chapter 1

The Orientation and History of the Fire Service

Chapter Overview

Becoming a fire fighter entails much more than simply knowing the mechanics of firefighting. The fire service is rich with tradition and has developed into a sophisticated and varied profession. The fire service uses a paramilitary hierarchical command structure to ensure its mission fulfillment. A system of general guidelines and specific standard operating procedures (SOPs) helps ensure a consistent approach to dealing with the various emergencies a fire department may be called on to handle. It is the responsibility of the fire fighter to know these guidelines and procedures, the command structure, and the history of the fire service because all these factors affect the way a fire department operates and the role of the individual fire fighter. This chapter gives fire fighter students an orientation to the roles and responsibilities of a fire fighter and the guidelines they must follow.

After students complete this chapter and the related course work, they will be able to discuss the history of the fire service and describe the basic principles of organization of the fire department. Students will also understand the various roles within the fire department, and they will be able to describe fire department regulations, policies, and SOPs.

Objectives and Resources

Fire Fighter I

Knowledge Objectives

After studying this chapter, you will be able to:

* List five guidelines for successful fire fighter training. (p 4)
* Describe the general requirements for becoming a fire fighter. (p 5)
* Outline the roles and responsibilities of a Fire Fighter I. (NFPA 5.1, pp 5–6)
* Describe the common positions of fire fighters within the fire department. (NFPA 5.1.1, pp 6–7)
* Describe the specialized response roles within the fire department. (p 7)
* Explain the concept of governance and describe how the fire department’s regulations, policies, and SOPs affect it. (NFPA 5.1.1, p 8)
* Locate information in departmental documents and SOPs. (NFPA 5.1.2, p 8)
* List the different types of fire department companies and describe their functions. (NFPA 5.1.1, pp 8–10)
* Describe how to organize a fire department in terms of staffing, function, and geography. (NFPA 5.1.1, pp 10–11)
* Explain the basic structure of the chain of command within the fire department. (NFPA 5.1.1, p 11)
* Define the four basic management principles used to maintain organization within the fire department. (p 12)
* Explain the evolution of the methods and tools of firefighting from colonial days to the present. (pp 13–17)
* Explain how building codes prevent the loss of life and property. (pp 13–14)
* Describe the evolution of funding for fire department services. (pp 17–18)

Skill Objectives

There are no skill objectives for Fire Fighter I candidates.

Fire Fighter II

Knowledge Objectives

* Outline the responsibilities of a Fire Fighter II. (NFPA 6.1, p 6)
* Describe the roles of a Fire Fighter II within the fire department. (NFPA 6.1.1, p 6)

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 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 1, and all related presentation support materials.
* Review local firefighting protocols for Chapter 1.

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

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.
* If you have access to any fire service memorabilia or historical materials, consider bringing them to class to augment discussions of fire service history.

Teaching Tips and Activities

* This is your first class and your only chance to make a good first impression. Get plenty of rest the night before. Wear a clean uniform or appropriate professional clothing. Be well-groomed. Show up on time. Be confident by being well prepared.
* Introduce yourself with your name, department affiliation, and rank (if appropriate), and tell briefly about your fire service experience.
* Ask students to introduce themselves. If the students are from different fire departments or are not yet affiliated with a department, ask them to tell where they are from.
* Go over administrative details, such as facility rules, registration, bathrooms, and break periods. Then be sure to point out fire safety information, such as fire exits, fire extinguishers, fire alarm procedures, and pull station locations.

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 and II |
| **Lecture** |  |  |  |
| **I. Introduction** | Lecture/Discussion | 12 minutes | Fire Fighter I and II |
| **II. Fire Fighter Guidelines** | Lecture/Discussion | 1.5 minutes | Fire Fighter I |
| **III. Fire Fighter Qualifications** | Lecture/Discussion | 4.5 minutes | Fire Fighter I |
| **IV. Roles and Responsibilities of Fire Fighter I and Fire Fighter II** | Lecture/Discussion | 12 minutes | Fire Fighter I and II |
| **V. Roles Within the Fire Department** | Lecture/Discussion | 4.5 minutes | Fire Fighter I |
| **VI. Working with Other Organizations** | Lecture/Discussion | 3 minutes | Fire Fighter I |
| **VII. Fire Department Governance** | Lecture/Discussion | 4.5 minutes | Fire Fighter I |
| **VIII. The Organization of the Fire Service** | Lecture/Discussion | 13.5 minutes | Fire Fighter I |
| **IX. The History of the Fire Service** | Lecture/Discussion | 16.5 minutes | Fire Fighter I |
| **X. Fire Service in the United States Today** | Lecture/Discussion | 1.5 minutes | Fire Fighter I |
| **XI. Summary** | Lecture/Discussion | 6 minutes | Fire Fighter I and II |
| **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 and II |
| **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 and II

Small Group Activity/Discussion

Use this activity to motivate students to learn the knowledge and skills needed to understand the history of the fire service and how it functions today.

