# Chapter 2, Workforce Safety and Wellness

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## 1. Prioritizing EMT Well-being

| Aspect of Well-being | Description | Source |
|---|---|---|
| Recognizing Hazards | EMTs must identify potential threats to their health, safety, and well-being. | [3] |
| Coping with Stress | Managing both physical and mental stress is crucial. | [2] |
| Assisting Emotional Aspects | Helping patients and families with the emotional impact of illness, injury, or death is part of the role. | [2] |

| | | |
|---|---|---|
| Ensuring Personal Safety | Taking preventative actions is important. | [2] |
| Dealing with Sensitivity | Interacting with patients and co-workers requires sensitivity. | [2] |
| Proper Precautions | Using appropriate measures for infectious diseases is essential. | [2] |
| Preventing Injuries | Avoiding on-the-job injuries is a priority. | [2] |

To effectively care for others, emergency medical technicians (EMTs) must prioritize their own well-being [2]. Recognizing hazards to health, safety, and well-being is very important [3]. These hazards include personal neglect, environmental threats, human-made threats, and mental and physical stress [4]. The emotional well-being of an employee and the patient are intertwined, especially in high-stress rescues [5]. wellness is the active pursuit of a good state of health [10]. resilience is the capacity to cope with and recover from distress [11].

## 2. Strategies for Enhancing Resilience and Managing Stress

Practices that can help increase resilience include eating healthy and maintaining a well-balanced diet [12]. Ensuring a minimum of seven to nine hours of sleep is also important [12]. Strengthening positive relationships with family and friends can build resilience [12]. Building relationships with peers and colleagues is also recommended [12]. Incorporating daily stretching, movement, and exercise helps [12]. Building habits of mindfulness and positivity contributes to resilience [12].

Strategies can be used to manage stress [13]. Minimizing or eliminating stressors as much as possible is helpful [14]. Changing partners to avoid negative personalities or changing work hours can reduce stress [15]. Cutting back on overtime might also be an option [15]. Changing your attitude about the stressor can make a difference [16]. Talking about feelings with people you trust is important [16]. Seeking professional counseling is an option if needed [17]. Do not obsess over frustrating situations that are unable to change [18]. Focus on delivering high-quality care [18]. Adopting a philosophical outlook can be beneficial [19]. Expanding your social support system beyond co-workers helps manage stress [20]. Developing friends and interests

outside of emergency services is recommended [20]. Limiting the intake of caffeine, alcohol, and tobacco use is also advised [20].

## 3. Nutrition, Exercise, and Sleep for EMTs

| Health Aspect | Recommendations | Consequences of Neglect | Source |
|---|---|---|---|
| Nutrition and Fluids | Eat regular, well-balanced meals; Limit sugar, fat, sodium, and alcohol; Consume complex carbohydrates for long-term energy; Maintain adequate fluid intake, preferably water. | Obesity, cardiac disease, other long-term health problems from excessive fat intake. | [21] |
| Exercise and Relaxation | Regular exercise enhances nutrition and hydration benefits; Handle stress more easily when in good physical condition; Engage in at least 30 minutes of moderate or vigorous activity 5+ days/week; Include cardiovascular endurance, muscle strength, and flexibility. | Handling stress becomes more difficult. | [25] |
| Sleep | Adults need 7-9 hours of sleep; Work shifts shorter than 24 hours; Access to caffeine and opportunity to nap on duty; Education and training on fatigue mitigation; 20-30 minute naps or rest breaks during shifts; Increase physical activity; Be careful about caffeine; Engage in mental exercise; Avoid caffeine, nicotine, chemicals 4+ hours before bed; Ensure dark, quiet, cool sleep environment; | Medical errors, vehicle crashes, harm to patients, bystanders, other EMS providers (short-term); Hypertension, sleep apnea, respiratory issues, diabetes, depression, other medical conditions (long-term); Increased stress. | [28] |

| | | | |
|---|---|---|---|
| | Exercise early but allow time to relax; Nap early and avoid heavy pre-sleep meals; Balance fluid intake; Establish calming pre-sleep routine; Sleep when truly tired; Keep sleep schedule consistent; Expose to natural light during waking hours. | | |

Eating regular, well-balanced meals is important [21]. Limit consumption of sugar, fat, sodium, and alcohol [21]. complex carbohydrates like pasta and rice are reliable for long-term energy [22]. Fats can lead to obesity and cardiac disease if eaten too much [23]. Maintaining adequate fluid intake is crucial [24]. Water is generally the best fuel available [24].

