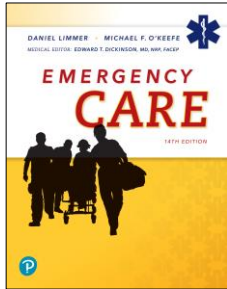


Emergency Care

Fourteenth Edition



Chapter 2

Well-Being of the EMT

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Topics

- [Well-Being](#)
- [Personal Protection](#)
- [Diseases of Concern](#)
- [Emotion and Stress](#)
- [Scene Safety](#)

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Well-Being

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Importance of Well-Being

- Keeping yourself prepared for demands and risks of EMT is very important.
- If you are unable to function for any reason, patients may not get needed care.

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Maintaining Well-Being

- Maintaining solid personal relationships
- Exercise
- Sleep
- Eating right
- Limiting alcohol and caffeine intake
- Seeing your physician regularly and keeping up to date on vaccines

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Personal Protection

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Standard Precautions (1 of 2)

- Pathogens are organisms that cause infection.
- Pathogens can be bloodborne or airborne.
- Standard Precautions include steps to protect self from pathogens.
- Make decisions about which Standard Precautions to use based on seeing the patient.



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Standard Precautions (2 of 2)

- The Occupational Safety and Health Administration (OSHA) has issued strict guidelines about precautions against exposure to bloodborne pathogens.
- Refer to local protocols for wearing personal protective equipment.
- Written policies also address what to do in the event of an exposure to infectious substances.



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Personal Protective Equipment (1 of 11)



Always wear personal protective equipment to prevent exposure to contagious diseases.



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Personal Protective Equipment (2 of 11)

- Protective gloves
 - Always have vinyl or other nonlatex gloves readily available.
 - Gloves should be changed between patients.
 - Wear heavyweight and tear resistant gloves when cleaning the ambulance and soiled equipment.



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Personal Protective Equipment (3 of 11)



Pull at top of glove #1 and pull glove #1 inside out.
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Personal Protective Equipment (4 of 11)

- Hand cleaning
 - Hand washing
 - Vigorously wash hands with soap and water
 - Alcohol-based hand cleaners
 - Considered effective by the Centers for Disease Control (CDC)
 - Alcohol-based hand sanitizers can be used if soap and water are not available.



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Personal Protective Equipment (5 of 11)



Careful, methodical hand washing is effective in reducing exposure to contagious diseases.

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Personal Protective Equipment (6 of 11)



Alcohol-based hand cleaners are effective and often available when soap and water are not.

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Personal Protective Equipment (7 of 11)

- Eye and face protection
 - Eye protection prevents splashing, spattering, or spraying fluids from entering the body.
 - Should provide a guard from the front and the sides

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Personal Protective Equipment (8 of 11)

- Masks
 - In cases where there will be blood or fluid splatter, wear a surgical-type mask.
 - In cases where tuberculosis is suspected, wear an N-95 or high-efficiency particulate air (HEPA) respirator approved by the National Institute for Occupation Safety and Health (NIOSH).
 - Face shields offer protection of the entire face.

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Personal Protective Equipment (9 of 11)



Wear a NIOSH-approved respirator when you suspect a patient may have tuberculosis.

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Personal Protective Equipment (10 of 11)



Wear a protective mask and face shield when suctioning a patient.

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Personal Protective Equipment (11 of 11)

- Gowns
 - May also wear gown to protect clothing and bare skin from spilled or splashed fluids
 - Wear a gown if a patient has an arterial bleed, is in childbirth, or has multiple injuries



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Diseases of Concern

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Hepatitis B and C

- Infection that causes inflammation of the liver
- Can live on surfaces in dried blood for several days
- Hepatitis B (HBV) is deadly; killed hundreds of health care workers each year before vaccine was available
- Hepatitis C (no vaccine yet) poses same risk.



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Tuberculosis (TB)

- Infects lungs
- Highly contagious
- Airborne



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AIDS (1 of 2)

- HIV
 - Attacks immune system, leaving patient unable to fight off infection
- AIDS
 - Set of conditions that results when the immune system has been attacked by HIV



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AIDS (2 of 2)

- Lower risk for health care workers than hepatitis or TB
- Contact with blood is the usual route of infection



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Specific Diseases of Concern (1 of 3)

- Ebola
 - People in the U.S. infected in 2014
 - Hemorrhagic fever
 - High rate of deaths and lack of definitive treatment



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Specific Diseases of Concern (2 of 3)

- Severe Acute Respiratory Syndrome (SARS)
 - Spread through respiratory droplets
- Middle Eastern Respiratory Syndrome (MERS)
 - Found primarily on the Arabian Peninsula



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Specific Diseases of Concern (3 of 3)

- Avian flu
 - Found in poultry; can affect humans
 - Not easily transmissible from human to human
- Influenza
 - Around for hundreds of years
 - 1918 pandemic killed between 30 and 50 million people around the world



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Infection Control and the Law

- EMS personnel and other health care workers are at high risk of coming in contact with infectious diseases.
- Guidelines for workplace safety developed by OSHA and the CDC



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Occupational Exposure to Bloodborne Pathogens (1 of 2)

- The OSHA standard on bloodborne pathogens requires infection control to be the joint responsibility of employer and employee.
- EMS agencies provide training, protective equipment, and vaccinations to employees.
- Employees participate in infection exposure control plan.