Purpose

To allow students an opportunity to explore the significance and concerns associated with the history and present operation of the fire service.

Instructor Directions

1. Direct students to read the “You Are the Fire Fighter” scenario found in the beginning of Chapter 1.
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: 12 Minutes

Slides: 1–8

Level: Fire Fighter I and II

Lecture/Discussion

* + 1. Training to become a fire fighter is not easy.

Slide 8

Introduction

* Training to become a fire fighter is not easy.
* Fire fighters are challenged both physically and mentally.
* Fire fighter training will expand your understanding of fire suppression.

Slides 2-7

Chapter Objectives

Slide 1

CHAPTER 1

* The Orientation and History of the Fire Service
  + - 1. The work is physically and mentally challenging.
      2. You must keep your body in excellent condition and remain mentally alert.
    1. Fire fighter training will expand your understanding of fire suppression.
       1. This course equips fire fighters to continue a centuries-old tradition of preserving lives and property threatened by fire.
  1. II. Fire Fighter Guidelines

Time: 1.5 Minutes

Slide: 9

Level: Fire Fighter I

Lecture/Discussion

* + 1. Be safe.

Slide 9

Fire Fighter Guidelines

* Be safe.
* Follow orders.
* Work as a team.
* Think!
* Follow the Golden Rule.
  + - 1. Safety should always be uppermost in your mind.
    1. Follow orders.
       1. If you follow orders, you will become a dependable member of the department.
    2. Work as a team.
       1. Firefighting requires the coordinated efforts of each department member.
    3. Think!
       1. Lives will depend on the choices you make.
    4. Follow the Golden Rule.
       1. Treat each person, patient, or victim as an important person.
  1. III. Fire Fighter Qualifications

Time: 4.5 Minutes

Slides: 10–12

Level: Fire Fighter I

Lecture/Discussion

* + 1. Age Requirements

Slide 10

Fire Fighter Qualifications

* Age requirements
* Most departments require that candidates be between the ages of 18 and 21 years.
* Education requirements
* Most departments require a minimum of a high school diploma or equivalent.
  + - 1. Most career fire departments require that candidates be between the ages of 18 and 21 years.
    1. Education Requirements
       1. Most career fire departments require a minimum of a high school diploma or equivalent.
    2. Medical Requirements

Slide 11

Fire Fighter Qualifications

* Medical requirements
* Medical evaluations are often required before training can begin.
* Medical requirements for fire fighters are specified in NFPA 1582, Standard on Comprehensive Operational Medical Program for Fire Departments.
  + - 1. Medical evaluations are often required before training can begin.
      2. Medical requirements for fire fighters are specified in NFPA 1582, Standard on Comprehensive Operational Medical Program for Fire Departments.
    1. Physical Fitness Requirements

Slide 12

Fire Fighter Qualifications

* Physical fitness requirements
* Physical fitness requirements ensure that fire fighters have the strength and stamina needed.
* Emergency medical requirements
* Departments may require fire fighters to be certified as an Emergency Medical Responder, Emergency Medical Technician (EMT)–Basic, or Paramedic.
  + - 1. Physical fitness requirements are established to ensure that fire fighters have the strength and stamina needed to perform the tasks associated with firefighting and emergency operations.
    1. Emergency Medical Care Requirements
       1. Many departments require fire fighters to become certified as an Emergency Medical Responder, Emergency Medical Technician (EMT)–Basic, or an EMT-Paramedic.
  1. IV. Roles and Responsibilities of Fire Fighter I and Fire Fighter II

Time: 12 Minutes

Slides: 13–20

Level: Fire Fighter I and II

Lecture/Discussion

* + 1. The roles and responsibilities for Fire Fighter I include:

Slide 13

Roles and Responsibilities for Fire Fighter I

* Properly don and doff PPE.
* Hoist hand tools using appropriate ropes and knots.
* Understand and correctly apply appropriate communication protocols.
* Use self-contained breathing apparatus (SCBA).
  + - 1. Don and doff personal protective equipment properly.
      2. Hoist hand tools using appropriate ropes and knots.
      3. Understand and correctly apply appropriate communication protocols.
      4. Use self-contained breathing apparatus (SCBA).
      5. Respond on apparatus to an emergency scene.