Regular exercise enhances good nutrition and hydration [25]. Being in good physical condition makes handling stress easier [26]. Engage in at least 30 minutes of moderate or vigorous activity at least five days per week [27]. Include cardiovascular endurance, muscle strength building, and muscle flexibility [27].

Adults should sleep a minimum of seven to nine hours [28]. Half of EMS personnel get less than six hours of sleep [29]. They report severe mental and physical fatigue [29]. Short-term effects of sleep deprivation include medical errors and vehicle crashes [30]. Long-term effects include hypertension, sleep apnea, and diabetes [31]. Increased stress contributes to sleep deprivation and fatigue [31]. Guidelines for fatigue management have been developed [32]. EMS personnel should work shifts shorter than 24 hours [35]. They should have access to caffeine and opportunity to nap [36]. Education and training can help mitigate fatigue [38]. Recommendations to combat fatigue include adequate sleep and taking 20 to 30 minute naps [39]. Increase physical activity and be careful about caffeine consumption [39]. Engage in mental exercise [39]. To improve sleep quality, avoid caffeine, nicotine, and other chemicals before bed [40]. Ensure your sleep environment is dark, quiet, and cool [41]. Exercise early but relax before trying to sleep [41]. Nap early and avoid heavy pre-sleep meals [41]. Balance fluid intake and establish a calming pre-sleep routine [41]. Sleep when truly tired and keep your schedule consistent [41]. Expose yourself to natural light during waking hours [41].

## 4. Disease Prevention and Health Promotion

Disease prevention focuses on medical care and prevention to avoid or reduce disease effects [42]. health promotion focuses on personal practices and social habits to improve health [43]. Smoking, vaping, or chewing nicotine can lead to cardiovascular and respiratory disease [44]. Smokeless tobacco is associated with cancers of the throat, mouth, and pancreas [45]. Vaping has been shown to cause cardiovascular and respiratory illness [46]. Strategies for quitting nicotine include creating a plan and setting a quit date [47]. Tell a friend, family, or co-worker your plan [47]. Remove tobacco and vaping products from your surroundings [47]. Talk to your doctor about resources that can help you quit [47].

An acceptable amount of alcohol is one drink per day for women and two for men [48] . Excessive alcohol use causes about 88,000 deaths per year in the United States [49] . It also costs more than $200 billion per year [49]. Approximately 75 percent of the cost is due to binge drinking [50]. Excessive alcohol use can adversely affect cardiovascular, hepatic, immune, and central nervous systems [50]. It may increase the risk of developing certain cancers [50].

Both prescription and illegal drugs may be abused or misused [51]. According to the CDC, drug abuse costs the United States more than 190 billion dollars annually [52]. Many EMS agencies drug test their employees [53]. Balancing work, family, and health is important [53]. When possible, rotate your schedule to give yourself time off [53]. You need to take vaccinations [54]. If the stress of work is too much, seek help [54].

## 5. Infectious and Communicable Diseases: Risks and Prevention

| Term | Definition | Source |
| --- | --- | --- |
| Pathogen | A microorganism capable of causing disease. | [60] |
| Contamination | Presence of an infectious organism or foreign body on or within objects, wounds, or a patient's body. | [61] |
| Exposure | Contact with blood, body fluids, tissues, or airborne particles that may allow disease transmission. | [61] |

| | | |
|---|---|---|
| Personal Protective Equipment (PPE) | Protective equipment worn by an individual to prevent exposure to a pathogen or hazardous material. | [62] |

An infectious disease is caused by organisms within the body [55]. A communicable disease can be spread from person to person or from one species to another [56]. Infection is a risk for EMTs [57]. Infection risk can be minimized by immunizations, protective techniques, and hand washing [58].

