for particular services. Some of these services may take on some of the aspects of general psychotherapy, and may need to be extended into additional group sessions.

Formal CISD Phases

A formal CISD session consists of seven phases. As the session proceeds, the discussion moves into more emotionally-charged topics, then gradually comes back out into less-emotional discussion.

First is an Introduction, in which the ground rules, such as confidentiality, are laid down.

Second is the Fact Phase, in which the situation and the aspects of the situation which made it difficult to experience are briefly reviewed with an emphasis on how those facts produced emotions;

Next comes the **Thought Phase**, in which the participants are able to state their first thoughts upon exposure to the worst part of the incident.

The emotional depths are usually reached in the **Reaction Phase**, in which participants can state their overall feeling or emotional reaction to the situation. The participants are usually asked to discuss the worst thing about the situation for them personally.

Moving to a less emotional level, we reach the Symptom Phase, in which the group can discuss

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the cognitive, physical, emotional, and behavioral symptoms which occurred at the scene, or within a few days or weeks after the incident.

The sixth phase is the **Teaching Phase**, in which the group leader provides reassurance that what the members of the group are experiencing is a set of normal reactions to a bad incident and that they are not going crazy; and

Finally the session concludes with the Re-entry Phase, which is the concluding phase, in which people get a chance to ask questions and clarify what has occurred. The leader and CISD team members may then make referrals for additional help.

These are the formal stages of a full formal CISD session. The principles, however, may be applied in less formal CISD sessions, such as an initial defusing.

CISD teams are generally available through local law enforcement, fire, or emergency medical services agencies. If you need a CISD team immediately, and cannot obtain one through local sources, you may call the International Critical Incident Stress Debriefing Team Coordination Center at 1-410-313-2473 (Emergency Only). General information about CISD teams is available from the American Critical Incident Stress Foundation, Inc., P.O. Box 204, Ellicott City, MD 21041; (410) 750-0856.

Managing Patient Stress

Much has been written on the psychological impact of disasters, and most of it is relevant to the wilderness patient, who is the victim of a small but psychologically devastating disaster.³ What has been said about stress reactions in emergency services workers, above, is also relevant to the victim of a disaster or wilderness rescue.

Most disaster victims fall into one of three classes. However, a person may go from one class to another, and the number in each class depend on the nature of the disaster and the people involved. Very roughly, a third of the victims are able to function adequately, though they may show a few signs of an immediate stress reaction. About a third of the victims are stunned and in





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a state of psychological shock. They may show physiologic signs of a hyperadrenergic state, including diaphoresis, clammy skin, dull eyes, and dilated pupils. They are usually inactive and withdrawn. When asked questions, they may respond slowly or not at all. The other third of victims are hysterical. They are agitated, physically very active, and generally acting out-of-control. Most show no signs of true psychosis, but seem unable to slow down enough to think clearly, or even to talk rationally. They may have amnesia for recent events, or may develop hysterical paralysis of limbs. Despite what one learns from television, never slap a hysterical person or use force. For one very good reason, it is battery, and illegal. For another, there is no evidence that physical force helps hysterical people, and some good evidence that it does harm.

The first step is a quick baseline mental status exam to assess three key points. If all three are appropriate, the person falls in the adequately functioning group. If any of these three is inappropriate, the person falls in one of the two other groups. These may be remembered by the SEA-3 mnemonic:

- * S-Speech
- * E-Emotional status or response
- * A-3- Alertness, Awareness, and Actions (behavior)

If the person seems to have severe thought disturbances, or hallucinations or delusions, he or she has at least some degree of psychosis. A very few disaster victims will be overtly psychotic. More detailed guidelines for diagnosing and dealing with patients with psychotic reasoning are presented in the section on General Medicine. These patients need evacuation to a medical facility for therapy.

Some general rules will help you deal with hysterical and psychologically shocked people. As with an emergency services workers with an immediate stress reaction, the first step is to isolate the person from the sights, sounds, and smells of the incident. Give simple, clear, and gentle directions. Find something constructive for the person to do. It is OK to say "You're in psychological shock from this disaster. Right now, the best thing for you, and for the rest of us, is for you to help out by bringing water up from the creek." This validates the person's perception that he is not functioning normally, but lets him know that there is still something that he can do to help, and gets him away from the scene. Once the initial shock of the disaster wears off, gently "wean" hysterical people into making their own decisions.

All dealings with hysterical people must be completely honest. Cooperation depends on credibility. Never lie just to agree with a hysterical or shocked patient.

Many people will benefit from just having someone to talk to. If you have a victim who seems psychologically secure, ask him or her to help by going around and talking with the psychologically "walking wounded." However, protect hysterical people from the media, if necessary. Isolate those people who are so hysterical as to be disruptive to the rest, preferably with a stable individual who can spend some time "talking them down."