Slide 14

Roles and Responsibilities for Fire Fighter I

* Respond on apparatus to an emergency.
* Establish and operate safely in emergency work areas.
* Force entry into a structure.
* Exit a hazardous area safely as a team.
* Set up ground ladders safely and correctly.
  + - 1. Establish and operate safely in emergency work areas.
      2. Force entry into a structure.
      3. Exit a hazardous area safely as a team.
      4. Set up ground ladders safely and correctly.
      5. Attack a passenger vehicle fire, an exterior Class A fire, and an interior structure fire.

Slide 15

Roles and Responsibilities for Fire Fighter I

* Attack a passenger vehicle fire, an exterior Class A fire, and an interior structure fire.
* Conduct search and rescue in a structure.
* Perform ventilation of an involved structure.
* Overhaul a fire scene.
  + - 1. Conduct search and rescue in a structure.
      2. Perform ventilation of an involved structure.
      3. Overhaul a fire scene.
      4. Conserve property with salvage tools and equipment.

Slide 16

Roles and Responsibilities for Fire Fighter I

* Conserve property with salvage tools.
* Connect an engine to a water supply.
* Extinguish Class A, Class B, Class C, and Class D fires.
* Illuminate an emergency scene.
* Turn off utilities.
  + - 1. Connect a fire department engine to a water supply.
      2. Extinguish incipient Class A, Class B, Class C, and Class D fires.
      3. Illuminate an emergency scene.
      4. Turn off utilities.
      5. Combat a ground cover fire.

Slide 17

Roles and Responsibilities for Fire Fighter I

* Combat a ground cover fire.
* Perform fire safety surveys.
* Clean and maintain equipment.
  + - 1. Perform fire safety surveys.
      2. Clean and maintain equipment.
    1. The roles and responsibilities for Fire Fighter II include:

Slide 18

Roles and Responsibilities for Fire Fighter II

* Prepare reports.
* Communicate the need for assistance.
* Coordinate an interior attack line team.
* Extinguish an ignitable liquid fire.
* Control a flammable gas cylinder fire.

**FIREFIGHTER II**

* + - 1. Prepare reports.
      2. Communicate the need for assistance.
      3. Coordinate an interior attack line team.
      4. Extinguish an ignitable liquid fire.
      5. Control a flammable gas cylinder fire.
      6. Protect evidence of fire cause and origin.

Slide 19

Roles and Responsibilities for Fire Fighter II

* Protect evidence of fire cause and origin.
* Assess and disentangle victims from motor vehicle collisions.
* Assist special rescue team operations.
* Perform a fire safety survey.
  + - 1. Assess and disentangle victims from motor vehicle collisions.
      2. Assist special rescue team operations.
      3. Perform a fire safety survey.
      4. Present fire safety information.

Slide 20

Roles and Responsibilities for Fire Fighter II

* Present fire safety information.
* Maintain fire equipment.
* Perform annual service tests on fire hose.
  + - 1. Maintain fire equipment.
      2. Perform annual service tests on fire hoses.
  1. V. Roles Within the Fire Department

Time: 4.5 Minutes

Slides: 21-23

Level: Fire Fighter I

Lecture/Discussion

* + 1. General Roles

Slide 21

General Roles Within the Department

* Fire apparatus driver/operator
* Company officer
* Safety officer
* Training officer
* Incident commander
* Fire marshal/inspector/investigator
  + - 1. Fire apparatus driver/operator:
         1. Responsible for getting the apparatus to the scene safely and setting up and running the pump or operating the aerial ladder
      2. Company officer:
         1. Usually a lieutenant or captain in charge of an apparatus
         2. In charge of the company both on scene and at the station
      3. Safety officer:
         1. Watches the overall operation for unsafe practices
         2. Has the authority to stop firefighting activities until they can be performed safely and correctly
      4. Training officer:
         1. Responsible for updating the training of current fire fighters and for training new fire fighters
      5. Incident commander:
         1. Responsible for the management of all the incident operations
         2. Focuses on overall strategy
      6. Fire marshal/inspector/investigator:
         1. Inspects businesses and enforces public safety laws and fire codes
         2. Responds to fire scenes to assist in cause determination
         3. May have full police powers
      7. Fire and life safety education specialist:

Slide 22

General Roles Within the Department

* Fire and life safety education specialist
* 911 dispatcher/telecommunicator
* Apparatus maintenance personnel
* Fire police
* Information management
* Public information officer
* Fire protection engineer
  + - * 1. Educates the public about fire safety and injury prevention
      1. 911 Dispatcher/telecommunicator:
         1. Takes calls from the public, sends appropriate units to the scene, assists callers with emergency medical information, and assists the incident commander with needed resources
      2. Fire apparatus maintenance personnel:
         1. Repair, service, and keep fire and Emergency Medical Services (EMS) vehicles ready to respond to emergencies
         2. Usually trained by equipment manufacturers
      3. Fire police:
         1. Fire fighters who control traffic and secure the scene from public access
      4. Information management (“info techs”):
         1. Fire fighters or civilians who take care of a department’s computer and networking systems
      5. Public information officer:
         1. Serves as a liaison between the incident commander and the news media
      6. Fire protection engineer:
         1. Usually has an engineering degree
         2. Reviews plans and works with building owners to ensure that their detection and suppression systems are appropriate
    1. Specialized Response Roles

Slide 23

Specialized Response Roles

* Aircraft/crash rescue fire fighter
* Hazardous materials technician
* Technical rescue technician
* SCUBA dive rescue technician
* Emergency Medical Services (EMS) personnel
* EMT, Advanced EMT, and Paramedic
  + - 1. Aircraft/crash rescue fire fighter
         1. Based on military and civilian airports
         2. Receives specialized training in aircraft fires, extrication, and extinguishing agents
      2. Hazardous materials technician
         1. Has training and certification in chemical identification, leak control, decontamination, and clean-up procedures
      3. Technical rescue technician
         1. Trained in special rescue techniques for incidents involving:

Structural collapse

Trench rescue

Swiftwater rescue

Confined-space rescue

High-angle rescue

* + - * 1. Sometimes called urban search and rescue teams
      1. SCBA dive rescue technician
         1. Trained in rescue, recovery, and search procedures in both water and under-ice situations
      2. EMS personnel
         1. Administer prehospital care to people who are sick or injured
         2. Prehospital calls account for most responses in many departments.
         3. EMT

Has training in basic emergency care skills, including oxygen therapy, cardiopulmonary resuscitation, and bleeding control

* + - * 1. Advanced EMT

Can perform more procedures than EMT-Basic

Has training in specific aspects of Advanced Life Support (ALS), such as defibrillation and airway intubation

* + - * 1. Paramedic

Highest level of training in EMS

Has extensive training in ALS, including administering drugs, inserting advanced airways, and manual defibrillation

* 1. VI. Working with Other Organizations

Time: 3 Minutes

Slides: 24-25

Level: Fire Fighter I

Lecture/Discussion

* + 1. To fulfill its mission, a fire department must interact with other organizations in the community.

Slide 24

Working with Other Organizations

* Fire departments need to interact with other organizations in the community.
  + 1. Incident Command System
       1. An ICS using unified command provides a means to control an incident when multiple agencies must function together on the scene.

Slide 25

Working with Other Organizations

* Incident Command System (ICS)
* Unified command system
* Controls multiple agencies at an incident
  + - * 1. Eliminates multiple command posts
        2. Establishes a single set of goals and objectives
        3. Ensures mutual communication and cooperation
    1. Large-scale incidents may call on a number of different agencies, such as:
       1. Public works
       2. School administrators
       3. Funeral directors
       4. Government officials
       5. Federal Bureau of Investigation
       6. Military
       7. Federal Emergency Management Agency
       8. Search and rescue teams
       9. Fire investigators
       10. Various state agencies
  1. VII. Fire Department Governance

Time: 4.5 Minutes

Slides: 26-28

Level: Fire Fighter I

Lecture/Discussion

* + 1. Governance is the process by which an organization exercises authority and performs the functions assigned to it.

