Chapter 2

Fire Fighter Safety

Chapter Overview

Fire fighting is risky business. The fire fighter’s most important responsibility is to finish the shift or the call in the same (or better) condition than he or she began it. Coming home safely means knowing one’s job, understanding the risks one faces as a fire fighter, and taking steps to prevent injuries by reducing or eliminating those risks. In this chapter, fire fighters will learn about the principles of safety that should be followed throughout one’s career in the fire service.

After students complete this chapter and the related course work, they will understand the importance of safe operating practices.

Objectives and Resources

Fire Fighter I

Knowledge Objectives

After studying this chapter, you will be able to:

* List the major causes of death and injury in fire fighters. (pp 26–27)
* Explain how to submit a Near Miss Report. (p 28)
* List the three groups whom fire fighters must always consider when ensuring safety at the incident scene. (p 27)
* List and describe the four components of a fire fighter safety program. (pp 27–28)
* Describe the 16 fire fighter life safety initiatives. (p 29)
* Describe the connection between physical fitness and fire fighter safety. (NFPA 5.1.1, pp 28–30)
* Describe the components of a well-rounded physical fitness program. (NFPA 5.1.1, pp 28–30)
* Explain the practices fire fighters should take to promote optimal physical and mental health. (NFPA 5.1.1, pp 28–31)
* Describe the purpose of an employee assistance program. (NFPA 5.1.1, p 30)
* Explain how fire fighter candidates, instructors, and veteran fire fighters work together to ensure safety during training. (p 30)
* Describe the steps to ensure safety when responding to an emergency. (pp 30–31)
* Describe the steps to ensure safety when driving to an emergency incident. (pp 31–33)
* List the four general principles that govern emergency vehicle operation. (pp 31–33)
* List the guidelines for safe emergency vehicle response. (p 33)
* Explain how the teamwork concept is applied during every stage of an emergency incident to ensure the safety of all fire fighters. (pp 33–35)
* Describe how the personnel accountability system is implemented during an emergency incident. (pp 35–36)
* List the common hazards at an emergency incident. (p 36)
* Describe the measures fire fighters follow to ensure electrical safety at an emergency incident. (p 36)
* Describe how to lift and move objects safely. (p 36)
* Explain how rehabilitation is used to protect the safety of fire fighters during an emergency incident. (pp 36–38)
* Explain the role of a critical incident stress debriefing in preserving the mental well-being of fire fighters. (p 38)
* Describe how to ensure safety at the fire station. (p 38)
* Describe how to ensure safety outside of the workplace. (p 38)

Skill Objectives

There are no skill objectives for Fire Fighter I candidates.

Fire Fighter II

Knowledge Objectives

There are no knowledge objectives for Fire Fighter II candidates. NFPA 1001 contains no Fire Fighter II Job Performance Requirements for this chapter.

Skill Objectives

There are no skill objectives for Fire Fighter II candidates. NFPA 1001 contains no Fire Fighter II Job Performance Requirements for this chapter.

Additional NFPA Standards

* NFPA 1250, *Recommended Practice in Emergency Service Organization Risk Management*
* NFPA 1451, *Standard for a Fire Service Vehicle Operations Training Program*
* NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*
* NFPA 1582, *Standard on Comprehensive Operational Medical Program for Fire Departments*

Reading and Preparation

* Review all instructional materials, including *Fundamentals of Fire Fighter Skills*, Chapter 2, and all related presentation support materials.
* Review local firefighting protocols for Chapter 2.

Support Materials

* Dry erase board and markers or chalkboard and chalk
* LCD projector, slide projector, overhead projector, and projection screen
* PowerPoint presentation, overhead transparencies, or slides
* Personnel accountability system equipment in use by the department, including tags, passports, accountability status boards, and signaling systems
* Newspaper articles or videos that depict failures of fire-ground safety practices that have led to injuries, deaths, or near misses
* Copies of local departmental standard operating procedures (SOPs) relating to personnel accountability, rapid intervention teams, rehabilitation, and other safety-related practices

Enhancements

* Direct the students to visit the Internet at www.FireFighter.jbpub.com for online activities.
* Direct the students to relevant sections in the Student Workbook for application of the content introduced in this chapter.
* Direct the students to take practice/final examinations in the Navigate Test Prep to prepare for examinations.