Avoid sedatives and psychotropic drugs unless absolutely necessary. They may mask physical injuries, and are a poor substitute for evacuation and counseling. If sedation is absolutely needed, a dose of 1 to 5 milligrams of haloperidol (Haldol®), either IM or PO, is a good first choice. Sedatives and antipsychotic medications are discussed in more detail in the pharmacology section. The Disaster section also discusses the psychological impact of disasters.

Glossary

Affect: When used in the psychological or mental status exam context, affect means the physical signs of emotion; someone who shows no signs of emotion has a flat affect, and someone who is depressed may show a sad affect.

Anomia: inability to find the right words.

References

- Critical incident: An incident causing such a high level of psychological stress that many exposed to it develop immediate or delayed stress reactions.
- Critical Incident Stress Debriefing: CISD is a form of limited intervention that is highly effective in preventing many of the ill effects resulting from exposure to a critical incident and its attendant immediate and delayed stress reactions.
- Critical incident stress: psychological stress resulting from specific critical incidents that cause high levels of psychological (but not necessarily physical) stress.
- Cumulative Stress Reaction: a set of abnormal and maladaptive responses to chronic high levels of stress.
- Delayed Stress Reaction: a psychological reaction, characterized by unusual physical, emotional, cognitive, and behavioral signs and symptoms, occurring weeks or months after exposure to a critical incident, and often triggered by a seemingly innocuous stimulus.
- Globus hystericus: sensation of a lump in the throat due to stress.
- Hallucinations: sensory impressions of objects or people that do not exist in reality; hallucinations may be visual, auditory, or even tactile or olfactory.
- Hypersomnia: sleeping too much.
- Hypervigilance: increased suspicion and attention to one's environment.
- Immediate Stress Reaction: a psychological reaction, characterized by unusual physical, emotional, cognitive, and behavioral signs and symptoms, occurring at, or soon after, exposure to a critical incident.
- Insomnia: Inability to go to sleep normally. Olfactory: relating to the sense of smell.

- Peer: "1. a person of the same civil rank or standing; an equal before the law. 2. one who ranks with another in respect to endowments or other qualifications; an equal in any respect." When talking about trained peers in respect to CISD, we mean people who have similar enough backgrounds to be regarded as "one of us." Thus, a CISD-trained peer must be an emergency services worker. For SAR personnel, an ideal "CISD-trained peer" is a member of a SAR team with CISD training.
- Post-traumatic Stress Disorder (PTSD): a psychiatric disorder which is caused by an exposure to a severe stress. This disorder usually needs special treatment by a mental health professional.
- PTSD: Post-Traumatic Stress Disorder.
- Regression: retreat to infantile or childish defense mechanisms.
- Theobromine: a chemical found in cocoa and chocolate that has stimulant actions similar to caffeine.

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Chapter XIXb: Death and Dying

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Appalachian Search and Rescue Conference Center for Emergency Medicine of Western Pennsylvania

Wilderness EMT Textbook

Chapter XIXb: Death and Dying

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Note: this section has been developed as an addendum to the section on Stress and CISD and will be folded into that section in the near future, as part of a revision and expansion of that section into a more general treatment of psychological aspects of Wilderness EMS. © 1989, 1997 by ASRC-CEM WEMCDP/WEMSI This Textbook chapter is based on material created and edited by members of a Project Task Group, and approved by the Editorial Board, of the ASRC-CEM Wilderness EMS Institute. It may be not be reproduced, whole or in part, by any means, without written permission. The Project, its Task Group, Editorial Board and Staff, and the Editor-in-Chief have attempted to assure that all material herein is accurate, but can accept no responsibility for its use. All care rendered by WEMTs must be at the direction of a licensed physician and in accordance with applicable laws and regulations. Editor-in-Chief: Keith Conover, M.D., FACEP, 36 Robinhood Road, Pittsburgh, PA 15220 (412) 561-3413 kconover+@pitt.edu

Background Information

The ASRC-CEM Wilderness Emergency Medical Services Institute

The ASRC-CEM Wilderness Emergency Medical Services Institute, previously named the Wilderness Emergency Medicine Curriculum Development Project, is devoted to developing curricula for wilderness EMS providers and medical control physicians, and fosters wilderness EMS research. It is a cooperative venture of the Appalachian Search and Rescue Conference and the Center for Emergency Medicine of Western Pennsylvania. The ASRC is a large, tightly-knit wilderness search and rescue organization with eight teams throughout the mid-Appalachian states. The Center for Emergency Medicine is an emergency medicine and prehospital care research and teaching organization. It provides a medical helicopter service, an emergency medicine residency, Emergency Medical Services for the city of Pittsburgh, and conducts a variety of related projects.