Slide 26

Fire Department Governance

* Regulations
* Detailed rules that implement a law passed by a governmental body
* Policies
* Outline what is expected in stated conditions
* Issued by a department to provide guidelines for its actions
  + - 1. Regulations are developed by various government or government-authorized organizations to implement a law that has been passed by a government body.
      2. Policies are developed to provide definitive guidelines for present and future actions.
      3. SOPs provide specific information on the actions that should be taken to accomplish a certain task

Slide 27

Fire Department Governance

* SOPs
* Provide specific information on actions that should be taken to accomplish a task
* Standard operating guidelines (SOGs) are not as strict.
  + - 1. Suggested operating guidelines (SOGs) are not as strict as SOPs because conditions may dictate that the fire fighter or officer use his or her personal judgment in completing the procedure.

Slide 28

Fire Department Governance

**Figure 1-5**: A sample standard operating procedure.

* 1. VIII. The Organization of the Fire Service

Time: 13.5 Minutes

Slides: 29-37

Level: Fire Fighter I

Lecture/Discussion

* + 1. Company Types

Slide 29

Company Types

* Engine
* Truck
  + - 1. Engine companies
         1. Responsible for:

Securing a water source

Deploying handlines

Conducting search and rescue operations

Putting water on the fire

* + - * 1. Have a pump, carry hoses, and maintain a booster tank of water
      1. Truck (or ladder) companies
         1. Specialize in:

Forcible entry

Ventilation

Roof operations

Search and rescue

Deployment of ground ladders

* + - * 1. Carry several ground ladders and an extensive quantity of tools
        2. Equipped with aerial devices that can be raised and positioned above a roof
      1. Rescue companies

Slide 30

Company Types

* Rescue
* Wildland/brush
* Hazardous materials
* Emergency Medical Services (EMS)
  + - * 1. Responsible for rescuing victims from fires, confined spaces, trenches, and high-angle situations
        2. Carry many regular and specialized tools
      1. Wildland/brush companies
         1. Dispatched to wildland and brush fires that larger engines cannot reach
         2. Use four-wheel drive vehicles
         3. Carry special equipment, such as portable pumps, rakes, shovels, and other tools
      2. Hazardous materials companies
         1. Responsible for controlling hazardous materials releases
         2. Have special equipment, personal protective equipment, and training to handle chemical emergencies
      3. EMS companies
         1. Responsible for the assessment, treatment, and transportation of the ill and injured
         2. Often have medications, defibrillators, and other equipment that can stabilize a critical patient
    1. Other Views of Fire Service Organization

Slide 31

Other Views of Fire Service Organization

* Staffing
* Department must have sufficient trained personnel available
* Function
* Bureau or office
* Apparatus type
* Geography
  + - 1. Staffing
         1. Personnel must be available to respond at any hour of the day, every day of the year.
         2. Staffing issues affect all fire departments—career, combination, and volunteer.
         3. To ensure sufficient personnel, some volunteer departments hire full-time fire fighters during hours when volunteers are not available.
      2. Function
         1. Fire departments can be organized by the various functions they provide.
         2. This can be done by office or bureau and by apparatus type.
      3. Geography
         1. Fire departments are responsible for distinct geographic areas.
         2. Each station is responsible for a distinct area within the fire department’s greater area of responsibility.
    1. Chain of Command

Slide 32

Chain of Command

* Structure for managing the department and the fire-ground operations
* Ranks may vary by department, but the concept is the same.
  + - 1. Creates a structure for managing the department and the fire-ground operations
      2. Ranks may vary in different departments, but the basic concept is the same.
      3. Fire fighters usually report to a lieutenant.
      4. Lieutenants are responsible for a single fire company on a single shift.
         1. Can provide many practical skills and tips to new recruits
      5. Captains are responsible for a fire company on their shift and for coordinating the company’s activities with other shifts.
      6. A battalion chief (or district chief) coordinates the activities of several fire companies in a defined geographic area.