Routes of transmission include direct contact and indirect contact like a needle stick [63]. Airborne transmission occurs through sneezing [63]. Foodborne transmission is from contaminated food [63]. vector-borne transmission is via a flea or mosquito [63]. OSHA develops, publishes, and enforces guidelines for reducing workplace hazards [64]. All EMTs are trained in handling blood-borne pathogens [65]. The CDC has developed standard precautions for healthcare workers [66]. standard precautions prevent contact with objects, blood, body fluids, and other potential risks [67]. Assume every person is potentially infected [68]. Apply infection control procedures to reduce infection [68]. OSHA refers to this as universal precautions [69]. Notify your designated officer if you are exposed [70].

donning and doffing full PPE in a consistent sequence is essential [71]. Common components of PPE include a mask, eyewear, face shield, gloves, and a gown [72]. Proper hand washing is the simplest and most effective way to control disease transmission [73]. Wash hands before and after patient contact, even if you wear gloves [74]. Wear gloves if there is any possibility of exposure to blood or body fluids [75]. Vinyl, nitrile, and latex gloves are effective [76]. Wear heavy-duty gloves when cleaning the ambulance [77]. Change gloves between patients [77]. Removing gloves requires a technique to avoid self-contamination [78].

Eye protection prevents blood splatters [79]. Prescription glasses are not adequate [79]. Goggles or a face shield are best [79]. Gowns provide protection for extensive blood splatter [80]. They may be worn during aerosolized generating procedures or major trauma [80]. Wear a standard surgical mask for fluid splatter [81]. Place a surgical mask on a patient [81]. Wear a particulate air respirator like an N95 if an airborne disease is suspected [81]. Protective eyewear using safety glasses with side shields, goggles, or a face shield is also needed [81]. If a patient needs oxygen, use a non-rebreathing mask instead of a surgical mask [82]. Particulate air respirators must comply with OSHA guidelines and be fit tested [83].

Mouth-to-mouth or mouth-to-mask resuscitation is recommended during active community spread of an airborne virus [85]. Bag-valve ventilation is an aerosol-generating procedure and should be avoided in epidemic scenarios like COVID-19 [86]. Proper use and disposal of sharps help avoid exposure to HIV and hepatitis [87]. Do not recap, break, or bend needles [88]. Dispose of used sharps in an approved, closed, and rigid container [89].

## 6. Employer Responsibilities and Immunity

The risk of being exposed to a communicable disease is a job hazard [90]. You should follow OSHA and other national guidelines to reduce exposure risk [91]. Know and follow your department's infection control plan [92]. Cleaning and decontaminating the ambulance and equipment is important [93]. Clean the ambulance after each use and daily whenever possible [94]. Cleaning should ideally be done at the hospital [95]. Remove medical waste and place it in a red biohazard bag [97]. Dispose of it at the hospital [97]. Contaminated equipment left at the hospital should be cleaned by staff or bagged for transport [98]. Use a bleach water solution at a 1 to 10 dilution to clean the unit [99]. Remove contaminated linen and place it in the appropriate bag [100]. Reusable equipment should be cleaned and sterilized per department procedure [101].

Even if germs reach you, you are not necessarily at risk of infection [102]. Immunity is a major factor in determining who gets sick [103]. You can be immune or resistant to particular germs [104]. Immunity means having been immunized or vaccinated and able to recover from an infection [105]. A history of childhood infectious diseases should be recorded [106]. This includes chickenpox, mumps, measles, rubella, and whooping cough [107]. The CDC recommends several immunizations for healthcare workers [108]. Hepatitis B is required by OSHA [108]. Yearly influenza vaccination is recommended [108]. MMR and varicella vaccines are also recommended [108]. The Tdap shot is recommended every 10 years [108]. Skin tests for tuberculosis are recommended prior to hire and annually [109].