Teaching Tips and Activities

* Have each student research one fire fighter fatality that occurred within the previous year. Documentation of fire fighter fatalities is available yearly from both the National Fire Protection Association (NFPA) and the US Fire Administration. Select a few students at random to relate to the class the circumstances of the fatality incident they researched.
* Hand out a copy of each safety-related SOP to every student. Assign students to read each SOP thoroughly.

Presentation Overview

|  |  |  |  |
| --- | --- | --- | --- |
| **Total time**: 2 hours, 21.5 minutes (with enhancements)  | **Activity Type** | **Time** | **Level** |
| **Pre-Lecture** |  |  |  |
| **You Are the Fire Fighter** | Small Group Activity/Discussion | 5 minutes | Fire Fighter I |
| **Lecture** |  |  |  |
| **I. Introduction** | Lecture/Discussion | 13.5 minutes | Fire Fighter I  |
| **II. Causes of Fire Fighter Deaths and Injuries** | Lecture/Discussion | 3 minutes | Fire Fighter I |
| **III. Injury Prevention** | Lecture/Discussion | 15 minutes | Fire Fighter I |
| **IV. Safety and Health**  | Lecture/Discussion | 4.5 minutes | Fire Fighter I  |
| **V. Safety During Training** | Lecture/Discussion | 1.5 minutes | Fire Fighter I |
| **VI. Safety During the Emergency Response** | Lecture/Discussion | 1.5 minutes | Fire Fighter I |
| **VII. Safe Driving Practices** | Lecture/Discussion | 9 minutes | Fire Fighter I |
| **VIII. Safety at Emergency Incidents** | Lecture/Discussion | 19.5 minutes | Fire Fighter I |
| **IX. Safety at the Fire Station** | Lecture/Discussion | 1.5 minutes | Fire Fighter I  |
| **X. Safety Outside Your Workplace** | Lecture/Discussion | 1.5 minutes | Fire Fighter I |
| **XI. Summary** | Lecture/Discussion | 6 minutes | Fire Fighter I  |
| **Post-Lecture** |  |  |  |
| **I. Wrap-Up Activities****A. Fire Fighter in Action****B. Technology Resources** | Individual Activity/Small Group Activity/Discussion | 40 minutes | Fire Fighter I and II |
| **II. Lesson Review** | Discussion | 15 minutes | Fire Fighter I |
| **III. Assignments** | Lecture | 5 minutes | Fire Fighter I and II |

Pre-Lecture

* 1. I. You Are the Fire Fighter

Time: 5 Minutes

Level: Fire Fighter I

Small Group Activity/Discussion

Use this activity to motivate students to learn the knowledge and skills needed to perform their duties as a fire fighter safely and correctly.

Purpose

To allow students an opportunity to explore the significance and concerns associated with basic fire-ground safety.

Instructor Directions

1. Direct students to read the “You Are the Fire Fighter” scenario found in the beginning of Chapter 2.
2. You may assign students to a partner or a group. Direct them to review the discussion questions at the end of the scenario and prepare a response to each question. Facilitate a class dialogue centered on the discussion questions.
3. You may also assign this as an individual activity and ask students to turn in their comments on a separate piece of paper.

Lecture

* 1. SLIDE TEXT LECTURE NOTES
	2. I. Introduction

Time: 13.5 Minutes

Slides: 1–9

Level: Fire Fighter I

Lecture/Discussion

* + 1. Introduction to Fire Fighter Safety

Slide 9

Introduction

* Firefighting is inherently dangerous.
* Departments must do what they can to reduce known hazards and dangers.
* The final responsibility for personal safety falls to the individual fire fighter.

Slide 1

CHAPTER 2

* Fire Fighter Safety
	+ - 1. Common sense tells us firefighting is inherently dangerous.
			2. Fire departments must do what they can to reduce the hazards and dangers of the job.
				1. The incident commander (IC) has ultimate responsibility for the overall safety of every fire-ground operation.
				2. recommending appropriate safety measures to the IC.