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Occupational Exposure to Bloodborne Pathogens (2 of 2)

- Infection exposure control plan
- Adequate education and training
- Hepatitis B vaccination
- Personal protective equipment
- Methods of control
- Housekeeping
- Labeling
- Postexposure evaluation and follow-up



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Ryan White CARE Act (1 of 2)

- Allows EMS providers to find out if they have been exposed to potentially life-threatening diseases while providing patient care
- Designated officer gathers facts about potential exposures.



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Ryan White CARE Act (2 of 2)

- Two notification systems
 - Airborne disease exposure
 - Bloodborne or other infectious disease exposure
- Once notified of an exposure, employer will refer you to a health care professional for evaluation and follow-up.



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Tuberculosis Compliance Mandate

- OSHA's respiratory standard
 - Selection and use of respirators
- Wear a NIOSH-approved N-95 or HEPA mask when you are:
 - Caring for patients suspected of having TB
 - Transporting an individual from such a setting in a closed vehicle
 - Performing high-risk procedures such as endotracheal suctioning and intubation



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Immunizations

- Immunizations for hepatitis B, other infectious diseases should be available through EMS agency.
- Regular TB testing may also be required.
- Local system protocols vary.



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Emotion and Stress

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Physiologic Aspects of Stress (1 of 2)

- Stress is inevitable in the EMS profession.
- Recognizing signs of stress and developing strategies to deal with stress are very important to the EMS career.
- Resilience means "toughness" or an ability to overcome tough situations.
 - Helps EMS providers deal with difficult situations
 - Includes understanding stress, being physically and mentally able to respond, and using techniques to mentally process difficult scenes



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Physiologic Aspects of Stress (2 of 2)

- First stage
 - Alarm reaction (fight-or-flight)
- Second stage
 - Stage of resistance (coping)
- Third stage
 - Exhaustion (loss of ability to resist or adapt to the stressor)



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Types of Stress Reactions

- May occur as the result of a critical incident
 - Any situation that triggers a strong emotional response



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Acute Stress Reaction

- Often linked to catastrophe
- Signs and symptoms develop soon after incident.
- Physical, cognitive, emotional, and behavioral symptoms
- Normal reactions to extraordinary situation
- May require professional intervention



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Delayed Stress Reaction

- Posttraumatic stress disorder (PTSD)
- Signs and symptoms not evident until long after incident.
- Delay makes dealing with reaction much harder.
 - Patient may not recognize what is causing problem.
- Requires intervention by mental health professional



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Cumulative Stress Reaction (1 of 2)

- Burnout
- Results from years of sustained low-level stressors
- Early signs
 - Vague anxiety
 - Boredom and apathy
 - Emotional exhaustion



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Cumulative Stress Reaction (2 of 2)

- Progresses to physical complaints, loss of emotional control, irritability, depression
- May present as severe withdrawal or suicidal thoughts requiring long-term psychological intervention



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Causes of Stress

- Multiple-casualty incidents (MCI)
- Calls involving infants or children
- Severe injuries
- Abuse and neglect
- Death of a coworker



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Signs and Symptoms of Stress (1 of 2)

- Eustress
 - Positive form of stress that helps people work under pressure and respond effectively
- Distress
 - Negative stress causing immediate and long-term problems with health and well-being



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Signs and Symptoms of Stress (2 of 2)

- Irritability
- Inability to concentrate
- Changes in daily activities
- Anxiety
- Indecisiveness
- Guilt
- Isolation
- Loss of interest in work



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Think About It

- If your partner is beginning to show signs of stress, what should you do?
- What possible risk could there be to your partner, you, or a patient if stress is left unresolved?
- Do you have an obligation to act to help your partner?



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Dealing with Stress (1 of 7)

- Lifestyle changes
 - Develop more healthful and positive dietary habits
 - Exercise
 - Devote time to relaxing
 - Change shift or location for lighter call volume, different call types, more family time



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Dealing with Stress (2 of 7)

- Invisible wounds—Preventing psychological trauma
 - Psychological trauma can result from tragic scenes
 - System that takes in stimulus from a traumatic incident may malfunction



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Dealing with Stress (3 of 7)

- Invisible wounds—Preventing psychological trauma
 - eSCAPe curriculum:
 - e: Every patient
 - S: Social Support
 - C: Choice and Control
 - A: Anticipate
 - P: Plan and Organize
 - e: Every time



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Dealing with Stress (4 of 7)

- Critical incident stress management
 - Comprehensive system
 - Includes education and resources to prevent stress
 - Ways to deal with stress appropriately when it occurs



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Dealing with Stress (5 of 7)

- Critical incident stress management
 - Critical incident stress debriefing (CISD)
 - Designed to help responders “defuse” after incident
 - Team of trained peer counselors and mental health professionals meet with rescuers and health care providers involved in major incident 24 to 72 hours after incident
 - Helps responders deal with stress



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Dealing with Stress (6 of 7)

- Understanding reactions to death and dying
 - Emotional stages
 - Denial or “Not me.”
 - Anger or “Why me?”
 - Bargaining or “OK, but first let me...”
 - Depression or “OK, but I haven’t...”
 - Acceptance or “OK, I’m not afraid.”