For general post-exposure management, turn over patient care to another provider if exposed to blood or body fluids [110]. Clean the exposed area with soap and water [110]. If eyes were exposed, rinse them for 20 minutes [110]. Activate your department's infection control plan [111]. Complete an exposure report [112]. Be screened to determine significant exposure to a bloodborne pathogen [112]. You may be required to quarantine if exposed to a highly communicable disease without proper PPE [112]. Post-exposure prophylactics and treatment are available for significant exposure [113].

## 7. Scene Safety Protocols

| Hazard | Protective Measures | Source |
|---|---|---|
| Hazardous Materials | Read labels/placards from a distance; Call a hazardous material team; Do not care for patients until moved and decontaminated; Remain upwind and uphill; Keep distance; Contact dispatch for additional response; Do not enter until instructed. | [117] |
| Electricity | Mark off a danger zone around downed lines (one span of power poles); Do not approach downed wires or anything in contact with them; Avoid high ground during lightning; Stay away from drainage ditches, moist areas, small depressions, and wet ropes during lightning; Become the smallest target possible; Drop all equipment. | [126] |
| Fire | Be aware of smoke, oxygen deficiency, high temperatures, toxic gases, building collapse risk, equipment, or explosions. | [135] |
| Vehicle Crashes | Use sufficient proper protective gear; Be aware of traffic, unstable vehicles, downed power lines, violence risk, airbags, fluids, and sharp objects. | [136] |

Personal safety is very important in an emergency situation [114]. Safety begins with protecting yourself as soon as you are dispatched [114]. Wear your seatbelt and don appropriate PPE [114]. Continue to protect yourself once on scene [115]. Make sure the scene is well marked [115]. Place warning devices to alert other motorists [115]. Park at a safe distance from the scene [115]. Ensure there are plenty of lights if it is dark [116]. Wear reflective clothing in dark scenes [116].

Upon arrival at a scene with potential hazardous materials, read labels, placards, and identification numbers from a distance [117]. A specially trained hazardous material team will handle disposal or patient removal [118]. Do not begin caring for patients until they are moved and decontaminated [119]. Do not enter the scene unless it is safe to do so [120]. The U.S. Department of Transportation ERG lists common hazard

materials and procedures [122]. Smartphone and tablet apps are also available [123]. General guidelines for hazmat scenes include not entering the scene if there is evidence of a hazmat [123]. Remain upwind and uphill from the scene [124]. Keep your distance [124]. Quickly contact dispatch and request additional responses [124]. Do not enter the scene until instructed by trained responders [125].

Dealing with downed power lines is beyond EMT training [127]. Mark off a danger zone around the downed lines until poles are secured [128]. This safety zone is one span of the power poles' distance [128]. Do not approach a downed wire or touch anything it contacts [129]. Lightning is a threat from a direct hit or a ground current [130]. A repeat lightning strike can occur in the same area [132]. Avoid high ground to minimize direct lightning strike risk [132]. To avoid ground current injury, stay away from drainage ditches, moist areas, and wet ropes [133]. Become the smallest target possible and drop all equipment [134].

Common hazards at a fire include smoke, oxygen deficiency, and high temperatures [135]. Toxic gases, building collapse, equipment, or explosions are also hazards [135]. Vehicle crashes are common events [136]. Hazards at vehicle crashes include traffic, unstable vehicles, and downed power lines [136]. Risk of violence, airbags, and fluid and sharp objects are also present [137]. Use sufficient proper protective gear to reduce risk [137].

## 8. Managing Violence on Scenes

Violence on scenes includes assaults, hostile situations, riots, or disturbances [138]. A scene assessment should begin while en route [138]. Once on scene, continue assessment using observation and information from other responders [138]. Maintain personal safety and the safety of your team [138]. Mass violence situations may involve several agencies [139]. Know who is in command [139]. Remain vigilant for potential violence at all times [139]. Allow law enforcement to secure the scene before approaching scenes involving projectiles [139]. Find protection [139].