The WEMSI Wilderness EMT Curriculum

This chapter is part of the WEMSI Wilderness Emergency Medical Technician Textbook. In concert with the WEMT Curriculum, the Textbook has been in development since 1986, and took as its starting point a program Dr. Conover developed for the National Association for Search and Rescue in 1980. The Project also draws on many other sources. These include the Wilderness EMT program of SOLO (Stonehearth Open Learning Opportunities), the WEMT program developed by Wilderness Medical Associates, and the Winter Emergency Care Course of the National Ski Patrol. The Wilderness Medical Society's educational and research publications provide needed background for the Textbook. The National Association of EMS Physicians has developed and has published clinical guidelines for delayed/prolonged transport; WEMSI protocols are also available as a model.

With textbooks used by its EMT and SAR prerequisites, the WEMT text provides the material needed to complete the Wilderness Prehospital Emergency Care curriculum established by the Wilderness Medical Society. (Indeed, early drafts of this textbook were a major resource for the WMS curriculum.) We assume that students have the knowledge and skills of an EMT-Basic or EMT-Paramedic. (The curriculum can accommodate both EMTs and paramedics in the same class.) We also assume that students have the knowledge and skills of the Virginia Ground Search and Rescue Field Team Member standards or better. (EMT standards are available from state EMS offices or the U.S. Department of Transportation. The Virginia GSAR standards and GSAR Manual are available from the Virginia Department of Emergency Services, 310 Turner Road, Richmond, VA 23225-6491.) The curriculum is competency-based rather than hours-based, but can be competed in 5-6 intensive days. The curriculum also recommends clinical training, for which guidelines are available in the Curriculum.

WEMT Textbook Chapter Development

An outline for each of the twenty sections was created by a Task Group of five to twenty selected members, but draws on many published sources and consultants. A Task Group Leader guides the Task Group in reviewing and revising the section, and the Curriculum Coordinator supervises all aspects of curriculum development. When the outline satisfies the Task Group, it goes to the **Editorial Board**, including officers of the ASRC and CEM. It also includes experts in emergency medicine, search and rescue, and education, and a State EMS director. Once acceptable to the Board, it is released to the public.

The Task Group Leader and Editor-in-Chief then produce a Textbook chapter based on the outline. Having a single editor provides a coherent, unified style. Basing chapters on the Task Group's Lesson Plans, as approved by the Editorial Board, ensures accuracy. Each chapter provides a glossary of terms new to a reader with basic EMT and SAR training. In the complete textbook, these glossaries are merged and alphabetized. Each chapter also provides references to support its statements and for further reading. Background that need not be presented in a class based on the Curriculum appear *in a small, italic font.*

The textbook will be commercially published when completed. All profits will be used to support curriculum development. The textbook will be submitted for publication in 1997. Until then, preliminary versions of the chapters will be printed in this format. These preliminary versions are for use at classes only when authorized by WEMSI. A Course Guide with information about Wilderness Emergency Medical Technician training and course scheduling, and a checklist for recommended inhospital training are available. For a price list of available publications, write to: Center for Emergency Medicine, 320 McKee Place, Suite 500, Pittsburgh, PA 15213-4904, (412) 578-3203, or email wemsi+@pitt.edu.

We solicit suggestions from those reading any of our Lesson Plans or Textbook chapters. Please send your comments to the Editor-in-Chief, (see title page).

Death and Dying – General

<u>ABSOLUTE</u> Rules of Medicine

- All patients die.
- No one can change rule #1.

Dying is part of living

- Natural progression of events
- All creatures die
- Ultimate cure for disabilities and diseases
- Makes room for new generations

Why are we so uncomfortable with death?

- It's not time
- They're not ready
- We're not ready
- Our job is to prevent (sic) death

If they die...we've failed

Their death reminds us of ...

- Our death
- Our loved ones deaths

How do you feel about death?

Most "regular" EMS personnel don't deal with death.

Patients are dead when you arrive, or... they die *after* you deliver them to the hospital.

Wilderness EMS is different

Wilderness EMS personnel must be ready to deal with death

- 12 min. vs. 12 hrs.
- Traumatic injuries with entrapment
- Prolonged extrication and/or evacuation

• Inaccessibility of definitive care And you're the one who is there

Dealing with Death

Dealing with the patient Dealing with yourself Dealing with the team

What to do when patients die – What to do when you know they are going to die

When they don't know

When they ask

When they know

When they don't know ...and don't ask

Treat them Put yourself "on hold"

When they ask

Be honest don't be cruel "I don't know, but..." Don't put the responsibility on them Emphasize the effort being made Be prepared to listen When they know, they are usually right.

If you knew that you had less than 12 hours to live, how would you want to spend it?

When they know Be prepared for individualized reactions Be prepared for changing reactions