Slide 33

Chain of Command

**Figure 1-9**: The chain of command ensures that the department’s mission is carried out effi ciently and effectively.

* + - * 1. Usually the officer in charge of a single-alarm working fire
      1. Assistant or division chiefs are usually in charge of a functional area within the department.
      2. The top of the chain of command is the chief of the department.
         1. Has overall responsibility for the administration and operations of the department
      3. Chain of command ensures that tasks are performed in a uniform manner.
    1. Source of Authority

Slide 34

Source of Authority

* Source of authority
* Local governments
* Sometimes state and federal governments
* Fire chief accountable to the governing body
  + - 1. Generally, local governments provide fire departments their needed legal authority.
      2. Sometimes fire departments derive their authority from state governments or the federal government.
      3. The fire chief is accountable to the governing body.
    1. Basic Principles of Organization

Slide 35

Basic Principles of Organization

* Discipline
* Guiding and directing fire fighters
* Division of labor
* Makes individual responsible for completing the assigned task
* Prevents duplicate job assignments
  + - 1. Discipline
         1. Guiding and directing fire fighters to do what their department expects of them
         2. Positive discipline includes policies, SOPs, training, and education.
         3. Corrective discipline includes counseling, formal reprimands, and suspension.
      2. Division of labor
         1. The breaking down of an overall mission into component tasks that are assigned to different units or people.
         2. Specific task assignment makes the individual responsible for completing the task and prevents duplication of assignments.
      3. Unity of command

Slide 36

Basic Principles of Organization

* Unity of command
* Establishes a direct route of responsibility from the chief to the fire fighter
  + - * 1. Each person within a department has only one direct supervisor.
        2. Establishes a direct route of responsibility from the chief to the fire fighter
      1. Span of control

Slide 37

Basic Principles of Organization

* Span of control
* Number of people one person can supervise effectively
  + - * 1. The number of people that one person can supervise effectively
        2. Should extend to no more than five people in a complex or rapidly changing environment
  1. IX. The History of the Fire Service

Time: 16.5 Minutes

Slides: 38-48

Level: Fire Fighter I

Lecture/Discussion

* + 1. Introduction to the History of the Fire Service

Slide 38

History of the Fire Service

* Romans created first fire department, the Familia Publica.
* First paid department in the United States was Boston (established in 1679).
* Ben Franklin started the first volunteer department in the United States in Philadelphia in 1735.
  + - 1. Concerns with fire protection can be traced as far back as the Roman times.
         1. In 24 B.C., Augustus Caesar created the first fire department, the *Familia Publica*, composed of slaves stationed around the city to watch for fires.
         2. In 60 A.D., the *Corps of Vigiles* was responsible for firefighting, fire prevention, and building inspections.
    1. The American Fire Service
       1. The first documented structure fire in North America occurred in Jamestown, Virginia, in 1607.
       2. City of Boston created the first fire regulations in North American in 1630. It banned wood chimneys and thatched roofs.
       3. The first paid fire department in the United States was established in Boston in 1679.
       4. The first volunteer fire department in the United Stated was started by Benjamin Franklin in Philadelphia in 1735.
          1. Citizens were required to keep filled fire buckets outside their doors to assist in fighting fires.
       5. The Great Chicago Fire

Slide 39

The Great Chicago Fire

* Began October 8, 1871
* Burned for 3 days
* Damage totals:
* $200 million
* 300 dead
* 90,000 homeless
  + - * 1. Started October 8, 1871
        2. Errors in judging the location of the fire and signaling the alarm resulted in delayed response time.
        3. Fire burned throughout the city for 3 days.
        4. Final damage totals:

2000 acres burned

17,000 homes destroyed

$200 million in damage

300 people dead

90,000 people homeless

* + - 1. The Peshtigo Fire

Slide 40

The Peshtigo Fire

* Flash forest fire occurred at same time as the Great Chicago Fire
* “Tornado of fire” 1000 ft high and 5 miles wide
* 2400 square miles (m2) of forest land burned
* 2200 dead
* Several small communities destroyed
  + - * 1. A flash forest fire that occurred in Peshtigo, Wisconsin, at the same time as the Great Chicago Fire

A “tornado of fire” more than 1000 ft high and 5 miles wide

2400 m2 of forest land burned

2200 people died.