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Dealing with Stress (7 of 7)

- Understanding reactions to death and dying
 - Recognize the patient’s needs.
 - Be tolerant of angry reactions from the patient or family members.
 - Listen empathetically.
 - Do not falsely reassure.
 - Offer as much comfort as you realistically can.



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Scene Safety

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Scene Safety

- EMS not usually a dangerous profession
- Being aware of potential dangers is always a priority.
- Determining scene safety will be the most important decision on any call.



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Hazardous Material Incidents (1 of 2)

- Primary rule is to maintain a safe distance from the source of the hazardous material.
- Placards
 - Ensure that your emergency vehicle is equipped with binoculars.
 - Correspond with coded colors and identification numbers that are listed in the Emergency Response Guidebook



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Hazardous Material Incidents (2 of 2)

- Roles
 - Recognize potential problems.
 - Take actions for personal safety and the safety of others.
 - Notify a trained hazardous material response team.
- Do not treat patients until after they have undergone decontamination.



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Potential Safety Threats at Scene



Using binoculars to identify hazardous materials before approaching an emergency site.



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Terrorist Incidents

- May be small or large in scale
- May include chemical agents, biological agents, radiation, weapons, and/or explosive devices



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Rescue Operations

- Rescuing or disentangling victims from fires, auto collisions, explosions, electrocutions, and more
- Evaluate each situation and ensure that appropriate assistance is requested early in the call.
 - Never perform acts that you are not properly trained to do.



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The Realities of Well-Being

- In some situations, you will have to make calculated decisions between helping or personal safety
- Know that despite your best efforts, some patients will die
- Scene safety and well-being are determined by the decisions you make under pressure



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Violence (1 of 4)

- Plan
 - Wear safe clothing
 - Prepare your equipment so it is not cumbersome
 - Carry a portable radio whenever possible
 - Decide on safety roles



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Violence (2 of 4)

- Observe
 - Survey scene on approach.
 - Do not announce arrival.
 - Turn off lights and siren.



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Violence (3 of 4)

- Observe
 - Violence
 - Crime scenes
 - Alcohol or drug use
 - Weapons
 - Family members
 - Bystanders
 - Perpetrators
 - Pets



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Violence (4 of 4)



As a safety precaution, do not stand directly in front of a door when knocking or ringing the bell.



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React to Danger (1 of 4)

- Three Rs
 - Respond
 - Radio
 - Reevaluate
 - Do not reenter a scene until it has been secured by police.



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React to Danger (2 of 4)



Never enter a scene that is potentially violent until the police have secured it and told you it is safe.

AP Photo/The Sacramento Bee, Randy Pench



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React to Danger (3 of 4)

- Flee.
- Get rid of any cumbersome equipment.
- Take cover and conceal yourself.



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React to Danger (4 of 4)



Concealing yourself is placing your body behind an object that can hide you from view.



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Chapter Review



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Chapter Review (1 of 4)

- Your well-being is an important concept. This chapter has provided several ways to protect and maintain it.
- You should never take safety or Standard Precautions lightly. Each yields an important decision you will make at least once at each scene you respond to—always.



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Chapter Review (2 of 4)

- Protect yourself from violence and scene hazards at all costs.
- Protect yourself from disease. Do not be paranoid about catching a disease, but take appropriate precautions.



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Chapter Review (3 of 4)

- Resilience means “toughness” or ability to recover quickly from a difficult situation. It is important for all EMTs to remain physically and mentally strong.
- Stress may be an immediate reaction from a particular call or cumulative from a combination of life and EMS. Both kinds are bad for you. Seek help if you need it.



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Chapter Review (4 of 4)

- You will see death and reaction to death. Each is very personal to those involved. The stages of death are denial, anger, bargaining, depression, and acceptance.
- Treat people who are under stress fairly and compassionately, even if it is difficult to do so.



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Remember

- Scenes are dynamic and can change in an instant.
- Assessment of scene safety is an ongoing process.
- Don't be so focused on the patient that you lose perception of what is happening around you.



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Questions to Consider

- What precautions must I take if I am dealing with a patient who has an open wound?
- What can I do to help deal with stress?
- A patient who refuses to believe she has a terminal disease is in what stage of dealing with it?



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Critical Thinking

- You are called to an unknown emergency at a tavern. As you approach the scene, you see a man lying supine in the parking lot, apparently bleeding profusely. Two other men are scuffling, and one seems to have a gun. What actions must you take?



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