Slides 2-8

Chapter Objectives

* + - * 1. Fire departments should review and revise their safety procedures regularly.
				2. Safety must be fully integrated in every activity, procedure, and job description.
				3. The final responsibility for personal safety falls to the individual fire fighter.
	1. II. Causes of Fire Fighter Deaths and Injuries

Time: 3 Minutes

Slides: 10-11

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Fire Fighter Deaths and Injuries

Slide 10

Causes of Fire Fighter Deaths and Injuries

* Each year 80 to 100 fire fighters are killed in the line of duty in the United States.
	+ - 1. Each year approximately 80 to 100 fire fighters are killed in the line of duty in the United States.
			2. Deaths occur:
				1. At emergency incident scenes
				2. In the station
				3. During training
				4. When responding to or returning from emergencies
			3. Heart attack and stroke are the leading causes of fire fighter deaths.
			4. Vehicle collisions are a major cause of fire fighter fatalities.
				1. Nationally there is one emergency vehicle collision per 1000 responses.
				2. 39 percent of fire fighter fatalities in vehicle collisions involved failure to use seat belts. Seat belt use is key!
			5. According to the NFPA, 71,875 fire fighters were injured in the line of duty in 2010.

Slide 11

Causes of Fire Fighter Deaths and Injuries

* According to the National Fire Protection Association (NFPA), 71,875 fire fighters were injured in the line of duty in 2010.
	+ - * 1. Fewer than half of these injuries occurred while fighting fires.
				2. Strains, sprains, and soft-tissue injuries were most common.
				3. Burns and smoke and gas inhalation were only a small percentage.
	1. III. Injury Prevention

Time: 15 Minutes

Slides: 12-21

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Introduction to Injury Prevention

Slide 12

Injury Prevention

* Every team member is responsible for preventing injuries.
* Priority of safety on the fire ground is:
* Self (personal safety)
* Other team members
* Everyone else
	+ - 1. Every member of the team has the responsibility to prevent injuries.
			2. The relative priority of safety on the fire ground is:
				1. Self (personal safety)
				2. Other team members
				3. Everyone else present at the emergency scene
			3. A successful safety program will address standards and procedures, personnel, training, and equipment.

Slide 13

Injury Prevention

* A successful safety program will address:
* Standards and procedures
* Personnel
* Training
* Equipment
	+ - * 1. Standards and procedures
				2. Personnel
				3. Training
				4. Equipment
		1. Standards and Procedures

Slide 14

Standards and Procedures

* Fire service safety is governed by:
* NFPA 1500
* State and federal agencies programs, such as the Occupational Safety and Health Administration
* Every department should have standard operating procedures (SOPs).
	+ - 1. Fire service safety is governed by NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, and state and federal agencies or programs, such as the Occupational Safety and Health Administration.
			2. Every fire department should have a set of SOPs or standard operating guidelines (SOGs).
				1. SOPs or SOGs cover a range of topics from uniform and grooming standards to emergency scene operations.
				2. Every fire fighter is responsible for understanding and following applicable SOPs or SOGs.
			3. The Incident Command System (ICS) is used in the command and control of emergency incidents. Using the ICS helps ensure safe operations, so it should be implemented at every scene.

Slide 15

Standards and Procedures

* The Incident Command System (ICS) is used in the command and control of emergency incidents.
* Each department should have a health and safety committee.
	+ - 1. Each department should have (or consider having) a health and safety committee.
		1. Personnel

Slide 16

Personnel

* A safety program is only as effective as the individuals who implement it.
* Freelancing is extremely dangerous and has no place on the fire ground.
	+ - 1. A safety program is only as effective as the individuals who implement it.
			2. Working as part of a team is essential to safe operations.
			3. Freelancing, or acting independently of orders or SOPs is extremely dangerous and has no place on the fire ground.
			4. A fire fighter who freelances endangers not only himself or herself but everyone else at the scene who may need to rescue that fire fighter.
			5. Incident safety officer

Slide 17

Personnel

* Incident safety officer
* Designated member of the fire department
* Primary responsibility is safety.
* Reports directly to the IC
* Has the authority to stop any action deemed to be unsafe
	+ - * 1. Designated member of the fire department whose primary responsibility is safety.
				2. Reports directly to the IC.
				3. Has the authority to stop any action he or she judges to be unsafe.
		1. Training

Slide 18

Training

* Knowledge and skills from training are essential for safety.
* Fire fighters must continually seek out additional courses and work to keep their skills current.
	+ - 1. The knowledge and skills developed during training classes are essential for safety.
			2. Fire fighters must continually seek out additional courses and work to keep their skills current to ensure personal and team safety.
		1. Equipment