Several small communities destroyed

* + - * 1. The fire storm even jumped the 60-mile-wide Green Bay.
    1. Building Codes

Slide 41

Building Codes

* History of building codes
* Egyptians used codes to prevent collapse.
* Colonial communities had few codes.
* Present codes address construction materials and “built-in” protection.
  + - 1. History of building codes
         1. Egyptians used codes to prevent building collapse.
         2. Colonial communities had few codes and buildings were primarily made of wood, making them susceptible to fire.
         3. In 1678, Boston required that noncombustible materials be used for roofs and chimneys.
         4. Today’s codes address construction materials and built-in fire and life safety protection.
      2. Code development

Slide 42

Building Codes

* Codes are written by national organizations.
* National Fire Protection Association (NFPA)
* Volunteer committees research and develop proposals.
* The consensus document is presented to the public.
  + - * 1. Today, codes are written by national organizations, such as the National Fire Protection Association (NFPA).
        2. Volunteer committees research and develop proposals for various groups to debate and review.
        3. The final document, called the consensus document, is presented to the public.
    1. Training and Education

Slide 43

Training and Education

* Today’s fire fighters operate high-tech, costly equipment.
* Fire fighters need to continually sharpen their skills and increase their knowledge.
  + - 1. Fire fighter training and education have also come a long way.
         1. Today’s fire fighters operate high-tech, costly equipment, including apparatus, radios, thermal imaging devices, and SCBA.
         2. The most important “machines” on the fire scene remain the knowledgeable, well-trained, physically capable fire fighters.
      2. The increasing complexity of the world and the science of firefighting requires that fire fighters continually sharpen their skills and increase their knowledge of potential hazards.
    1. Fire Equipment

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Fire Equipment

* Colonial fire fighters had buckets, ladders, and fire hooks.
* Hand-powered pumpers were developed in 1720.
* Steam-powered pumpers were developed in 1829.
  + - 1. Colonial fire fighters had buckets, ladders, and fire hooks.
         1. Homeowners were required to keep buckets filled with water.
         2. Fire hooks were used to pull down burning buildings to prevent extension to nearby structures.
      2. Hand-powered pumpers were developed in London, England, in 1720.
         1. Powered by several strong men
      3. Steam-powered pumpers replaced hand-powered pumpers in 1829.
         1. Volunteer fire fighters felt threatened by their use.
         2. Heavy machines pulled by a team of horses
         3. Required constant attention
      4. Current equipment does not require the constant attention that horses or steam engines did.

Slide 45

Fire Equipment

* Present-day equipment
* Single apparatus used for several purposes
* Fire hydrants developed in 1817
* First public call boxes developed in 1860
  + - * 1. Modern apparatuses include water carriers, a pumping mechanism, hoses, equipment, and personnel.
      1. The first fire hydrants were developed in New York City in 1817.
         1. Fire plugs were used to control access to water in the system.
         2. Fire fighters could tap into the water supply when there was a fire.
      2. Public call boxes were introduced in Washington, DC, in 1860.
         1. Telegraph signal activated bells to direct the fire department to the call box, where the caller would wait to show the exact location of the fire.
    1. Communications

Slide 46

Communications

* Fire wardens and night watchmen used during colonial period
* Telegraph alarm systems developed in late 1800s
* Present day
* Hardwired and cellular telephones
* Computer-aided dispatch facilities
  + - 1. Colonial period
         1. Fire wardens or night watchmen sounded a church bell or other alarm if fire was discovered.
         2. Some towns had fire towers where wardens would watch for fires.
      2. Late 1800s
         1. Telegraph alarm systems were installed in large cities.

Enabled more rapid reporting of fires

Gradually replaced by community sirens

* + - 1. Present day
         1. Hardwired and cellular telephones enable rapid reporting of many events.
         2. Computer-aided dispatch facilities have improved response times because the closest available units can respond to the scene.
      2. Fire-ground communications

Slide 47

Communications

* Fire-ground communications
* Early days: Chief’s trumpet, now a symbol of authority
* Present: Two-way radios
  + - * 1. Early days

Chief officers used trumpets (bugles) to amplify their voices to give commands.

Trumpet insignia is used today as a symbol of authority.

* + - * 1. Present day

Two-way radios enable fire units and fire fighters to remain in contact with each other at all times.