Two types of protection exist [140]. cover is the use of impenetrable barriers for protection [140]. concealment is hiding behind objects to limit visibility [141]. If the event is a crime scene, attempt to maintain the chain of evidence [142]. Do not disturb the scene unless absolutely necessary for patient treatment [143]. The rate of violence-related injuries for emergency responders is 22 times higher than for other employees [143]. Recommendations for preventing violence include training in identifying potential violence scenes [144]. Training in de-escalation strategies and

techniques is recommended [144]. Practice ongoing scene assessments [144]. Dispatch identification and alerting of past or potential threats is important [144]. Recommendations for protection against violence include training in self-defense and escape techniques [145]. Training in physical and chemical restraint techniques is also recommended [145]. Fitting and use of body armor is advised [145]. Training and practice in operations with law enforcement is crucial [145].

## 9. Protective Clothing and Gear

| Type of Protective Clothing/Gear | Purpose | Source |
|---|---|---|
| Cold Weather Gear | Pulls moisture away from skin (inner layer); Serves as insulation (middle layer); Resists wind, rain, sleet, snow (outer layer). | [149] |
| Turnout Gear (Bunker Gear) | Protects firefighters from heat, fire, sparks, and flashover. | [152] |
| Gloves | Protect from heat, cold, and cuts; May reduce dexterity. | [153] |
| Helmets | Protection anytime working in a fall zone; Should provide top and side protection; Secure chin strap; Not well suited for rescue situations; Helmet with chin strap and face shield for electrical hazards. | [154] |
| Boots | Water resistant, fit well, flexible; Steel-toed preferred; Traction important for rescue. | [158] |
| Eye Protection | Protects from blood splatters; Eyeglasses with side shields for routine care and when tools are used; Use face shield and goggles when appropriate. | [160] |

| | | |
|---|---|---|
| Ear Protection | Soft foam industrial type ear plugs. | [161] |
| Skin Protection | Protects against sunburn; Use sunscreen with minimum 15 SPF. | [162] |
| Body Armor (Bulletproof Vests) | Ranges from lightweight to heavy; May not be practical for everyday use; Costly; Do not protect against rifle ammunition or stabbing. | [164] |

Wearing protective clothing and other appropriate gear is critical to personal safety [146]. Become familiar with the protective equipment available to you [147]. Inspect your clothing and wear your gear regularly, ideally before reaching the scene [148].

Many EMS services have restricted policies regarding hair, rings, and jewelry [166]. Tie hair up neatly [167]. Limit the number of rings worn [167]. Wear only a watch on your wrist [168].

## 10. Caring for Critically Ill and Injured Patients

A patient needs to know who you are and what you are doing [168]. Let the patient know you are attending to their immediate needs [169]. Avoid making unprofessional comments during resuscitation [169]. Treat all patients with dignity and respect [169]. Techniques for communicating with critical patients include avoiding sad and grim comments [170]. Such remarks may increase the patient's anxiety [170]. Orient the patient to their surroundings using brief statements [170]. Be honest, deciding how much information the patient can understand [170]. Allow the patient to be part of the care being given [171]. Allow for hope if there is a slight chance [171]. Locate and notify family members [171]. Assure the patient that you will take care of notifying appropriate people [171].

Critically injured children should be cared for as any adult [172]. It is important that a relative or responsible adult accompany the child [173]. This helps relieve anxiety and assists in care [173].

## 11. Coping with Death and Dying

The death of a child is a tragic and dreaded event [175]. Help the family through the initial period of death [176]. Acknowledge death in a private place [177]. Shock, denial,

and disbelief are common emotions [178]. If circumstances allow, let the parents hold the child [179]. Use your best judgment to determine if this is appropriate [180]. Let the family's actions be your guide [181]. The family may want to see the child, and you should allow them to do so [182]. Prepare the parents for what they will see [183]. Do not overload the grieving parents with information [184].