Slide 19

Equipment

* Fire fighters must know how to use equipment properly and operate it safely.
* Equipment must be properly maintained.
* Follow manufacturers’ operating instructions and safety procedures.
	+ - 1. Fire fighters must know how to use equipment properly and operate it safely.
			2. Equipment also must be properly maintained.
			3. Follow manufacturer’s operating instructions and safety procedures.
				1. Use equipment for its intended purpose.
				2. Do not exceed manufacturer’s safety parameters for chosen equipment.
				3. Ensure equipment purchased meets applicable standards for its intended use.
		1. Reducing Fire Fighter Injuries and Deaths

Slide 20

Reducing Fire Fighter Injuries and Deaths

* Requires the effort of every firefighter
* Most reported injuries and deaths are the result of preventable situations.
* The goal of the National Fallen Firefighters Foundation is to reduce line-of-duty deaths.
	+ - 1. Requires the dedicated effort of every fire fighter
			2. In 1992 the US Congress created the National Fallen Firefighters Foundation (NFFF).
			3. Most reported injuries and deaths are the result of preventable situations.
			4. The NFFF goal is to reduce line-of-duty deaths.
			5. The Fire Fighter Near Miss Reporting System provides a means for fire fighters to learn from past situations.
			6. The Everyone Goes Home program raises awareness for life safety issues, improves safety practices, and promotes the goal of returning every fire fighter back to the station after a call.
			7. The 16 Life Safety Initiatives describe the steps that need to be taken to change the culture of the fire service to help make it a safer place for all.

Slide 21

Reducing Fire Fighter Injuries and Deaths

Table 2-2: 16 FireFighter Life Safety Initiatives

* 1. IV. Safety and Health

Time: 4.5 Minutes

Slides: 22-24

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Introduction to Safety and Health

Slide 22

Safety and Health

* A healthful lifestyle includes:
* A balanced diet
* Weight training
* Cardiovascular exercises
	+ - 1. A healthy lifestyle that includes a balanced diet, weight training, and cardiovascular exercises helps reduce many risk factors for heart disease and enables fire fighters to meet the physical demands of the job.
			2. Each department member is responsible for personal conditioning and nutrition.
			3. Fire fighters should establish a sleep schedule and routine to get adequate amounts of uninterrupted sleep.

Slide 23

Safety and Health

* Get adequate amounts of sleep.
* Spend at least an hour a day in physical fitness training.
* Drink up to a gallon of water each day.
* Avoid tobacco products entirely.
* Never work under the effects of alcohol or drugs.
	+ - 1. All fire fighters, whether paid or volunteer, should spend at least an hour a day in physical fitness training.
			2. Fire fighters should drink up to a gallon of water each day to keep properly hydrated.
			3. Diet is an important aspect of physical fitness.
			4. Fire fighters should avoid tobacco products entirely for both health and insurance reasons.
			5. Fire fighters should never work under the effects of alcohol or drugs.
			6. Fire fighters who use drugs endanger their lives, the lives of their team members, and the lives of the public they serve.
		1. EAPs

Slide 24

Employee Assistance Programs (EAP)

* Provide help with a wide range of problems
* Fire fighters who use an EAP can do so with complete confidentiality and without fear of retribution.
	+ - 1. EAPs provide help with a wide range of problems that might affect performance, including:
				1. Physical problems
				2. Financial problems
				3. Emotional problems
				4. Substance abuse problems
			2. Fire fighters who use an EAP can do so with complete confidentiality and without fear of retribution.
	1. V. Safety During Training

Time: 1.5 Minutes

Slide: 25

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Training

Slide 25

Safety During Training

* Proper gear and teamwork are important.
* Do not attempt anything beyond your ability or knowledge.
* Do not freelance during training!
* An injured fire fighter should not return until medically cleared for duty.
	+ - 1. According to the NFPA, an average of nine fire fighters are fatally injured during training exercises every year.
			2. Proper protective gear and teamwork are as important during training as they are on the fire ground.
			3. Developing the proper (ie, safe) working habits during training courses helps ensure safety later (on the fire ground).
			4. Do not attempt anything you feel is beyond your ability or knowledge.
			5. If you see something that you feel is an unsafe practice, bring it to the attention of your instructors or a designated safety officer.
			6. Do not freelance during training (or any other time)!
			7. Work as a team!
			8. A fire fighter injured during training should not return until medically cleared for duty.
	1. VI. Safety During the Emergency Response