* + 1. Paying for Fire Service

Slide 48

Paying for Fire Service

* In early times, insurance companies paid fire departments for service.
* Career departments are generally funded through local tax funds.
  + - 1. In the early days, insurance companies would pay fire departments for their services.
         1. If more than one company showed up at the scene, a dispute might arise over which company would receive payment.
      2. Career fire departments today are invariably funded through local tax dollars.
      3. Volunteer fire departments today are funded by a variety of methods:
         1. Money raised through fund-raising activities
         2. Tax dollars
  1. X. Fire Service in the United States Today

Time: 1.5 Minutes

Slide: 49

Level: Fire Fighter I

Lecture/Discussion

* + 1. Introduction to the Fire Service

Slide 49

Fire Service in the United States Today

* About 1.1 million fire fighters
* 75% of career fire fighters serve communities of 25,000 or larger.
* Half of volunteers serve rural areas with populations of 2500 or smaller.
* Approximately 30,000 fire departments
  + - 1. There are approximately 1.1 million fire fighters in the United States.
         1. 27 percent are full-time career fire fighters.
         2. 73 percent are volunteer fire fighters.
      2. Community size
         1. Three of four fire fighters work in communities of 25,000 or larger.
         2. Half of volunteer fire fighters work in small, rural communities with populations of 2500 or smaller.
      3. There are approximately 30,000 fire departments in the United States.
      4. Structure
         1. All career
         2. Combination

Combination: both paid and volunteer

Mostly volunteer: more than half are volunteer.

* + - * 1. Volunteer
  1. XI. Summary

Time: 6 Minutes

Slides: 50-53

Level: Fire Fighter I and II

Lecture/Discussion

* + 1. Remember the five guidelines: Be safe, follow orders, work as a team, think, and follow the Golden Rule.

Slide 50

Summary

* Be safe, follow orders, work as a team, think, and follow the Golden Rule.
* Training and performance qualifications for fire fighters are specified in NFPA 1001.
* Fire Fighter I works under direct supervision; Fire Fighter II works under general supervision.
  + 1. The training and performance qualifications for fire fighters are specified in NFPA 1001, Standard for Fire Fighter Professional Qualifications.
    2. A Fire Fighter I works in a team under direct supervision, whereas a Fire Fighter II works under general supervision.
    3. Throughout your career, you may assume several roles in the fire department, such as fire apparatus driver/operator, company officer, incident commander, fire and life safety education specialist, and public information officer.

Slide 51

Summary

* You may assume several roles in the fire department.
* Most large fire departments have teams of specialized fire fighters.
* When multiple agencies work together at an incident, a unified command must be established.
  + 1. Most large fire departments have teams of specialized fire fighters, such as aircraft/crash rescue fire fighters, hazardous materials technicians, technical rescue technicians, SCBA dive rescue technicians, and EMS personnel.
    2. When multiple agencies work together at an incident, a unified command must be established.
    3. Governance is the process by which an organization exercises authority and performs the functions assigned to it.

Slide 52

Summary

* Governance is the process by which an organization exercises authority.
* A fire department includes many different types of companies.
* The chain of command is fire fighter, lieutenant, captain, battalion chief, assistant or division chief, and chief of the department.
  + 1. A fire department includes many different types of companies, including the engine company, truck company, rescue company, wildland/brush company, hazardous materials, and EMS company.
    2. The chain of command, from lowest rank to highest, is fire fighter, lieutenant, captain, battalion chief, assistant or division chief, and chief of the department.
    3. The four basic management principles of the fire service are discipline, division of labor, unity of command, and span of control.

Slide 53

Summary

* The management principles of the fire service are discipline, division of labor, unity of command, and span of control.
* Building codes govern construction materials.
* It is helpful to study the past and present fire service.
  + 1. Building codes govern construction materials and frequently require built-in fire prevention and safety measures.
    2. It is helpful to study the past and present fire service.

Post-Lecture

* 1. I. 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 the different departments within the fire service. The activity incorporates both critical thinking and the application of fire fighter knowledge.

Purpose

This activity allows students an opportunity to think critically about the varied departments within the fire service.

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 1.
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. C
2. A
3. B
4. D
5. B
6. C

Technology Resources

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 1.
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 and II

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. Name some of the physical fitness requirements established for firefighters.
    2. What are some of the general roles for a public information officer?
    3. What are some of the specialized roles in which firefighters may require specialized training?
    4. What are the main functions of the engine company?
    5. Describe the main functions of the rescue company.
    6. What was the primary purpose of the fire warden?
    7. Where did the first documented structure fire in North America occur?
    8. Why are fire codes necessary?
    9. What advantages do today’s firefighters have over their counterparts from the beginning of the 20th century?
    10. How do fire and life safety codes differ from those instituted in the 1700s and 1800s?

Fire Fighter II

**FFII**

* + 1. What are the major differences between the roles of the Fire Fighter I and the Fire Fighter II?
  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.