Death is likely to be either sudden or after a prolonged terminal illness [186]. The EMT will sometimes face death [187]. The grieving process has stages [188]. The first stages include denial, anger, hostility, bargaining, depression, or acceptance [189]. What can the EMT do? You can ask the patient and family if there is anything you can do to help [190]. Reinforce the reality of the situation [190]. Be honest with death and dying [191]. Do not say you know how the patient or family feels [192]. Let the patient or family members grieve in their own way [193].

## 12. Stress Management for EMTs

| **Physiological Manifestations of Stress** |
| --- |
| Increased respirations and Heart rate [198] |
| Increased blood vessels dilated [198] |
| Vessels near the skin surface dilated [198] |
| Pupils tense [198] |
| Muscles increase blood glucose levels [198] |
| Perspiration [198] |
| Decreases blood flow to the gastrointestinal tract [199] |

EMS is a high-stress job [195]. It is important to know the causes of stress and ways to deal with them [196]. Stressors include emotional, physical, and environmental situations [196]. There are general adaptation syndromes [197]. The alarm response occurs first [197]. Then there is reaction and resistance to stress [197]. Finally, there is recovery or exhaustion [197].

Situations stressful for EMS providers include dangerous situations [200]. Physical or psychological demands are also stressors [200]. Critically ill or injured patients are stressful [200]. Dead or dying patients can be overpowering [200]. Sight, smells, and sounds can cause stress [200]. Multiple patient situations are stressful [200]. Angry or upset patients, families, or bystanders contribute to stress [200]. The unpredictability and demands of EMS cause stressful situations [200].

There are different stress reactions [201]. An acute reaction can occur during the event [201]. A delayed reaction manifests after the stressful event [202]. Cumulative stress is prolonged or excessive stress [202]. Physical symptoms of stress include fatigue and changes in appetite [202]. GI problems, headaches, and insomnia are also symptoms [202]. Irritability and inability to concentrate can occur [202]. Hyperactivity or underactivity can be physical symptoms [202]. Physiological symptoms include fear and depression [203]. Guilt, oversensitivity, anger, and frustration are also symptoms [203].

## 13. Critical Incident Stress and Burnout

Critical incident stress is brought about by acute, severe stressors [204]. These can include mass casualty incidents [205]. Serious injury or traumatic death of a child can cause this stress [205]. Crashes with injuries caused by an emergency provider are also critical incidents [205]. Death or serious injury of a co-worker in the line of duty is a severe stressor [205]. Post-traumatic stress disorder (PTSD) may develop after a distressing event [206]. It is characterized by re-experiencing the event [206]. Over-responding to stimuli recalled from the event is also a characteristic [206].

Critical Incident Stress Management (CISM) helps providers relieve stress [207]. This can occur formally or at an ongoing scene [207]. Trained CISM professionals facilitate diffusing sessions [208]. Diffusing sessions are held during or immediately after the event [208]. Debriefing sessions are held 24 to 72 hours after the event [208]. An important rule is not to turn the debriefing into an operational critique [209]. If CISM is not an option, private counseling by a mental health professional may be preferred [210].

Burnout describes a combination of exhaustion, cynicism, and poor performance [211]. It results from long-term job stress [211]. Burnout affects the well-being of the EMT and their colleagues and patients [212]. It can result in increased major medical errors [212]. Increased rates of healthcare-associated infection can occur [212]. Increased patient mortality is also a possible effect [212]. It contributes to decreases in work

morale and overall work effort [213]. Effective teamwork and patient satisfaction can decrease [213]. Burnout can lead to an increase in job turnover [213].

Compassion fatigue is common among healthcare providers [214]. It is also known as secondary stress disorder [214]. It is characterized by a gradual lessening of compassion over time [214]. Symptoms include high absenteeism and difficult relationships with colleagues [215]. Inability to work in teams and aggressive behavior towards patients are symptoms [215]. Strong negative attitudes towards work and lack of empathy for patients can occur [215]. A judgmental attitude towards patients and preoccupation with non-work issues are also symptoms [215]. Other symptoms of increased stress are present [215].