Time: 1.5 Minutes

Slide: 26

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Emergency Response

Slide 26

Safety During the Emergency Response

* Walk quickly to the apparatus; do not run.
* Personal protective gear should be properly positioned.
* Comply with all traffic laws.
	+ - 1. Walk quickly to the apparatus; do not run. You do not want to slip and become injured.
			2. Personal protective gear should be properly positioned so you can don it quickly before getting into the apparatus.
			3. Be sure that seat belts are properly fastened before the apparatus begins to move.
			4. Know how to don seat-mounted self-contained breathing apparatus (SCBA) without compromising safety.
			5. The few seconds gained by speeding are not worth the risk created.
			6. Comply with all applicable traffic laws.
	1. VII. Safe Driving Practices

Time: 9 Minutes

Slides: 27-32

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Introduction to Safe Driving Practices

Slide 27

Safe Driving Practices

* Motor vehicle collisions are the second leading cause of fire fighter deaths.
* Emergency driving requires added considerations.
* Collisions consist of a series of separate collision events.
	+ - 1. The use of seat belts and air bags greatly reduces the possibility of serious injury or death.
			2. Motor vehicle collisions are the second leading cause of fire fighter deaths.
				1. Emergency driving requires added considerations.
				2. Collisions consist of a series of separate collision events.
		1. Laws and Regulations Governing Emergency Vehicle Operation

Slide 28

Laws and Regulations Governing Emergency Vehicle Operation

* Emergency vehicle operators are subject to traffic regulations.
* Exemptions are legal only when operating in emergency mode.
* Operator can be found liable.
* An exemption does not relieve the driver from reasonable care.
	+ - 1. Emergency vehicle operators are subject to all traffic regulations unless specific exemption.
			2. Exemptions are legal only when operating in emergency mode.
			3. Even with an exemption, operator can be found criminally or civilly liable.
			4. An exemption does not relieve the driver of an authorized emergency vehicle from the duty to drive with reasonable care.
		1. SOPs for Personal Vehicles

Slide 29

Standard Operating Procedures (SOPs) for Personal Vehicles

* The use of personal vehicles to respond to fire and Emergency Medical Services (EMS) calls constitutes a fire department function.
* Fire departments should have SOPs that dictate the use of personal vehicles.
	+ - 1. The use of personal vehicles to respond to fire and Emergency Medical Services (EMS) calls constitutes a fire department function.
			2. Fire departments should have SOPs that dictate the use of personal vehicles.
		1. Safe Driving Begins With You

Slide 30

Safe Driving Begins With You

* The attitude and ability of the vehicle operator is a major factor in vehicle crashes.
* Know the state and local laws relating to motor vehicle operations.
* Emergency driving requires good reactions and alertness.
	+ - 1. The attitude and ability of the vehicle operator are major factors in vehicle crashes.
			2. Know the state and local laws relating to motor vehicle operations.
			3. Emergency driving requires good reactions and alertness.
		1. Vehicle Collision Prevention

Slide 31

Vehicle Collision Prevention

* Anticipate the road and road conditions.
* Make allowances for weather conditions.
* Be alert for other emergency vehicles.
* Drive with a cushion of safety.
	+ - 1. Safe driving practices will prevent most vehicle collisions.
			2. Anticipate the road and road conditions.
			3. Make allowances for weather conditions.
				1. Adjust your speed to accommodate storm conditions.
			4. When operating an emergency vehicle, you are not exempt from the laws of physics.
				1. When the speed of a vehicle doubles, the force exerted by the vehicle increases by a factor of four.
				2. Higher speeds require more braking power and distance.
			5. Be alert for other emergency vehicles.
			6. Drive with a cushion of safety.
		1. The Importance of Vehicle Maintenance

Slide 32

The Importance of Vehicle Maintenance

* It is important to perform regular maintenance on fire department vehicles and your personal vehicle.
	+ - 1. It is important to perform regular maintenance on fire department vehicles and your personal vehicle.
			2. Regular maintenance should include:
				1. Engine
				2. Transmission
				3. Brakes
				4. Tires
				5. Suspension system
				6. Steering system
				7. Windshield wipers and washers
				8. Headlights, taillights, and turn signals
	1. VIII. Safety at Emergency Incidents

Time: 19.5 Minutes

Slides: 33-45

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Introduction to Safety at Emergency Incidents

Slide 33

Safety at Emergency Incidents

* Wait for the officer in command to “size-up” the situation before acting.
* Follow the officer’s instructions.
* Do not freelance.
	+ - 1. Fire fighters should never charge blindly into action.
				1. The commanding officer will “size-up” the situation and evaluate conditions.
				2. Wait for the officer in command to “size-up” the situation before acting.

Follow the officer’s instructions.

Do not freelance.

* + 1. Teamwork

Slide 34

Teamwork

* Maintain a minimum of two fire fighters in each team.
* Never work alone.
	+ - 1. Maintain a minimum of two fire fighters in each team.
				1. Never work alone.
				2. If one member of the team needs to leave the structure, the entire team must leave together.
			2. Maintain visual, vocal, or physical contact with each other at all times.
			3. Team members should check each other’s personal protective equipment (PPE) to ensure it is on and working correctly before they enter a hazardous area.
			4. At least one member of each team should have a portable radio.
			5. A back-up team needs to be in place any time fire fighters are in a hazardous area in case the entry team has to be rescued.

Slide 35

Teamwork

* A back-up team needs to be in place any time fire fighters are in a hazardous area.
* A designated rapid intervention team should be outside the hazardous area.
	+ - 1. A designated rapid intervention team should be established and positioned outside the hazardous area.
		1. Accountability

Slide 36

Accountability

* Accountability system should record:
* Individuals assigned to each team
* Assignments for each team
* Team’s current activities
* Provides an up-to-date accounting of everyone who is working at the incident.
	+ - 1. Every fire department should have a personnel accountability system to track personnel and assignments on the emergency scene.
			2. The system should record:
				1. The individuals assigned to each team
				2. The assignments for each team
				3. The team’s current activities
			3. The purpose of a personnel accountability system is to provide an up-to-date accounting of everyone who is working at the incident and how they are organized.
			4. Fire fighters must learn their department’s accountability system, how to work within it, and how it works within the ICS.

Slide 37

Accountability

* Fire fighters must learn department’s accountability system
* How to work within it
* How it works within the ICS
	+ - 1. Acceptable personnel accountability systems include:
				1. Paper-based systems
				2. Display boards
				3. Laptop computer systems
				4. “Passport”-type systems
				5. Accountability tag systems
		1. Incident Scene Hazards

Slide 38

Incident Scene Hazards

* Be aware of your surroundings.
* Always operate within established boundaries and protected work areas.
* Changing fire conditions will affect safety.
* Do not let down your safety guard.
	+ - 1. Fire fighters must be aware of their surroundings when performing their assigned tasks at an emergency scene.
			2. Always operate within established boundaries and protected work areas.
			3. Changing fire conditions will also affect safety.
			4. Because the chance for injury increases when you are tired, do not let down your safety guard even though the main part of the fire is over.
		1. Using Tools and Equipment Safely

Slide 39

Using Tools and Equipment Safely

* Learn to use tools and equipment properly before using them at an emergency.
* Practice doing basic repairs on tools and equipment at the fire station until you can perform them quickly and safely.
	+ - 1. Learn how to use tools and equipment properly and safely before using them at an emergency incident.
			2. Use protective gear, such as PPE, safety glasses, and hearing protection, when they are required.
			3. Equipment should always be in excellent condition and ready for use.
			4. Practice doing basic repairs on tools and equipment at the fire station until you can perform them quickly and safely on the emergency scene.
		1. Electrical Safety

Slide 40

Electrical Safety

* Always check for overhead power lines when raising ladders.
* Electric power supply to the building should be turned off.
* A downed line should be considered energized until confirmed dead.
	+ - 1. Energized power lines may be present on the fire ground.
			2. Always check for overhead power lines when raising ladders.
			3. During any firefighting operations, the electric power supply to the building should be turned off.
			4. Park apparatus outside the area and away from power lines when responding to a call for an electrical emergency.
			5. A downed power line should be considered energized until the power company confirms that it is dead.
			6. Do not use water to suppress fires near downed power lines.
		1. Lifting and Moving

Slide 41

Lifting and Moving

* Do not try to move something that is too heavy alone—ask for help.
* Prevent back injuries by always bending at the knees and using the legs to lift.
	+ - 1. Do not try to move something that is too heavy alone—ask for help.
			2. Prevent back injuries by always bending at the knees and using the legs to lift.
		1. Working in Adverse Weather Conditions