The suicide rate among emergency responders is higher than the rest of the population [216]. Job stress is widely considered the largest contributing factor to suicide [217]. Several organizations and mental health services are available to provide emotional support [218].

## 14. Emotional Aspects of Emergency Care and Workplace Issues

Even experienced healthcare providers sometimes have difficulty overcoming personal reactions [218]. The struggle to remain calm in horrible circumstances contributes to emotional stress [219]. In stressful situations, exercise extreme professional care in both words and actions [219]. Factors influencing a patient's reaction to stress include socioeconomic background and fear of medical personnel [219]. Alcohol or substance abuse disorders and a history of chronic stress also play a role [219]. Mental disorders, reaction to medication, age, and nutritional status are factors [219]. Feelings of guilt and past experiences with illness or injury also influence reactions [219]. Quickly and calmly assess the actions of the patient, family, and bystanders [220]. Use a professional tone, courtesy, sincere concern, and efficient action [221]. Patients must have the opportunity to express their fears and concerns [222]. Religious customs or needs of the patient must be respected [223]. Some people have religious convictions opposing medication, blood, and blood products [223]. Report this information to the next level of care [224]. In the event of death, handle the body with respect and dignity [225].

Workplace issues include cultural diversity on the job [226]. You are expected to work alongside co-workers with varying backgrounds, attitudes, beliefs, and values [226]. Accept their differences [226]. Culture is not restricted to different nationalities [227]. Consider age, sex, sexual orientation, marital status, work experience, and education

[227]. Communicate in a way sensitive to everyone's needs [228]. Cultural humility should be your ultimate goal [228]. Remain curious about others and reflect on their viewpoints with an open mind [228].

Two types of sexual harassment exist [229]. Quid pro quo is when a harasser requests sexual favors for something else, like a promotion [229]. Hostile working environment can involve jokes, touching, requesting a date, or talking about body parts [230]. The harasser's intent does not matter; the perception and impact of the behavior do [231]. Since EMTs depend on each other for safety, developing non-adversarial relationships is especially important [231]. Report harassment to your supervisor immediately [232].

Substance abuse is another workplace issue [233]. It increases the risk of accidents and tension [233]. It causes poor treatment decisions [234]. Many EMS systems require periodic random drug tests [235]. They also have for-cause testing when individuals are believed to be under the influence [235]. Addicts and alcoholics develop great skills at covering their behavior [236]. Seek help or confront an addicted coworker [237] . Allowing substance abuse presents a tremendous hazard to the public [237]. Employee assistance programs (EAPs) are often available [238].

Injury and illness prevention is important [239]. EMS providers visit emergency departments for work-related injuries over 20,000 times each year [239]. Each program should include interrelated elements [240]. These elements include management leadership and worker prevention [240]. Hazard identification and assessment are crucial [240]. Hazard prevention and control are necessary [240]. Education and training are important [240]. Program evaluation and improvement are also included [241].

## 15. Review of Key Concepts

A disease that can spread from person to person or species to species is known as a communicable disease [242]. The most effective way of preventing disease spread is hand washing [243]. When an EMT has blood splash into their eyes, it is an example of an exposure [244]. Protective measures preventing healthcare workers from contacting germs are called standard precautions [246].

In the general adaptation syndrome, the second stage of stress response is reaction and resistance [247]. A condition characterized by re-experiencing an event and over-responding to recalled stimuli is post-traumatic stress disorder (PTSD) [247]. Nutritious food is the fuel that makes the body run [249]. Physical exertion and stress

require high energy output [249]. The stage of grieving commonly resulting in blame is anger and hostility [250]. Placards are used on buildings and transport vehicles [251]. The five most common hazards associated with a structural fire are smoke, oxygen deficiency, high temperatures, toxic gases, and building collapse risk [252].