Slide 42

Working in Adverse Weather Conditions

* Dress appropriately for adverse weather conditions.
* Watch your footing on slippery surfaces.
	+ - 1. Dress appropriately for adverse weather conditions.
			2. Watch your footing on slippery surfaces.
		1. Rehabilitation

Slide 43

Rehabilitation

* Provides periods of rest and recovery for emergency workers
* Personnel should not be released until they are rested, refreshed, and ready for another work cycle.
	+ - 1. Fatigued fire fighters are more prone to making mistakes and becoming injured.
			2. Rehabilitation is a systematic process to provide periods of rest and recovery for emergency workers during an incident.
			3. Rehabilitation time can be used to replace SCBA cylinders, obtain new batteries for portable radios, and make repairs or adjustments to tools or equipment.
			4. Personnel should not be released from rehabilitation until they are rested, refreshed, and ready for another work cycle.
			5. Any fire fighter exhibiting signs and symptoms of heat exhaustion or chest pain or discomfort should stop and seek medical attention immediately.
		1. Violence at the Scene

Slide 44

Violence at the Scene

* Do not proceed to the scene until the police have declared it safe.
* If confronted with a potentially violent situation, do not respond violently.
	+ - 1. Fire fighters must sometimes contend with violent scenes.
			2. Do not proceed to the scene until the police have declared it safe.
			3. If the scene is not secure and there is any threat to personal safety, slowly back away from the emergency scene to a safe distance and ask the police to secure the scene.
			4. If you are confronted with a potentially violent situation, do not respond violently.
		1. Mental Well-Being

Slide 45

Mental Well-being

* Critical incident stress debriefing (CISD) provides a forum for personnel to discuss anxieties, stress, and emotions triggered by difficult calls.
* Some departments have CISD staff available 24 hours a day.
	+ - 1. Fire fighters involved in difficult or emotionally traumatic calls may be encouraged to meet with a counselor or attend a critical incident stress debriefing (CISD).
			2. CISD provides a forum for firefighting and EMS personnel to discuss the anxieties, stress, and emotions triggered by a difficult call.
			3. Most departments have qualified, designated CISD staff available 24 hours a day.
	1. IX. Safety at the Fire Station

Time: 1.5 Minutes

Slide: 46

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. The Fire Station

Slide 46

Safety at the Fire Station

* Be careful when working with:
* Power tools
* Ladders
* Electrical appliances
* Pressurized cylinders
* Hot surfaces
	+ - 1. Fire fighters will spend much of their shift time at the fire station.
			2. Injuries that occur at the firehouse can be just as devastating as those that occur at an emergency incident scene.
			3. Be careful when working with power tools, ladders, electrical appliances, pressurized cylinders, and hot surfaces.
	1. X. Safety Outside Your Workplace

Time: 1.5 Minutes

Slide: 47

Level: Fire Fighter I

Lecture/Discussion/Demonstration

* + 1. Outside Your Workplace

Slide 47

Safety Outside Your Workplace

* Follow safe practices when you are off-duty.
* An unintentional injury can end your career as a fire fighter.
	+ - 1. Follow safe practices when you are off-duty.
			2. An unintentional injury, regardless of where it happens, can end your career as a fire fighter.
	1. Summary

Time: 6 Minutes

Slides: 48-51

Level: Fire Fighter I

Lecture/Discussion

Slide 48

Summary

* Every fire fighter must have a strong commitment to safety and health.
* Fire fighters must always consider their personal safety and the safety of team and everyone else at the scene.
* A successful safety program must have standards and procedures, personnel, training, and equipment.
	+ 1. Every fire fighter and fire department must have a strong commitment to safety and health.
		2. Each year, on average, 80 to 100 fire fighters are killed at emergency incident scenes, in fire stations, during training, and while responding or returning from an emergency.
		3. When ensuring safety at the scene, fire fighters must always consider their personal safety, the safety of other team members, and the safety of everyone at the emergency scene.
		4. A successful safety program must have four major components: standards and procedures, personnel, training, and equipment.
		5. Safety and well-being are directly related to personal health and fitness.

Slide 49

Summary

* Safety and well-being are directly related to personal health and fitness.
* Employee assistance programs are available to provide fire fighters with support or assistance.
* Four general principles govern emergency vehicle operation.
	+ 1. EAPs are available to provide fire fighters with confidential counseling, support, or assistance in dealing with a physical, financial, emotional, or substance abuse problem.
		2. Four general principles govern emergency vehicle operation:
			1. Emergency vehicle operators are subject to all traffic regulations unless a specific exemption is made.
			2. Exceptions are legal only when operating in emergency mode.
			3. Even with an exemption, the emergency vehicle operator can be found criminally or civilly liable if involved in a crash.
			4. An exemption does not relieve the operator of an authorized emergency vehicle from the duty to drive with reasonable care for all persons using the highway.
		3. Emergency driving requires good reactions and alertness.

Slide 50

Summary

* Emergency driving requires good reactions and alertness.
* Safe driving practices will prevent most vehicle collisions.
* The accountability system tracks personnel and assignments at the scene.
	+ 1. Safe driving practices will prevent most vehicle collisions.
		2. The personnel accountability system tracks personnel and assignments at the emergency scene.
		3. A critical incident stress debriefing is a forum in which firefighting and EMS personnel can discuss anxieties, stress, and emotions triggered by a difficult incident.

Slide 51

Summary

* A critical incident stress debriefing (CISD) is a forum in which firefighting and EMS personnel can discuss anxieties, stress, and emotions.
* An unintentional injury can end your firefighting career.
	+ 1. An unintentional injury, regardless of when or where it happens, can end your firefighting career.

Post-Lecture

* 1. Wrap-Up Activities

Time: 40 Minutes

Level: Fire Fighter I and II

Small Group Activity/Individual Activity/Discussion

Fire Fighter in Action and/or Fire Fighter II in Action

This activity is designed to assist the student in gaining a further understanding of fire fighter qualifications and safety. The activity incorporates both critical thinking and the application of fire fighter knowledge.

Purpose

This activity allows students an opportunity to analyze a firefighting scenario and develop responses to critical thinking questions.

Instructor Directions

1. Direct students to read the “Fire Fighter in Action” and/or “Fire Fighter II in Action” scenario located in the Wrap-Up section at the end of Chapter 2.
2. Direct students to read and individually answer the quiz questions at the end of the scenario. Allow approximately 10 minutes for this part of the activity. Facilitate a class review and dialogue of the answers, allowing students to correct responses as needed. Use the answers noted below to assist in building this review. Allow approximately 10 minutes for this part of the activity.
3. You may also assign these as individual activities and ask students to turn in their comments on a separate piece of paper.

Answers to Multiple Choice Questions

1. B
2. C
3. B
4. B
5. B

Technology Resources

This activity requires students to have access to the Internet. This may be accomplished through personal access, employer access, or a local educational institution. Some community colleges, universities, or adult education centers may have classrooms with Internet capability that will allow for this activity to be completed in class. Check out local access points and encourage students to complete this activity as part of their ongoing reinforcement of firefighting knowledge and skills.

Purpose

To provide students an opportunity to reinforce chapter material through use of online Internet activities.

Instructor Directions

1. Use the Internet and go to www.FireFighter.jbpub.com. Follow the directions on the Web site to access the exercises for Chapter 2.
2. Review the chapter activities and take note of desired or correct student responses.
3. As time allows, conduct an in-class review of the Internet activities and provide feedback to students as needed.
4. Be sure to check the Web site before assigning these activities because specific chapter-related activities may change from time to time.
	1. II. Lesson Review

Time: 15 Minutes

Level: Fire Fighter I

Discussion

Note: Facilitate the review of this lesson’s major topics using the review questions as direct questions or overhead transparencies. Answers are found throughout this lesson plan.

Fire Fighter I

* + 1. List the major causes of fire fighter injury and deaths.
		2. What are the three groups that must always be considered on an emergency scene?
		3. Describe freelancing and the negative impact that it has on the fire ground.
		4. Why is it important for fire fighters to go through rehabilitation?
		5. What are some of the topics covered in SOPs or SOGs?
		6. What NFPA standard governs fire fighter safety?
		7. What information should be reviewed before using firefighting tools and equipment?
		8. What are the components that make up a good accountability system?
		9. Who is ultimately responsible for each fire fighter’s safety?
		10. A downed power line should be considered energized until when?
		11. Describe the needs and benefits of a CISD.
	1. III. Assignments

Time: 5 Minutes

Level: Fire Fighter I and II

Lecture

* + 1. Advise students to review materials for a quiz (determine date/time)
		2. Direct students to read the next chapter in *Fundamentals of Fire Fighter Skills* as listed in your syllabus (or reading assignment sheet) to prepare for the next class session.